

Adrian Curaj
Luke Georgiou
Jennifer Cassingena Harper
Eva Egron-Polak *Editors*

Mergers and Alliances in Higher Education

International Practice
and Emerging Opportunities

 fiscdi



SpringerOpen

Mergers and Alliances in Higher Education

Adrian Curaj • Luke Georghiou
Jennifer Cassingena Harper • Eva Egron-Polak
Editors

Mergers and Alliances in Higher Education

International Practice and Emerging
Opportunities



Springer Open

Editors

Adrian Curaj
UNESCO Chair on Science
and Innovation Policies

National University of Political Studies
and Public Administration (SNSPA)
Bucharest, Romania

Jennifer Cassingena Harper
Malta Council for Science
and Technology
Kalkara, Malta

Luke Georghiou
Manchester Business School
MBS Harold Hankins Bldg.
The University of Manchester
Manchester, UK

Eva Egron-Polak
Int Association of Universities (IAU)
Paris, France

ISBN 978-3-319-13134-4

ISBN 978-3-319-13135-1 (eBook)

DOI 10.1007/978-3-319-13135-1

Library of Congress Control Number: 2015936449

Springer Cham Heidelberg New York Dordrecht London

© The Editor(s) (if applicable) and The Author(s) 2015. The book is published with open access at SpringerLink.com.

Open Access This book is distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

All commercial rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made.

Printed on acid-free paper

Springer International Publishing AG Switzerland is part of Springer Science+Business Media
(www.springer.com)

Preface

For more than two decades, Romania's higher education system has been undergoing reforms, experiencing far-reaching changes and striving for academic excellence. The rate of change has been accelerated by a multitude of factors. Among them, the growing demand of a diversified public for higher education qualification and the ever-increasing societal expectations with regard to higher education's contributions to the country's prosperity and to job creation played an important role. In addition, globalization and internationalization raised dramatically the impact of rankings and transparency tools, bringing forth the growing role of private higher education and generating the massification of higher education, while also changing student needs and expectations. The two key developments at the European level, the Bologna Process and the Lisbon Strategy, have introduced an unprecedented dynamic to such transformations.

Institutional differentiation and inter-university cooperation have recently become strategically important for each university in Romania, particularly so when considering the demographic decline, which has led to a diminishing demand for higher education and the shrinking of public resources during the period of economic crisis. In order to meet the emerging challenges facing higher education institutions, the new Law on Education in Romania, adopted in 2011, explicitly refers to mergers in higher education, setting out a "soft framework" for university concentrations. Soon after the law was adopted, groups of universities in Romania engaged in merger negotiations. Some of these negotiations have already been concluded, some have failed, while other institutions are simply and cautiously exploring their options. What could and should be done in Romania to "walk the talk"? How would the existing international experiences help in taking advantage of the potential benefits of merger or alliance processes or other forms of concentration of resources, while avoiding the unintended consequences? Are there top-down, bottom-up or a wider diversity of strategies, interventions and options? Are there lessons to be learned and experiences to be shared in Europe and around the globe? How do we measure their impact? How much *prospective* thinking would help and when?

The subject of higher education collaborations, be they alliances or mergers, concentrations or amalgamations, is of interest not just nationally but also at the international level. It has generated a recent spate of new processes, many of which are yet to be researched in depth, to respond to questions such as the following: are these developments a fashion, are they about the efficiency-effectiveness of using resources or just about building of critical mass in areas where existing experiences and competences are far from reaching their potential, are they driven by existing fragmentation and duplications, etc.? There are top-down interventions and bottom-up initiatives, all of them aiming to strengthen institutions and improve their performance. However, the question that constantly looms large concerns primarily the optimal strategy at work and the intended or unintended consequences of such endeavours.

The idea of this volume, as a collection of case studies on alliances and mergers of higher education institutions, emerged during the discussions organized by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) within the framework of an international Mutual Learning Workshop (MLW) as part of the Bucharest Dialogues – “a form of Bohm Dialogue on the fundamentals of foresight”. The overall scope of the MLW has been to gather evidence and collective intelligence for informing decision-makers on policy options in order to ensure the most effective outcomes. The “Bucharest Dialogues” platform was launched in 2009 to support the process of the “Higher Education Vision 2025 – Seeds for the Future” and the development of the “White Paper – Higher Education 2015”. It was also the platform for the organizing of the “Future of Higher Education – Bologna Process Researchers’ Conference” in 2011. “Going beyond Bologna” suggests that the Bologna Process has always been a dynamic one, endowed with the capacity to transcend its original objectives. The “Bucharest Dialogues” has also been the platform supporting the *External* – “international institutional evaluation” process of university differentiation in Romania.

Last but not least, concentrations and amalgamations could and should be high on the development agenda of a project such as the “Laser Valley”, currently being implemented in Romania. This concept was generated by the construction of the Extreme Lights Infrastructure and Nuclear Physics, ELI-NP, in the southwest of Bucharest, close to the Danube River. The scientific and technological uniqueness of the ELI-NP, a pan-European research infrastructure, will be a catalyst for different forms of public-public and public-private partnerships. It may help the concentration of scientific and technological facilities, create incentives for interdisciplinary work and critical mass for taking full advantage of the innovation ecosystem, and generate incentives for universities to explore different ways of collaboration, including alliances and mergers.

It is likely that responding to external pressures will increasingly come to imply changing the boundaries of an institution. New frontiers may mean that such mergers and alliances will take place with entities from outside the academic world altogether, in the name of private provision. These are areas to be studied further, while looking forward to the emerging challenges of the upcoming 10–15 years.

The authors of the case studies and their personal and collective effort made this volume possible. They produced well-researched case studies that substantially extend our knowledge on academic mergers and alliances, while graciously and informatively developing the existing topics further. We are grateful for their contributions.

We would also like to acknowledge the financial support of the project “Ready for innovating, ready for better serving the local needs – Quality and Diversity of the Romanian Universities”, funded by the Structural Funds – Operational Programme for Human Resource Development 2007–2013.

May this research volume represent food for thought and inspire future strategic actions.

Bucharest, Romania

Adrian Curaj

Contents

1	Mergers and Alliances in Context	1
	Luke Georghiou and Jennifer Cassingena Harper	
Part I Mergers and Alliances from the Perspective of National Higher Education Systems		
2	Mergers and Alliances in France: Incentives, Success Factors and Obstacles	17
	Andrée Sursock	
3	Mergers and Classifications in Romania: Opportunities and Obstacles	33
	Liviu Andreescu, Radu Gheorghiu, Alina Irimia, and Adrian Curaj	
4	Collaboration Between Universities in Sweden	57
	Daniel Ljungberg and Maureen McKelvey	
5	Reorganising the Welsh University System	81
	Philip Gummett	
6	Institutional Mergers in Ireland	105
	Siobhan Harkin and Ellen Hazelkorn	
7	Institutional Mergers in Chinese Higher Education	123
	Rui Yang	
8	Institutional Culture of Mergers and Alliances in South Africa	145
	Martin Hall	

9	Institutional Combinations and the Creation of a New Higher Education Institutional Landscape in Post-1994 South Africa	175
	Saleem Badat	
Part II Mergers and Alliances at the Institutional Level – Experiences and Lessons		
10	Strategy to Join the Elite: Merger and the 2015 Agenda at the University of Manchester – An Update	205
	Luke Georgiou	
11	The Experience with Creating University of Lorraine by Merging Four Former Universities	221
	Jean-Pierre Finance, Hervé Coilland, and Pierre Mutzenhardt	
12	Strategic Aggregation of Universities in Spain: The Spanish Program International Campus of Excellence and the Experience of the Technical University of Madrid	243
	Luis Delgado and Gonzalo León	
13	The Process of Merging Romanian Universities: Technical University of Cluj-Napoca – North University of Baia Mare	273
	Radu Munteanu and Dan Călin Peter	
14	The Experience of University of Western Sydney, Australia	287
	Rhonda Hawkins	

About the Editors and Authors

About the Editors

Adrian Curaj is a professor of Research Management and the Director of the Centre for Strategic Management and Quality Assurance in Higher Education at the Politehnica University of Bucharest. He is the Chair holder – UNESCO Chair on Science and Innovation Policies at the National School of Political Studies and Public Administration.

Adrian Curaj has a Ph.D. in Control Engineering from the Politehnica University of Bucharest and graduated the EMBA programme of the ASEBUSS, Bucharest, and the University of Washington in Seattle Business School and the Global Management Program of Kennesaw State University.

Adrian Curaj is the General Director of the Executive Agency for Higher Education, Research, Development and Innovation since 2010. He was acting as the Romanian Prime Minister's Advisor on Science, Technology, ICT and e-Governance (2007–2008) and as the President of the National Authority for Scientific Research – Ministry of Education, Research, Youth and Sport in Romania (2009–2010).

Adrian Curaj has been working as a consultant with the World Bank, UNESCO, UNIDO, ETF and EC for studies in tertiary education, science and innovation, and foresight. He has been actively involved as project leader or expert in many research projects, most of them in research management, higher education management and foresight, areas where he also published scientific articles and books. Two of the inventions he is co-author of received gold medals at the Geneva Invention Salon 2009 and 2013.

Adrian Curaj is a member of the RISE – Research, Innovation and Science Policy Experts HLEG. He was a member of EFLA – European Forum for Forward Looking Activities (2012–2014) and a member of the People Advisory Group – EC (2007–2012). He is a member of the Romanian Commission for UNESCO and a member of the Board of Directors of the U.S. Fulbright Commission in Romania. He was acting as the Romanian representative at the Bologna Follow-Up Group.

Adrian Curaj was twice awarded with Romanian National Distinctions, For Merits-Cavalier in 1999 and For Merits-Officer in 2008 for his contributions to science and innovation.

Luke Georghiou B.Sc., Ph.D. is Vice President for Research and Innovation at the University of Manchester where he is responsible for the University's research strategy and performance, business engagement and commercialization activities. He holds the Chair of Science and Technology Policy and Management. His research interests include evaluation of R&D and innovation policy (particularly in relation to the use of public procurement and other demand-side measures), foresight, national and international science policy, and management of innovation. He has chaired or been a member of several high-profile committees including the Aho Group and the EC's Expert Group on ERA Rationales. He is a member of the Academia Europaea.

Jennifer Cassingena Harper B.A., M.Sc., Ph.D. has been engaged with the Malta Council for Science and Technology since 1989 in various capacities. Until 2011, she was the Director of Policy, Strategy, FP7 and International Relations with core responsibility for the National Research and Innovation Strategy and Foresight and links with the European Union. She currently retains a part-time consultancy role with the Council on strategy, policy and foresight. She also retains an expert role on foresight with the European Training Foundation. Dr. Harper is active at the European and international level as advisor, reviewer, speaker and expert group member. She is a member of the *European Journal of Futures Research* and the Higher School of Economics, Moscow.

Eva Egron-Polak has been Secretary General and Executive Director of the International Association of Universities (IAU), an international NGO based at UNESCO, Paris, since 2002.

Educated in the Czech Republic, Canada and France, Eva Egron-Polak studied French literature, political science and international political economy. Her post-graduate research focused on the development of higher education policy in the European Union in the mid-1980s, and she has continued to work in higher education since that time.

Prior to joining the IAU, and during nearly 20 years at the Association of Universities and Colleges of Canada (AUCC), Eva Egron-Polak held several senior positions including that of Vice President, International and Canadian Programs, developing policy, programmes and services in support of Canadian universities' outreach worldwide, with a particular emphasis on developing nations.

At the IAU, an independent, global association of higher education institutions and associations of universities, Eva Egron-Polak is involved in various policy issues in higher education – internationalization, provision of equitable access to and success in higher education, and the contribution of higher education to sustainable development to the Millennium Development Goals and to Education for All, among others. She has led the Association in its continuing preoccupation with academic values, ethics and higher education's social responsibility to society locally and globally.

Eva Egron-Polak has been a member of many committees at UNESCO, the European Commission, OECD, etc. She serves as a Member of Council at Mykolas Romeris University in Lithuania and at the International Advisory Committee of Amsterdam University College and has been a member of international advisory bodies on higher education in Ireland and Romania. Most recently, she was appointed to the Magna Charta Observatory Council and became a member of the Advisory Committee of the Association of Universities of Asia and the Pacific. She has taken part in system-level reviews of higher education in Egypt, Spain and Malaysia. In addition to co-authoring the 3rd and 4th Global Survey Reports on Internationalization of Higher Education in 2010 and 2014, respectively, she has written and presented numerous papers and book chapters on a variety of higher education topics.

About the Authors

Liviu Andreescu is associate professor with the Faculty of Administration and Business at the University of Bucharest, where he teaches public policy. Previously, he taught for more than a decade at Spiru Haret University. He is the author of two books on academic freedom and has published on higher education studies, futures studies, religious policy and church-state affairs, and American studies – sometimes at the intersection of these domains. He has also been working as a higher education policy expert for Romania's Executive Agency for Higher Education, Research, Development and Innovation Funding.

Saleem Badat holds degrees in the Social Sciences from the University of KwaZulu-Natal, a Certificate in Higher Education and Science Policy from Boston University, and a Ph.D. in Sociology from the University of York.

From 1 August 2014, he has been Programme Director for International Higher Education and Strategic Projects at the Andrew W. Mellon Foundation. His portfolio includes the South Africa Program and international grant making in higher education.

He has served as the Director of the Education Policy Unit at the University of Western Cape; as the first head of the Council on Higher Education, which advises the South African Minister of Higher Education and Training; and most recently as Vice Chancellor of Rhodes University.

He has been Chairperson of Higher Education South Africa and of the Association of African Universities Scientific Committee on Higher Education. He is a board member of the Centre for Higher Education Transformation.

He has contributed numerous chapters and articles to books, scholarly journals and magazines and has directed and authored various policy reports on South African higher education. He has also made invited keynote and other addresses at conferences and seminars around the world.

He is the author of *The Forgotten People: Political Banishment under Apartheid* (2013), *Black Man, You Are on Your Own* (2010) and *Black Student Politics, Higher Education and Apartheid* (2002); co-author of *National Policy and a Regional Response in South African Higher Education* (2004); and co-editor of *Apartheid Education and Popular Struggles in South Africa* (1990).

Jennifer Cassingena Harper B.A., M.Sc., Ph.D. has been engaged with the Malta Council for Science and Technology since 1989 in various capacities. Until 2011, she was the Director of Policy, Strategy, FP7 and International Relations with core responsibility for the National Research and Innovation Strategy and Foresight and links with the European Union. She currently retains a part-time consultancy role with the Council on strategy, policy and foresight. She also retains an expert role on foresight with the European Training Foundation. Dr. Harper is active at the European and international level as advisor, reviewer, speaker and expert group member. She is a member of the *European Journal of Futures Research* and the Higher School of Economics, Moscow.

Hervé Coilland was born in Nancy, France, in 1950. He is “Agrégé” (advanced degree) in Mathematics and doctor of Applied Mathematics. He was General Delegate of PRES (Pôle de Recherche et d’Enseignement Supérieur) of the University of Lorraine from 2009 to 2012, Vice President of Human Resources of Nancy 2 University from 2006 to 2008 and Director of the Nancy-Charlemagne University Institute of Technology (IUT) from 1999 to 2008.

He was also production management consultant from 1985 to 2006 for facilities belonging to the Pirelli Cables and Systems group (now the Prysmian Group, world leader in the cables sector).

Adrian Curaj is a professor of Research Management and the Director of the Centre for Strategic Management and Quality Assurance in Higher Education at the Politehnica University of Bucharest. He is the Chair holder – UNESCO Chair on Science and Innovation Policies at the National School of Political Studies and Public Administration.

Adrian Curaj has a Ph.D. in Control Engineering from the Politehnica University of Bucharest and graduated the EMBA programme of the ASEBUSS, Bucharest, and the University of Washington in Seattle Business School and the Global Management Program of Kennesaw State University.

Adrian Curaj is the General Director of the Executive Agency for Higher Education, Research, Development and Innovation since 2010. He was acting as the Romanian Prime Minister’s Advisor on Science, Technology, ICT and e-Governance (2007–2008) and as the President of the National Authority for Scientific Research – Ministry of Education, Research, Youth and Sport in Romania (2009–2010).

Adrian Curaj has been working as a consultant with the World Bank, UNESCO, UNIDO, ETF and EC for studies in tertiary education, science and innovation, and foresight. He has been actively involved as project leader or expert in many

research projects, most of them in research management, higher education management and foresight, areas where he also published scientific articles and books. Two of the inventions he is co-author of received gold medals at the Geneva Invention Salon 2009 and 2013.

Adrian Curaj is a member of the RISE – Research, Innovation and Science Policy Experts HLEG. He was a member of EFLA – European Forum for Forward Looking Activities (2012–2014) and a member of the People Advisory Group – EC (2007–2012). He is a member of the Romanian Commission for UNESCO and a member of the Board of Directors of the U.S. Fulbright Commission in Romania. He was acting as the Romanian representative at the Bologna Follow-Up Group.

Adrian Curaj was twice awarded with Romanian National Distinctions, For Merits-Cavalier in 1999 and For Merits-Officer in 2008 for his contributions to science and innovation.

Luis Delgado has a Ph.D. in Physics (Universidad Complutense de Madrid) and a Diploma in Planning and Management of Enterprises (Technical University of Madrid). He has a long trajectory working on higher education, research and innovation for more than 30 years, first as a materials researcher (CIEMAT, Spain) and then as Director of a technological centre (Madrid Institute of Technology) and of a public research organization (Geological and Mining Institute of Spain).

From 2002 to 2007, he was Deputy Director General of International Organisms and Programmes at the Spanish Ministry of Education and Science, being involved in policy making at both national and international levels, representing Spain in different international research committees, programmes and organisms (CREST, COST, CYTED, ICSU, GBIF, FP6 and FP7, etc.).

From September 2007 to July 2009, he worked in DG Research, European Commission on the Modernisation Agenda for European Universities at Directorate C – European Research Area (ERA): Knowledge-based economy, launching different programmes and policy initiatives to foster the excellence of university-based research.

From July 2009 to February 2012, he was Deputy Director General of Modernization and Internationalization of Universities in charge of the Modernization and Internationalization of Spanish Universities within the Spanish Ministry of Education, representing Spain in different multilateral organisms and programmes: OECD – IMHE programme; Steering Committee for Higher Education and Research of the Council of Europe; High Level Group of Education; High Council of the European University Institute; Institute for the Alliance of Civilizations of the United Nations University; and Thematic Group on the Modernization of Universities of the European Commission. In 2010, he coordinated the activities of the Spanish Presidency of the EU on universities, setting the agenda and priorities for the Education Council of the EU.

Since February 2012, he is in charge of the internationalization and excellence programmes at the General Secretariat of Universities in the Spanish Ministry of Education, Culture and Sport. His main tasks are the definition and implementation of the Internationalization Strategy of Spanish Universities and the development of

the Spanish Program International Campus of Excellence, CEI, coordinating the International Commissions for the evaluation of the CEI programme and for the evaluation of the global strategy for the modernization of universities, Strategy University 2015. He is member of higher education committees and organisms: the BFUG Board, Co-chair of the BFUG WG on Mobility and Internationalization.

He is professor of Innovation and Research Policies in the European Union in master's programmes of Direction, Creation and Innovation in Business (Vigo University and Technical University of Madrid). He is author of more than 150 articles, speeches, invited papers in higher education and science, and technology-and-innovation-related publications, seminars and conferences.

Jean-Pierre Finance was the President of Henri Poincaré University, Nancy 1, France, from 2004 to 2011, after a first term from 1994 to 1999. It was a university of Science, Technology and Health education. For 2 years (2007–2008), he was the President of the CPU (the French Rectors' Conference). Currently, he is representative for the CPU and IRD (French Institute of research for development) for the European Union in Bruxelles. In 2010, he was President of the cluster of the four universities in the Lorraine region, called PRES of the University of Lorraine, and actively participated in the project aiming to merge these four universities into the single University of Lorraine created on 1 January 2012. For 5 months, Prof. Finance has been the Provisional Administrator of this University.

He has been EUA (European University Association) board member from 2009 to 2013.

Further to his maths studies, Prof. Finance opted for informatics, specializing in programming language semantics and formal methods of specification and programming development. He obtained his Ph.D. in 1974 and his "doctorat d'Etat" in 1979. He became associate professor in 1972 and a full professor in computer science at Henri Poincaré University, Nancy 1, in 1980. His research field was the formal methods in software engineering.

From 1985 to 1994, he was the head of the Computer Science Research Centre of Nancy, also called CRIN, which was a joint laboratory of the three Nancy universities and of CNRS.

Luke Georghiou B.Sc., Ph.D. is Vice President for Research and Innovation at the University of Manchester where he is responsible for the University's research strategy and performance, business engagement and commercialization activities. He holds the Chair of Science and Technology Policy and Management. His research interests include evaluation of R&D and innovation policy (particularly in relation to the use of public procurement and other demand-side measures), foresight, national and international science policy, and management of innovation. He has chaired or been a member of several high-profile committees including the Aho Group and the EC's Expert Group on ERA Rationales. He is a member of the Academia Europaea.

Radu Gheorghiu holds a Ph.D. in Economics, and he is a researcher at the Institute for World Economy in Bucharest. Interested in the transition towards the knowledge-based economy, he has coordinated numerous studies on higher education market, information society dynamics and innovation-driven competitiveness. Since 2005, he has been collaborating as foresight expert with UEFISCDI (Romanian Agency for Higher Education, Research, Development and Innovation Funding), where he facilitated different participatory future-oriented exercises, including the large-scale consultation for the elaboration of the Vision for Romanian Higher Education 2025.

Philip Gummett CBE Philip Gummett's first degree was in Chemistry. He moved into the newly emerging field of science and technology policy studies at Manchester University, UK, heading both the Department of Science and Technology Policy and later the Department of Government and becoming professor of Government and Technology Policy. He taught a range of undergraduate programmes and developed graduate and research specialisms in UK science policy and in relations between defence and civil technologies, on which he led a 12-nation, mainly European, research group and published widely.

He then became a Pro-Vice Chancellor at Manchester, before moving to the Higher Education Funding Council for Wales, of which he was chief executive from 2003 until retiring in 2012. A key agenda item during that period was restructuring the Welsh university system, where the initial 13 institutions are now 8. He is a trustee of JISC, the body that provides digital infrastructure, resources and advice across all UK universities and colleges, and is a consultant on higher education. Recent work includes advice to the Irish Higher Education Authority on university restructuring in Ireland.

Martin Hall is currently Vice Chancellor of the University of Salford, Manchester. He was previously Deputy Vice Chancellor at the University of Cape Town, South Africa. He has written extensively on a range of public policy issues in higher education. As an archaeologist, he specializes in the archaeology of colonial settlement and representations of the past in the present. Full publication details are available at www.martinhallfacilitation.org.

Siobhan Harkin is the Director of Strategy and Quality at Maynooth University, Ireland. Her career has focused on the development and implementation of programmes and policy for higher education and research in Ireland and the EU across a number of organizations, including Waterford Institute of Technology, the Higher Education Authority and the Irish Universities Association. She has wide experience in the coordination of higher education initiatives across research and funding, human resources, graduate education, curriculum development, flexible learning and industry-academia partnerships. She is a board member of the Irish Higher Education Authority. Her research is in merger and alliance policy in higher education.

Rhonda Hawkins is the Deputy Vice Chancellor and University Provost at the University of Western Sydney (UWS). Rhonda has more than 30 years of experience in higher education, is a member of the UWS Executive, leads the University's Corporate Strategy and Services Division and is Secretary to the Board of Trustees. She is Chair of the board of the University's pathways college and a Director and past Director of numerous not-for-profit boards.

Ellen Hazelkorn holds a joint appointment as Director, Higher Education Policy Research Unit (HEPRU), Dublin Institute of Technology (Ireland), and Policy Advisor to the Higher Education Authority (HEA). She is also President of EAIR (European Higher Education Society) and Chairperson of the EU Expert Group on Science Education (2014). Professor Hazelkorn has over 20 years of senior experience in higher education and works as a consultant/specialist with international organizations and universities. Ellen is also a member of various editorial/editorial advisory boards. Her book *Rankings and the Reshaping of Higher Education: The Battle for World-Class Excellence* was published by Palgrave in 2011 and the second edition in January 2015. Her other current and forthcoming publications include, as an editor, *Global Rankings and the Geo-Politics of Higher Education* (Routledge 2015) and, as a co-author, *Rankings in Institutional Strategies and Processes: Impact or Illusion?* (EUA 2014); *The Civic University: Meeting the Leadership and Management Challenges* (Edward Elgar 2015); and *The Impact and Future of Arts and Humanities Research* (Palgrave Macmillan, 2015).

Alina Irimia is a doctoral researcher at the University of Bucharest, Faculty of Sociology and Social Work. Her research is focused on futures studies, especially on horizon scanning for future signs of societal changes.

She is working as a foresight expert in various projects implemented by UEFISCDI, being involved since 2009 in different exercises for developing scenarios, visions and sectoral strategies for higher education, Resources, Development & Ideas (RDI) and public administration. She has been part of the national consultation process for developing the VISION "Romanian Higher Education in 2025" and the "White Paper for Quality and Leadership in Romanian Higher Education". She also took part in a future-oriented exercise regarding mergers and other types of inter-institutional collaborations in higher education which aimed at elaborating strategic merger scenarios of the Romanian academic organizations.

Gonzalo León is a full professor of the Universidad Politécnica de Madrid in the area of Telematics Engineering since 1991 and Vice President for Strategic Programs of the Universidad Politécnica de Madrid (2013–) and Director of the Centre for Technology Innovation (UPM).

He conducted research activities in software engineering for communication systems, technology transfer models in ICT, and science policies and R&D policies in the ERA. He operated research projects with several companies of the telecom sector, and he was main researcher in the Framework Programme of the EU, EUREKA, and National Plan of R&D.

His relevant positions related to science and technology are as follows: Deputy General Director for International Relations on R&D (1996–1998), Deputy General Director of the Office of Science and Technology attached to the Presidency of the Spanish Government (1998–2000), Secretary General of Science Policy in the Ministry of Science and Technology (2002–2004) and Vice President for Research in the UPM (2004–2012).

He acted as Chairman of the Spanish Advisory Group of Research Infrastructures between 2000 and 2002. For the European Commission he was Chairman of several high-level expert groups like Chairman of the Follow-up of the Lisbon Strategy Group between 2006 and 2009, Chairman of the Space Advisory Group between 2008 and 2012 and Chairman of the Research infrastructures in the ERA between 2009 and 2010.

At present, he is member of the Board of Trustees of several foundations and companies and member or president of several advisory committees in Spain.

Daniel Ljungberg is assistant professor of Innovation and Entrepreneurship at the School of Business, Economics and Law at the University of Gothenburg, Sweden. He holds an M.Sc. in Engineering in “Management and Economics of Innovation” and a Ph.D. in “Technology Management and Economics”. His research has predominantly focused on analyzing the role and activities of universities and academics in the knowledge economy, specifically focusing on their relation with industry and their role in industrial innovation processes. His current research interests include academic patenting, university–industry interaction and economics of universities.

Maureen McKelvey is professor of Industrial Management at the School of Business, Economics and Law at the University of Gothenburg, Sweden. Her research addresses innovation and entrepreneurship, from an evolutionary and Schumpeterian perspective. Her current research addresses topics related to knowledge-intensive entrepreneurship, the impact of Asia on innovation, business models, knowledge networks in pharmaceuticals, innovation governance, renewal of traditional industries and the performance of universities.

Radu Munteanu has been a tenured higher education professor since 1971, and he is currently a professor at the Technical University of Cluj-Napoca, within the Department of Electrotechnics and Measurements.

Professor Radu Munteanu has elaborated over 60 technical, didactic, management, philosophy and cultural books and textbooks and over 300 scientific papers. He is also the author of 23 patented inventions and 12 patented innovations.

Between 1990 and 2004, he held the position of Dean of the Faculty of Electrical Engineering, and from 2004 to 2012, he was Rector of the Technical University of Cluj-Napoca. Since 2012, he is Honorary President of the Technical University of Cluj-Napoca.

Professor Radu Munteanu has been awarded 14 Doctor Honoris Causa titles in the country and abroad as well as numerous national and international distinctions.

Professor Radu Munteanu has been the Vice President of the National Council for Scientific Research in Higher Education since 1998, the representative of the Romanian higher education in the Steering Committees of the European Council in Strasbourg (since 2004) and the Vice President of the Academy of Technical Sciences from Romania (since 2013).

Pierre Mutzenhardt was born in Lorraine in 1966. Graduating in Physical Chemistry in 1988, he obtained a DEA (equivalent of a master's degree) in Theoretical Chemistry and Computational Sciences in 1990. He obtained his Ph.D. in Chemistry, Nuclear Magnetic Resonance, at Henri Poincaré University in 1993. He was enrolled the same year and in the same university as associate professor and became full professor in 2002. He researched in the field of nuclear magnetic resonance, more precisely in methodological aspects such new NMR instrumentation, pharmaceutics, organic chemistry, bio NMR and more recently in engineering sciences. He is the co-author of more than 60 international peer-reviewed papers. He was invited scientist at the University of Paris VI (1991) and at the National High Magnetic Field Laboratory (1996). Expert for the European Pharmacopoeia, he was elected Vice President in charge of research at Henri Poincaré University from 2007 to 2011. He became the first President of the University of Lorraine on 25 April 2012 for a tenure of 5 years.

Dan Călin Peter has been a tenured higher education professor since 1978, and he is currently a professor at the Technical University of Cluj-Napoca, coordinator of the course “Transport and distribution of electrical energy”.

Professor Dan Călin Peter has elaborated, on his own or in collaboration, 10 university monographs and textbooks, over 70 scientific papers and over 20 scientific research contracts.

Between years 2000 and 2004, he held the position of Dean of the Faculty of Engineering within the North University of Baia Mare, and from 2004 to 2012, he was Rector of the same university.

After the merger between the North University of Baia Mare and the Technical University of Cluj-Napoca in February 2012, Prof. Dan Călin Peter has been appointed Vice Rector of the Technical University of Cluj-Napoca, being in charge of coordinating the North University Center of Baia Mare.

André Sursock is Senior Advisor at the European University Association (EUA). Her main activities are focused on institutional governance and strategies and quality assurance policies and practices. Her publications include the 2010 and 2015 (forthcoming) Trends reports, which analyze policy change in European higher education from the perspective of higher education institutions. She holds a first degree in Philosophy from the Université Paris 1 Panthéon-Sorbonne and a Ph.D. in Anthropology from the University of California, Berkeley.

Rui Yang is a professor at the University of Hong Kong. He worked at a Chinese university for nearly a decade before commencing doctoral studies at the University of Hong Kong in 1996. He received his Ph.D. from the University of Sydney in 2001. He has taught and researched at the Universities of Shantou and Hong Kong in China and the Universities of Western Australia and Monash in Australia. He has written extensively in the field of comparative and international education. His current interest is focused on comparative and global studies in education policy, higher education internationalization, cross-cultural studies in education and education policy sociology. He has also undertaken many projects in the field of comparative education and is the editor of the journal *Frontiers of Education in China*. *Correspondence:* Faculty of Education, The University of Hong Kong, Pokfulam Road, Hong Kong, China.

Chapter 1

Mergers and Alliances in Context

Luke Georghiou and Jennifer Cassingena Harper

The foundation of a university often reflects the preoccupations of its age, reaching back to theological roots in medieval times, and later meeting the needs of nineteenth century empires for administrators with a rounded education or those of the emerging professional and industrial classes for a highly trained workforce and for research, particularly in science and engineering. Humanistic ideals and academic freedom were embodied as core elements in most cases. Such institutions, with more than a century behind them, have become part of a much larger population of universities as the expectations of and demands for a graduate education drove a global era of expansion and massification. While the core concept of a university remains recognisable almost anywhere that the term is used, substantial differentiation nonetheless exists. This differentiation may lie in the nature of the student population, the focus of the curriculum, the degree of research intensity, the form of governance, financial viability, scale of activity, the degree of autonomy and the extent to which it is embedded in one or more locations. More recently, as rankings and other forms of assessment have entered the picture, the level of ambition of an institution has also become a distinguishing factor.

Our concern in this volume is what happens when the circumstances prevailing at the time of foundation and developing during the subsequent evolution of the institution have changed such that it no longer meets the expectations of its stakeholders. Under these conditions governments or the institutions themselves may seek to redefine or reinforce their mission by combining the assets and

L. Georghiou (✉)

Manchester Business School MBS Harold Hankins Bldg.,
The University of Manchester, Oxford Road, M13 9PL Manchester, UK
e-mail: luke.georghiou@manchester.ac.uk

J. Cassingena Harper

Malta Council for Science and Technology, Villa Bighi, Bighi, KKR 1320 Kalkara, Malta
e-mail: jharper@vol.net.mt

capabilities of a university with one or more other institutions. This, as we shall see, is the essence of mergers and alliances in higher education.

The existing literature largely reflects a wave of merger activity that took place in the 1980s and 1990s. For example (Harman and Meek 2002) introduced a special edition of the journal Higher Education by noting the restructuring of higher education in Canada, Great Britain, Germany, the Netherlands, Norway, Sweden, Hungary, Vietnam, New Zealand, Australia and South Africa. They associated systemic transition with the move from small elite higher education systems to massified offerings based upon fewer larger and more comprehensive institutions, often extending to multiple campuses. In assembling the present collection of experiences, initially via a workshop and then with the addition of further contributions, we have taken the opportunity to reassess the phenomenon of mergers in higher education in the current context. This is done both through assessing the longer term consequences of historic merger activity and by introducing more recent cases forged in the current pressures facing higher education.

The chapters of this volume each tell stories and make contributions in their own right. It may help to guide the reader by pointing out from the start some recurrent themes and tensions. In seeking to identify the phenomenon of university mergers, their causes and their consequences we encounter a series of dichotomies.

1.1 Alliance Versus Merger

When the search is for resources or capabilities beyond the institution and possessed by another institution, or by a combination of those institutions, a range of options exist for university managers and national or regional administrations. Any scale of working together begins with cooperation. Virtually all institutions are engaged in some form of research cooperation and many have teaching arrangements with other institutions. To move into the frame of an alliance requires a more formal agreement, normally at institution level, embodying the scope, purpose and objectives and normally specifying a means of implementation. A useful basic taxonomy on these lines was set up by James on behalf of the Higher Education Funding Council for England (James, September 2012/21). This defined collaboration as two or more partners working together in a selected part of their activity. It could involve setting up a new institute or shared facility or a combination of existing activities. As indicated above, an alliance requires more systemic collaboration but does not have to extend to the full range of activities and as James states, the key test is that partners retain their separate identities. Delgado and Léon (Chap. 12, this volume) describe a process to drive such ‘strategic aggregations’ in Spain. This criterion of identity reserves for the full merger the definition: “two or more partners combining to create a single institution, which may retain the name and legal status of one of them or be an entirely new legal entity.” The report also notes a range of merged circumstances including the “holding company” model, in which an umbrella institution can operate subsidiaries that maintain separate

names, brands and operations. Most mergers (at least among those reported in this volume) once completed appear to be stable or even irreversible but alliances and federations are more likely to be in a position of evolving in either direction depending upon the balance between centrifugal and centripetal forces. In one of the cases presented (Georghiou, Chap. 10, this volume), the group considering the merger between the two Manchester institutions judged that the transaction costs of federation would make that option uneconomic and that true benefits could only be achieved in a sustainable way by a full merger. Hawkins (Chap. 14, this volume) provides a corroborating example in which the creation of the University of Western Sydney was driven by the high costs and perceived financial risks entailed by the pre-merger federal arrangement between the three constituent institutions.

Harman and Meek (*ibid*) introduced further taxonomic categories including distinctions between voluntary and involuntary mergers and between consolidations and take-overs. The issue of whether a merger is voluntary can be shaded. Such circumstances may arise from direct imperatives from government and its agencies, or by dint of being the chosen route out of a crisis, financial or otherwise. To these categories may be added the creation of a new entity from the elements of existing institutions. Even this is a continuum as substantial elements of the predecessor institutions may continue.

An interesting dimension is that of heterogeneity between the merging entities. This may apply to the specialisations of the universities. Mergers are usually moving in the direction of widening the offering and perhaps reducing the risk exposure of more narrowly defined institutions. For example, Yang (Chap. 7, this volume) describes how in China a series of monotechnics and specialised vocational training institutions were merged into universities in parallel with a process of upgrading. Several cases involved the accession of medical schools, with examples in Cardiff (Gummelt, Chap. 5, this volume) and Fudan (Yang, *ibid*) both driven in part by the belief that a world-class comprehensive university should not be without one. Another source of merger activity is the absorption of public research institutions which may not have had an educational mission. A further distinction made is that between mergers of institutions with similar academic profiles ‘horizontal’ and those with different academic profiles ‘vertical’. Ljungberg and McKelvey (Chap. 4, this volume) present examples of both in the Swedish context.

1.2 External Versus Internal Motivation

There is little doubt that national ambition is a driver for university mergers. In recent times this has been highlighted by the increased attention paid to ranking tables. Whatever the shortcomings of these (and there are many) they expose countries whose investments are not matched by their presence in the higher echelons (Hazelkorn 2009). In France, as both Sursock (*ibid*) and Finance et al. (*ibid*) acknowledge, rankings have been a driver even if this is not always admitted. Georghiou sets out how entering the world’s ‘Top 25’ became a central

goal in the University of Manchester's 2015 agenda. National expectations of universities can form a wider and more pervasive backdrop than the narrow goal of international league tables. The repercussions of the Bologna process are acknowledged in several of the European cases. Andreescu et al. (Chap. 3, this volume) indicate that the introduction of national rankings can be used as explicit instrument to drive mergers. The most extreme social need was manifested in South Africa where reform and consequent reorganisation were a necessary component of breaking the mould of racial segregation.

Systemic restructuring regularly drives merger activity and apart from the case of South Africa, already mentioned, there are examples of mergers being a tool for the implementation of national systemic visions as in Ireland (Harkin and Hazelkorn, Chap. 6, this volume) or their regional equivalents as in Wales (Gummell, *ibid*). Harman (1986) had long before provided an account of the tensions between a “coercive” Federal government and state governments in the Australian mergers of 1981–1983. Moving in a more positive direction, Yang (*ibid*) sees the transfer of jurisdictions from different departments and levels of government as an important rationalising benefit from mergers in the Chinese context.

In one particular respect governments play a critical role. Mergers are unlikely to succeed without substantial investment in capital and systems and in most cases the public sector is the source of such funds. Where they have not been forthcoming the results have often been negative. A converse danger is of over-incentivising structural change by tilting resources towards those who follow that path. In the worst case this can divert institutions from seeking real synergetic gains.

Several of the contributions reflect the tensions between the autonomy of the institutions and the ambitions of the government for systemic change. At one level this can be explained through a desire to avoid disruption or even to defend vested interests in university management. However, the tensions may be real with mergers leading to the end of long-established provision for a region or of particular ways of teaching and researching a subject. Even if overall system improvement is achieved (often an aspiration rather than a certainty), it cannot be assumed that all constituents will end up as beneficiaries.

1.3 Education Versus Research

The combination of heterogeneous institutions with different subject portfolios could be seen as a clear positive move for research, creating the possibility of new interdisciplinary combinations. For education such a move could be largely neutral. This is not the case when more similar institutions are combined. Ursin et al. (2010) have argued that even though educational improvement is often a stated goal, this issue receives relatively little attention in the planning processes associated with mergers. Their conclusions are based upon the analysis of documents associated with merger planning for four Finnish institutions (including the well known case of the formation of Aalto University). They attribute the

relative scarcity and generality in content of such documents to a desire to avoid the difficult topic of redundancy in provision and also that those involved in higher level planning of mergers are typically not closely engaged in teaching and learning and feel uncomfortable with the lack of clear measures of outcome that could be used to drive the process.

One issue that is particularly highlighted in the context of teaching and learning is that of distance. Merged universities frequently have multiple campuses inherited from the legacy institutions, with substantial travel time between them. Over time this may be mitigated by greater use of blended and distance learning but it remains a source of cost and administrative challenge.

1.4 Short-Term Versus Long Term Outcomes and Assessment

Universities are one of society's most durable institutions. This raises the question of what is the right timeframe in which to judge the success of a merger. Policy imperatives operate typically in the short-to-medium term with an expectation that goals will start to be met almost immediately. Against this one could recall Chinese Premier Chou en Lai's most probably apocryphal response to Henry Kissinger when asked his opinion of the effects of the 1789 French revolution, reportedly replying that it was too soon to say (McGregor 2011). University merger decisions made in the early 2000s could well continue to have consequences two centuries later.

The mergers literature in general does not provide a very positive evaluation of value generation. For example, (Cartwright and Schoenberg 2006) in a review of 30 years of the wider corporate M&A literature note that failure rates remain consistently high. University mergers lack a counterfactual and hence can only really be judged in terms of longitudinal changes in performance (with all the controversy that institutional performance assessment entails). Mao et al. (2009) provided a rare example of an attempt to evaluate quantitatively the research performance of merged universities (in China) and found that after a post-merger improvement for a couple of years, performance then declined through loss of cohesion in merged administrations. They echoed earlier work by Harman and Meek that it can take up to 10 years for newly merged institutions to operate as a cohesive whole (2000). Martin and Samels (2002) provide a still more pessimistic view of the outcome of measures in an article that recanted on their earlier support for university and college mergers in the USA (Martin and Samels 1994). An anticipated wave of mergers and super-institutions had failed to materialise, being outnumbered they report by strategic alliances in a ratio of 20:1.

Hall (Chap. 8, this volume) notes the lack of a formal comprehensive evaluation of outcomes of the wide-ranging South African restructuring but assembles evidence from audit reports and other sources to provide a systematic assessment. Badat (Chap. 9, this volume) cautions that functional differentiation does not

necessarily deliver the desired outcomes when other social circumstances have not shifted. Structural change is only one element. More broadly true evaluation is inhibited not only by timing and lack of formal frameworks but also by the absence of a counterfactual and the need to tailor performance measurement to the specific goals of each case.

1.5 Motivation and Implementation

Moving beyond the higher-level dichotomies, cases presented here also illustrate motivations for merger from a bottom-up or institutional perspective. A frequently used term is critical mass, addressing a fear that smaller institutions are less likely to have a voice at the international table and a reality that they may be less able to survive fluctuations in markets or policies. Indeed mergers can be driven by hard circumstances as well as by opportunity and ambition. Munteanu and Peter (*ibid*) describe how declining student numbers in a climate of financial austerity threatened the sustainability of one of the institutions. That said, there is no clear evidence that size is of itself an advantage. Structures need to be put in place to harvest the potential synergies and economies of scale and scope. The nature of public sector employment, the culture of academic freedom and the deep rooting in cities and regions of most universities has meant that the dramatic job losses and relocations associated with industrial mergers are much reduced in the context of academic merger experience.

Throughout this volume, implementation has emerged as a key issue. Detailed accounts of the processes involved have been presented, for example by Finance (*ibid*), Georghiou (*ibid*) and Hawkins (*ibid*). The emerging picture is that implementation is a multi-level and protracted process. Factors militating towards success include top-management commitment from the outset, mirrored by support from key stakeholders in governing bodies and related parts of government in the region or nation. A clear vision is also needed to ensure that the merged institution is not simply a loose association of pre-existing elements and in particular that it addresses the goals that precipitated the need for merger in the first place. Interim structures appear to be important as a means of engaging staff and students and ensuring that matters of vital detail are not subsumed in higher-level statements. Even with wide participation, many staff will not be close to the processes and hence a good communications strategy is essential. Where possible genuine redundancies, notably but not exclusively in administration, need to be recognised and dealt with, with an open process to populate newly created management positions. As already remarked, substantial resources are needed to implement mergers, often including funding for a renewal of capital assets and infrastructures. It is probably the default that merged institutions cost more than their predecessors unless explicit efforts are made to eliminate unnecessary costs. Apparently mundane matters such as compatibility of financial and student systems can be critical to success or failure.

1.6 An Overview

This volume seeks to draw upon more recent experiences of mergers and associations short of a merger and to approach the subject both from a systemic level and from the perspective of individual institutions. Inevitably the two levels are interlinked but broadly speaking this distinction is used to separate Part I, dealing with perspectives at the level of a nation and national system, although often illustrated by examples which extend the range of cases, and Part II, which takes us down to individual case-studies analysed in depth. These experiences of course also show responses to wider forces and initiatives but allow a more detailed insight into the specific rationales and the implementation issues involved in effecting a university merger.

Part I begins with Sursock's overview of mergers and alliances in France (Chap. 2, this volume). She takes as a reference point the European University Association (EUA) 2012 survey that highlighted four key factors behind merger activity including economies of scale; enhanced regional or international impact; increased quality through rationalisation and consolidation; and synergies in education and research. In France specific contextual factors came into play, in particular the hyper-centralisation and hyper-fragmentation of the higher education system. Mergers have been used by the leaders of educational institutions to address these weaknesses and to rationalise higher education and research, consolidating its various elements, and improving its impact internationally. A number of policy initiatives were introduced at national level from the 1960s to the 1990s, including a drive to strengthen universities' research capacity through a rapprochement with the research organisations, but this led to the emergence of two categories of laboratories. The launch of the Shanghai Ranking in 2005, with only three French universities in the top 100, led to efforts to address the factors for this poor performance, through initiatives to support university partnerships and financial incentives for regional partnerships. The drive to concentrate resources in support of excellence was coupled with a shift of power from the central to the regional government. The policy context remains dynamic and subject to reversals in what has been achieved to date through the mergers in terms of overcoming fragmentation and centralisation.

In Chap. 3, Andreescu et al. examine mergers and classifications in Romania. They illustrate how effects of the university classification and ranking process in Romania, as envisaged through the 2011 Law on national education which mandated them, have been slow to materialize. The process was prompted by a number of weaknesses affecting the higher education system, namely the homogeneity of universities, the limited level of competition between universities and the inefficient allocation of funding and general fragmentation of resources. While the 2011 Law moves beyond encouraging absorption of one university by another to support mergers directly, it fails to address in sufficient detail the formal types of mergers and it focuses solely on public universities. The outcomes targeted by the mergers include a more rational allocation of resources based on quality and institutional profile of the university, the preferential allocation of resources to

merged universities, and the concentration of public resources targeting scientific research. The current classification is rather limited and does not reflect current European thinking, focusing on three ideal types, namely research-intensive universities, research-and-education universities, and education-centred universities. The authors develop and explore a typology of merger scenarios, focusing on one in particular, the merger of Romanian universities and public research and development institutes. The successful conclusion of a number of merger cases highlights their utility in addressing deficiencies in the RDI system. The chapter identifies the benefits at various levels, systemic and institutional, as well as outlining certain areas for exercising caution.

Chapter 4, by Ljungberg and McKelvey, sets the context for university collaborations in Sweden as part of the broader pressures for dynamic change at European level linked to a call for more strategic approaches in addressing increased competition and autonomy for universities, causing them to transform from social into knowledge business entities. The main external pressures facing universities in Sweden relate to increased competition among HEIs; a shifting policy focus from quantity towards (increased) quality; forthcoming contraction of education; and government support for mergers between small HEIs and larger universities. Three “voluntary” merger cases are presented addressing a merger between two regional university colleges, the merger of two regional HEIs and a vertical merger (absorption of one university by the other) between two HEIs. The analysis indicates broadly similar rationales, namely to achieve scale and scope by pooling resources; increase quality; and differentiate into or change position in existing market or profile. The sub-rationales included achieving critical mass of researchers and scale in education, pooling and using resources efficiently, consolidating disciplines, accessing competencies and/or brands. In terms of outcomes, the cases indicate that it is easier for HEIs to strategically position themselves through mergers in education than in research, with two cases (Mid Sweden and Linnaeus universities) resulting in an increase in the number of students and increased efficiency in education relative to expenditure, but still deficiencies in terms of research capacity and critical mass of researchers. This raises questions as to whether mergers are less conducive to improving research performance in (regional) small and resource constrained HEIs.

Gummett in Chap. 5 identifies three main phases in the restructuring of the Welsh higher education, starting with a phase, from 2002 to 2006, when the Higher Education Funding Council (HEFCW) acted as facilitator of change, followed by its more interventionist phase, from 2006 to 2009, in driving the restructuring process; and finally a phase from 2010 onwards marked by a more explicit ‘blueprint’ for change. He highlights the key role of institutional and political leadership in these processes, and the challenges involved in securing change in a context of high institutional autonomy. Although the mergers were proposed by the institutions themselves, this was not a guarantee of a successful outcome as in the case of southeast Wales. The main lessons to be drawn relate to the need to properly address legal requirements during merger negotiations, the concept of a higher education system as particularly important in a small country and leveraging

change by providing funding for merger costs. The restructuring was prompted by the fact that despite the strengths of individual institutions, the higher education system as a whole was not delivering up to expectations. He highlights the tension between the institutional governing bodies' role of overseeing the university interests and pursuing the required institutional change. Finally, he underscores the tension, perhaps particularly evident in small countries, between responsibility for governance of individual institutions, and for securing the best possible overall higher education system.

In Chap. 6 Harkin and Hazelkorn examine alliance and merger developments in Ireland over a 15-year period. The framing of the merger policy drive in Ireland in response to a dynamic economic and global environment is based on a number of competing drivers, namely the rise of the knowledge society on the national agenda, a growing demand for higher education coupled with reduced public funding, a stronger emphasis on the economic imperative of higher education and public sector reform. From 2000, global and national economic circumstances began to encourage inter-institutional collaboration and alliances across the HE sector in Ireland, however the National Strategy for Higher Education to 2030 marked the launch of policy-led restructuring and system-wide reorganisation. The Strategy which made a case for greater system level coherence introduced three significant structural policy developments relating to the reform of Institutes of Technology sector through mergers, absorption of smaller institutions into the university sector; and setting up of regional clusters of collaborating institutions within a geographical area. The Strategy with its shift from laissez-faire to a more systematized, directed and regulated approach and measurable outcomes, walks a tightrope between institutional autonomy and system governance. This together with the introduction of strategic dialogues with publicly funded HEIs to ensure alignment with national objectives has resulted in an effective restructuring of higher education. The impact of these policies has also been significant in terms of how higher education is viewed in terms of its contribution to nation-building.

Yang in Chap. 7 analyses the reform of higher education in China in a global and national context, identifying five major rationales for the nationwide restructuring process undertaken from 1992 onwards, namely joint construction, cooperative administration of institutions, institutional amalgamation, transfer of jurisdiction, and participation of other social sectors in institutional operation. The restructuring process lasting over a decade, had three broad waves, with an initial phase in 1992, of mergers of small regional institutions, followed by a period from 1993 to 1997, marked by an increase in university mergers as part of a national drive, and culminating in the period up to 2000 when mergers became linked to China's bid to achieve world-class status for its universities. Three key features of the process relate to its national scale, complexity and innovation. The chapter raises a number of issues of concern relating to integration, costs and regional and territorial disparities. China's recent university mergers have produced significant results in transforming and benchmarking the higher education system at international level as well as some evident achievements in higher education governance. The reform process has effectively dismantled the separation by regions, sectors and

professions, and established a more coherent higher education governance system with provincial governments playing an important role. However, the long-term effects will take much more time and effort to materialise.

In the first of two chapters on mergers and alliances in South Africa, Hall explores the institutional culture. He notes that an extensive merger drive was implemented between 2002 and 2005, aimed at introducing major restructuring in the higher education system. The particular context of the racial segregation and the legacy of the apartheid era, calling for radical reforms, placed particular pressures on the merger drive. The studies and audits undertaken, including the study on governance of mergers, provide important insights on the process at key stages of design and implementation. The outcome of the merger process was three types of institution: “traditional” universities, universities of technology (previously technikons, offering vocationally-oriented qualifications) and “comprehensive” universities (intended to offer a combination of academic and vocational qualifications). In effect the merger drive resulted in mixed institutional outcomes with well-functioning new institutions, failed mergers, and a set of new universities that are still responding to the consequences of merger. The impact at the systemic level is marginal and irrelevant in terms of inequality and the long-term process of recovery from apartheid, with trends prior to the merger drive remaining in place. The merger drive has also had minimal sustained effect on institutional forms and structures, in terms of distinguishing between technical and comprehensive universities and their traditional counterparts, with long-established structures remaining dominant. The current National Development Plan has minimised the emphasis on mergers, focusing on earlier challenges of recovery from the apartheid years.

Badat, in Chap. 9, presents an alternative outlook on the higher education landscape in South Africa. He concludes in his analysis of institutional change in higher education, that it is characterised by ruptures and discontinuities with the past, resulting in the emergence of a new institutional landscape and new configuration of public universities as well as the conservation and reconstruction of institutional types and institutions. In this sense the government higher education goals, strategies and policies post-apartheid reflect successes in terms of policy analysis, design and adoption and significant shortcomings and failures in terms of the actual rollout and implementation of policies. The shortcomings relate to the inadequate factoring in of the dynamics and management of change in strategy and policy design, and related changes in cooperative governance and the roles of the state, universities and other higher education institutions in a post-apartheid democracy, and in defining the appropriate balance of institutional self-regulation and central coordination. The weaknesses extend to the institutional mechanisms for on-going engagement and consensus-building among key actors with differing perspectives and needs and the limited specialist expertise and experience for managing dynamic, complex, participatory systems, where different parts require simultaneous steering and coordination. In analysing the successful outcomes relating to a differentiated higher education system and universities with specific

missions, profiles and structures, a complex of different factors can be identified, including state-led restructuring initiatives, university leadership and engagement, and institutional culture, capabilities and capacities.

Part II begins with Chap. 10 by Georghiou who describes the motives and process that led to the formation of the University of Manchester and its progress against the post-merger strategy. The merger of the Victoria University of Manchester (VUM) and the University of Manchester Institute of Science and Technology (UMIST) was driven primarily by a motivation to create a world-class university and less by more typical efforts to achieve scale. The merger was based on internal rationales relating to favourable conditions for change and external pressures and challenges, including the globalisation of higher education dictating reforms in provision and delivery. The careful design and implementation of the merger process led to its unqualified success in process terms, in line with the set timeline. The key success factors included agreement on a clear strategic rationale and forward strategy, the 2015 Agenda, and on garnering external and internal support and resources through an effective communications strategy. The merger has to date recorded a number of achievements, notably against the goal of achieving high international standing with a shift in the university's position in the world rankings from 78 to 41 in 2013. Other positive outcomes relate to the increase in the research budget and the iconic appointments and widening student participation while maintaining high admission standards. A number of post-merger challenges have emerged particularly at the level of the underpinning goals, related to a large operating deficit and an increasing salary bill, which were addressed by stricter financial management and voluntary severance schemes. In improving productivity a careful balance has been struck between relieving academic staff from administrative work without creating an expensive bureaucracy. The University continues to evolve in an effort to improve its operation and to prepare to revisit goals and the targets set in the 2015 Agenda.

In Chap. 11 Finance et al. assess the experience of creating the University of Lorraine by merging four institutions. They argue that the context for the continuing increase in the number of mergers in France relates to a core rationale for higher education and research policies in past decades, namely reducing the excessive centralisation and fragmentation of the system. A number of government initiatives were launched in 2004, starting with the Pôles de recherche et d'enseignement supérieur (PRES) in 2004, aimed at boosting regional partnerships, and similar regional initiatives including the Réseaux thématiques de recherche avancée (RTRA) and the Centres thématiques de recherche et de soins (CTRS), aimed at decentralising power to regional and local actors. The quick succession of these and related initiatives resulted in pulling the system in different directions. In addition, while the PRES targets universities and other HEIs (grandes écoles, etc.), the mergers have only been taking place between universities. The main rationale for university reform relates to the need to increase interdisciplinarity and rationalise the educational offer building on a particular niche and specific research strengths. The mergers and alliances provide the means for triggering such a strategic change

process, although it may not prove the most effective and/or least painful. The process has met with a level of resistance from Universities due to concerns over losing their independence. As a result, different shades of mergers or merger-like processes have emerged, with some universities deciding to strengthen their cooperation without undergoing a merger, and others opting for a smaller scale merger, linking only some of their units. Academia has insisted on a sufficiently flexible legal framework to support these types of institutional solutions. The merger drive has produced a shift of power from central to regional government and towards stronger institutional leadership. The challenge remains how to maintain the current status quo and the progress achieved in a dynamic and fragile political and economic climate and how to sustain the motivation of the key players (not least staff and students) to accept the drive in favour of change.

Chapter 12 by Delgado and León assesses the strategic aggregation of universities in Spain. The merger process in that country formed part of the Spanish Strategy University 2015 (SU 2015), launched in 2008 to foster the modernization and internationalization of the Spanish university system, allowing universities to exploit their potential in the knowledge-based economy and society. The chapter reviews the experiences generated in 2009–2011 through the International Campus of Excellence (CEI) Programme, launched as an integral part of the SU2015, with the aim of improving the positioning of Spanish Universities at European level. An in-depth case study of the CEI-driven process at the Technical University of Madrid geared to user-driven open technology innovation, highlights positive results including more than 50 patents granted in 2012, with 17 spin-offs created and 12 licenses contracts, with CEI Montegancedo as a key catalyser. A major drawback has been the financial dimension with the impact of the financial crisis and the fact that the regional governments have largely not accepted to the commitments linked to the long-term loans imposing a burden on the universities. Despite the fact that the funding provided is in soft loans, the programme has succeeded in supporting the strategic modernisation process at universities. The authors conclude that the programme is having significant impact, attracting the participation of all public universities and more than half the private universities, despite the fact that private universities are not eligible to receive loans through the autonomous communities. The impact relates to enhancing international attractiveness, the internationalisation of teaching and research activities and the creation of new teaching and research posts, enhanced strategic processes, promoting the role of universities in contributing to economic recovery, the development of creative cities and smart territories and building knowledge ecosystems in specific thematic fields related with the social challenges.

Munteanu and Peter in Chap. 13 present the process of merging two Romanian universities, the Technical University of Cluj-Napoca and the North University of Baia Mare. In recent years new types of educational institutions in the tertiary field have emerged worldwide, increasing the competition for attracting students and driving traditional institutions to re-think their mode of operating and supplying quality educational services, using new technologies and business models. In this

context, mergers provide the opportunity for pooling sets of capabilities and expertise, shared among several actors capable of projecting a joint vision and strategy. The merger of the North University of Baia Mare (NUBM), and the Technical University of Cluj-Napoca (TUC-N) responded to the need to introduce an enabling structure to support the development of higher education in Baia Mare in the light of major sustainability challenges. The main rationale of the merger was to exploit synergies in concentrating material and human resources to increase didactic and scientific performance and the efficiency of the educational system as a whole. The main outcomes of the merger relate to the strengthening of the regional network of higher education in Transylvania, providing the basis for it to emerge as an important player in the educational politics of the region. It is too early to assess the complete results of the merger since it is a long-lasting process and complete integration will entail at least a cycle of study, during which common curricula and regulations will be developed. However, the merger drive is significant in the Romanian context as representing a passage from hierarchies to university networks, leading in turn to another passage, leading from an exclusive development option to the possibility to explore and embark on multiple options. It also provides the means for addressing important objectives of increasing quality in the education and research and enhancing the university's national and international visibility as a whole.

In the final case, in Chap. 14, Hawkins documents the experience of the University of Western Sydney in Australia. This merger was spurred by a combination of external and internal factors, primarily the changing dynamics in higher education (locally, nationally and internationally) and the strained and dysfunctional UWS federation forcing an overdue institutional reform process. This had its origins in the initial federated structural form of the University, its legislative charter, the nature and aspirations of its founders and the experiences and expectations of its communities, students and staff. The merger brought together three federation Member institutions to form a unified multi-campus University with a single administration and academic structure. The rationale for the merger related to the costs of the federation (labelled by Government as a financial risk) and the University's reduced productivity and diminishing ability to take advantage of the potential for sector-wide growth. A project management framework was set up to drive the process, designing the structure and processes, which had to be iterative and adaptive. The process was marked by significant student engagement in the process and in general communication strategies with stakeholders while intense were not always considered sufficiently effective and meaningful. A number of lessons for managing the merger process more effectively are outlined including projecting a well-articulated vision covering all areas of change process, focus on academic structure, manage change, garnering appropriate level of resources and benchmark costs, a comprehensive communications strategy. The main impacts of the merger are the continuing and comprehensive organisational and cultural change, to produce a revitalised and unified institution geared for change.

1.7 A Way Forward

The experiences presented here show that despite the very different circumstances present in universities around the world, there is a core commonality to their structures and missions which means that when mergers are contemplated similar issues are encountered. On that basis, it is to be hoped that by marshalling experiences from authors who are typically at the heart of the system or else long-term observers, it will be possible for those contemplating moves in this direction to move a little faster than they otherwise might have done and to avoid some of the pitfalls which others have encountered. Even for those included in this collection, this stocktake reflects a particular point in their history. The rapidly changing environment for higher education means that change is a constant. It is likely to become more frequent that responding to external pressures means changing the boundaries of an institution in response. New frontiers may mean that such mergers will take place with entities outside the academic world altogether in the name of private provision. As with other endeavours higher education needs to employ both hindsight through evaluation and foresight to ensure that it is prepared to defend and enhance its core mission in society.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Cartwright, S., & Schoenberg, R. (2006). Thirty years of mergers and acquisitions research: Recent advances and future opportunities. *British Journal of Management*, 17(S1), S1–S5.
- Harman, G. (1986). Restructuring higher education systems through institutional mergers: Australian experience, 1981–1983. *Higher Education*, 15(6), 567–586.
- Harman, K., & Meek, V. L. (2002). Introduction to special issue: “Merger revisited: International perspectives on mergers in higher education”. *Higher Education*, 44, 1–4.
- Hazelkorn, E. (2009). Rankings and the battle for world-class excellence: Institutional strategies and policy choices. *Higher Education Management & Policy*, 21(1), 55.
- James, D. (2012/21, September). *Collaborations, alliances and mergers in higher education*. Higher Education Funding Council for England. Bristol: Northavon House, Coldharbour Lane.
- Mao, Y., Yuan, D., & Liu, J. (2009). The effects of university mergers in China since 1990s from the perspective of knowledge production. *International Journal of Educational Management*, 23(1), 19–33.
- Martin, J., & Samels, J. E. (1994). *Merging colleges for mutual growth: A new strategy for academic managers*. Baltimore: Johns Hopkins University Press.
- Martin, J., & Samels, J. E. (2002). We were wrong; try partnerships, not mergers, chronicle of higher education. *The Chronicle Review*, p. B10. <http://chronicle.com>
- McGregor, R. (2011, June 10). Zhou’s cryptic caution lost in translation. *Financial Times*.
- Ursin, J., Aittola, H., Henderson, C., & Välimaa, J. (2010). Is education getting lost in university mergers? *Tertiary Education and Management*, 16(4), 327–340.

Part I

Mergers and Alliances

from the Perspective of National

Higher Education Systems

Chapter 2

Mergers and Alliances in France: Incentives, Success Factors and Obstacles

Andrée Sursock

2.1 Introduction

The number of mergers and alliances in higher education has grown recently in Europe, and France has not escaped this general trend. An unpublished survey of the 34 national associations of universities that are members of the European University Association (EUA) shows that, as of November 2012, 21 associations reported activities in this area. The survey revealed that motivations for such activities could be grouped into four categories (several of which may be relevant to a single country): economies of scale; enhanced regional or international impact; increased quality via the rationalisation of the education offer and the consolidation of a fragmented research sector; and creating new synergies in education and research by seizing on the opportunity of a demographic decline. Although these might be shared objectives, they should not conceal important contextual differences. Thus, this chapter presents the evolving French policy context that has led to recent mergers and alliances in universities. The stand-alone schools of engineering or of commerce are also engaged in a similar process but these types of institutions are not part of this historical account because their motives and trajectory for engaging in such activities are somewhat different from those of the universities.

The chapter is based on several empirical sources: the author's direct involvement in the evaluations of four French alliances (two regional alliances, an institutional merger and an international consortium involving French universities), in the international visiting board of a Parisian university, and in the 2012 review of French higher education and research that was initiated by the government following François Hollande's election in 2012. The chapter is also based on formal and informal discussions held with French university leaders over the course of nearly 20 years, as well as a number of printed sources.

A. Sursock (✉)
European University Association, Brussels, Belgium
e-mail: andree.sursock@eua.be

This chapter shows that alliances and mergers have been promoted by institutional leaders as a step toward rationalising French higher education and research, consolidating its various elements, and improving its impact internationally. It is the result of at least 50 years of policy development. However, if these steps were perceived as logical and important by decision makers and many university presidents, they were not perceived as such by some of the rank-and-file academics, particularly when these policies were viewed through the prism of partisan politics and ideology. The new government of François Hollande decided to examine the impact of past legislative reforms and consider new legislative changes. These are currently under discussion. To use Christine Musselin's apt words, this is indeed "the long march of the French universities" (Musselin 2001). The interested reader is warned that the legal saga is not finished; its next episodes will have to be found elsewhere than in this chapter.

2.2 The Foundations of the French Higher Education System

French higher education and research policies of the past decades have been aimed at addressing two perceived weaknesses of the system – hyper-centralisation and hyper-fragmentation. In the interest of brevity, it could be said that the seeds of these two weaknesses were sown in the eighteenth century.

2.2.1 *Fragmentation*

Around the French Revolution, the state created the first "grandes écoles" through the establishment of the Ecole normale supérieure and the Ecole polytechnique. These institutions followed in the footpath of older tertiary (non-university) institutions that were dedicated to the training of engineers, including of military personnel. Access to the "grandes écoles" has been through a *concours* (a highly selective competition), a feature that is explained as being fundamental to reinforcing democracy because it ensures that social mobility is based on merit rather than birth. In other words, the process of elite formation through a *concours* has been viewed as fair and democratic because – theoretically – everyone holds the same chances to success. Although Bourdieu and Passeron (1990) showed the extent to which the system reproduced elites, the ideological commitment to this approach has not wavered.

The fragmentation of institutions of higher learning produced a model that is unique in the world in that small, specialised, elite schools (the *grandes écoles*) are at the apex of a pyramid whose base is constituted by large, multidisciplinary universities that are required to accept any holder of a *baccalauréat*, without any

selection or even academic orientation. This means, for instance, that the holders of professional and technological *baccalauréats* have access to the universities even though these *baccalauréats* were meant to lead into vocational higher education. This situation results in relatively high failure rate in the first year of university and a sense, on the part of the universities, that they are given worthy social mobility and democratic objectives but without the financial means to succeed. Indeed, the universities receive less funding per student than the *grandes écoles*.

The fragmentation of the higher education landscape was further aggravated by a policy of reinforcing research outside the universities. This was embodied by the most visible of all research organisations, the prestigious Centre national de la recherche scientifique (CNRS). (To note, there are several other such organisms but the acronym CNRS is used in this chapter as shorthand for all of them.).

2.2.2 *Centralisation*

The Emperor Napoléon I created the imperial university, managed centrally by the ministry. In the process of creating one university (with a multitude of branch faculties across France), the imperial power, in effect, destroyed the French universities *qua* institutions. There were institutions that continued to be called universities but these were empty shells and the government dealt with the branch faculties directly. This reality was reflected in the most common way that the general public spoke of universities, referring to them as “*fac*” for faculties. The institutions had no autonomy in relation to their “*autorité de tutelle*” – a very strong expression referring to their ministry and suggesting the extent to which the ministry ran the universities’ affairs.

Managed centrally meant that – at least, in principle – all universities had the same mission, and the same profile as prescribed by law. In fact, the legal framework was so detailed that, over the years, the universities came to teach study programmes whose components were defined centrally. They had little leeway to innovate, particularly for the first years of the initial cycle. This has changed relatively recently but the temptation of central regulation is still very strong.

2.3 From the 1960s to the 1990s

Between the mid-1960s and the mid-1990s, three important processes emerged within the higher education system, which were somewhat at odds with one another.

- Firstly, a rapprochement between the universities and the research organisations started with the creation of “associated laboratories” (university laboratories co-funded by the CNRS) and later, the *unités mixtes de recherche* (UMR), or joint research units: these brought researchers from the universities and the

CNRS or equivalent organisations into the same laboratories. The universities, however, felt that the CNRS was strengthening its own research capacity by picking the best brains in the universities.

- Secondly, autonomous faculties were regrouped by the government into one or more universities in some cities. Thus, three universities replaced the Université de Grenoble; three, the Université de Strasbourg; four, the Université de Bordeaux; etc. To take the example of Nancy, newly formed Nancy 1 became specialised in sciences and medicine, Nancy 2, in social sciences and the humanities and the Institut national polytechnique de Lorraine regrouped several engineering schools. To a certain extent, the new universities represented an attempt to promote a level of interdisciplinarity but within a rather small range of disciplines. It was only in the smaller – to medium-size towns that truly interdisciplinary, comprehensive universities (with or without medicine) were found. In addition, a history of autonomous faculties cannot be erased easily and lingering, nostalgic feelings contributed to centrifugal tensions within the newly created universities (Finance 2012).
- Thirdly, France recognised that the legal framework should support the new universities by providing more autonomy and strengthening their leadership. Perhaps this was a rational political response to the massification of higher education and the realisation that the sector had become too big to be managed centrally. In an attempt to strengthen both the universities and their leadership, the institutions were asked to develop and negotiate a strategic project with the ministry that was enshrined in a multi-year contract. The contract strengthened the central leadership of universities and required the university presidents and the top leadership teams to shape and coordinate an institutional strategy. The universities were assigned an advisor (a former university president) who served as coach and mentor to the presidential team and advised during the process of developing and negotiating the contracts. The ministry, however, paid these advisors; as such, they had to balance the interests of the universities with that of their employer. Some ended up feeling that they represented the ministry in one of the most important negotiations between each university and the ministry (Jean-Pierre Finance, private communication).

These three policies were somewhat in contradiction and, as any other policy, had unintended consequences – at least three consequences in this case, as elaborated below.

2.3.1 Universities Evolved Different Organisational Cultures

Although the universities were generally restructured along disciplinary lines, in some cases, the restructuring also reflected political (left/right) fractures: some universities split along party lines and it was left up to individual professors to decide which university to join. This crystallised long-standing tensions that had survived over the years.

Even if the restructuring along disciplinary lines was friendlier, it resulted over time in diverging organisational cultures amongst neighbours. As an example of this, the organisation of research is vastly different in the universities focused on the humanities and social sciences (where research is generally an individual pursuit) to the way it is organised in scientific universities (generally characterised by teamwork, and requiring more institutional investment: funding, equipment, health and safety measures, etc.). As a result, the scientific universities tend to be more hierarchical and disciplined. Student participative culture is also different and the terms of engagement are generally more political and turbulent in the former group of universities than in the latter. As will be noted, these contrasting cultural differences turned into challenges to be overcome when cooperation became a goal at the turn of the twenty-first century.

2.3.2 National vs. International Prestige Strategies

The policy of boosting the universities' research capacity through a rapprochement with the research organisations had a downside because two categories of laboratories were created in the process: the UMR that were mentioned above and the *laboratoires d'accueil*, which received funding from their university rather than from the CNRS and similar bodies.

The UMR were considered to be the top laboratories in France, and as a result, researchers identified more strongly with their laboratories (if it was a UMR) than with their universities. Researchers valued the UMR label, using it for their individual promotion at national level, but this strategy undermined their university's international visibility because the researchers signed off their publications using other affiliations (the laboratory, the funding research organisation, etc.) than the name of their university.

When the Shanghai Ranking appeared in 2005, it had the effect of a bombshell: only three French universities were in the Top 100 and the “grandes écoles” or the research organisations did not feature in the Top 100. In an effort to understand the roots of the problem, a scientific and medical university (Université Lyon 1) undertook an inventory of the ways in which its researchers listed their affiliations in academic publications and came up with the staggering number of over 50 different ways! The compounded individualistic strategies aimed at gaining national prestige, resulted in the loss of the researchers' university affiliation and a weakening of the aggregate international impact of French university research, which became hardly visible in the newly created international rankings.

2.3.3 Institutional Strategic Capacity

Furthermore, the multiplicity of research structures resulted in institutional inertia on the part of the universities, due to a lack of institutional self-confidence and

pervasive individualism. In other words, the structures did not help individual academics and these academics, in turn, did not support the structures. In addition, the continued central steering from the ministry did not contribute to building institutional strength and effective leadership.

Over time, however, the institutional contract and other measures served to build up the strategic capacity of French universities. A new generation of presidents emerged who became attuned to stronger and more effective leadership. A number of these presidents was no longer willing to accept a situation characterised by under-funding, limited institutional autonomy and lack of student orientation and advisory support, which, in the 1980s and 1990s, led to overcrowding and a high failure rate in the first cycle. The university presidents complained that they were trapped between two types of more powerful organisations: the *grandes écoles* on the one hand, which were properly funded, had more autonomy and could select their students; and, research organisations, on the other, which had their own national research strategies into which the universities were expected to fit rather than they themselves shape. The universities felt, for good reason, that they were the handmaids of the sector, financially strapped and politically squeezed between the national research organisations and the “*grandes écoles*”. Both types of institutions were considered as the elite part of the sector and, as such, had the ear of the policy makers in Paris. It did not help matters that the top politicians and civil servants had been generally educated in the “*grandes écoles*” rather than in the universities and had little exposure to research-based teaching.

2.4 The First Steps Toward Ever-Closer Alliances

Around the year 2002, the universities in Grenoble became the trailblazer in France when they established “Grenoble Universités”. This was an umbrella organisation to organise and promote cooperation across the universities in Grenoble. Grenoble Universités announced that it would drop the plural to indicate a much closer cooperation. A number of French universities followed this model. They set up their own umbrella organisations with some starting to discuss possible mergers in order to increase their critical mass and address their chronic under-funding.

An article – whimsically entitled *Napoléon renversé* (Napoleon upside down) by Aust and Crespy (2009) – describes how this consolidation movement started as a grass-roots initiative, i.e., at the initiative of some university presidents rather than coming from the ministry.

The ministry supported this movement. The regional and national governments took several initiatives to encourage such partnerships. In 2003, the ministry proposed a structure for such cooperation that found few takers. A year later, at the time of the implementation of the Bologna reforms, the then director general of higher education, Jean-Marc Monteil (2004), wrote to the universities emphasising that their future contracts should integrate a strong element of local partnerships (universities, schools, teachers’ training colleges, university

hospitals, etc.) and that it was “vital to ensure the coherence of the local educational offer in order to contribute to regional development, within an international perspective” (author’s translation).

2.5 Devolution to Regional Authorities and the Emergence of the “PRES”

Shortly afterward, an initiative, accompanied by financial incentives, to boost regional partnerships was launched: this was the *Pôles de recherche et d’enseignement supérieur* (PRES), which joined a set of similar regional initiatives such as the *Réseaux thématiques de recherche avancée* (RTRA) and the *Centres thématiques de recherche et de soins* (CTRS). These initiatives were part of a general effort to decentralise and devolve power to regional and local actors (Laperche and Uzunidis 2011) – a process that had started already in the 1980s with the “Université 2000” plan.

As in other parts of the world, Silicon Valley was the model that central and regional actors wanted to emulate. This was a far cry from the traditional French approach to industrial development that had been centrally driven, with the state defining the overall approach (say, the development of nuclear power) and deciding the local applications (in this case, the location of the nuclear plants). Such centralised planning was guided by the notion that, to the extent that it is possible, there would be a harmonious development across the country. The code words for this equalising treatment are *l’aménagement du territoire* (or regional development).

The new funding instruments were conceived in a selective and competitive way. Thus, the PRES funding was supposed to be concentrated on ten sites but, by 2012, there were 26 PRES.

According to Aust and Crespy (2009), the university presidents who were most successful at promoting a PRES had a similar professional profile: for the most part, they were scientists who led scientific universities and whose professional trajectory included an advisory or expert role to the ministry in Paris, their regional authorities and the European institutions. In the process of driving their change agenda, these promoters adopted a top-down approach and excluded from the initial discussions important sections of the university community and the decision-making bodies, including the staff and student unions and the faculty deans (Aust and Crespy 2009). This would come back to haunt them a few years later.

The main objectives of the PRES have been to increase critical mass and improve international visibility. Thus, typical activities include the coordination of doctoral education (via common doctoral schools), shared policies for the acquisition, use and maintenance of scientific equipment and facilities; common internationalisation strategy (promotion, exchanges, agreements, etc.); joint initiatives for knowledge transfer and joint signatures on scientific publications.

The PRES were successful to the extent that they encouraged the university leadership to be more strategic and to work better with their regional authorities, the neighbouring *grandes écoles* and the local branches of the research organisations. These are notable achievements even if it has taken time for partners to learn to work together and if it was challenging to create cohesion when status, salaries and identities differed across a wide variety of partners. In addition, some PRES have gone as far as undergoing mergers (Aix-Marseilles, Lorraine).

It remains to be seen, however, if the PRES will bring added value or if they turn into a new layer of bureaucracy that would have no positive impact on academic strategies.

2.6 Between Excellence and Regionalism

In addition to the PRES and the other funding instruments, several reforms were introduced during the Chirac (1995–2007) and the Sarkozy (2007–2012) presidencies. These included a new law on public finance (LOLF); a “*pacte de la recherche*” that saw the creation of a research funding agency (*Agence nationale de la recherche*, ANR) and a new evaluation agency (*Agence d'évaluation de la recherche et de l'enseignement supérieur*, AERES); a restructuring of the national research organisations, such as the CNRS; and a new law on university autonomy (LRU).

2.6.1 A French Excellence Initiative

In addition to these measures, competitive funding was strengthened through the *plan campus* and a programme called “*investissements d'avenir*”. The first was meant to fund ten campuses of excellence. The selection was based on four criteria: the academic project, the condition of the physical plan, the development of campus life and the anchoring in a region. The second programme included a variety of instruments such as: Equipex to fund intermediate size laboratory equipment, Labex to fund innovative scientific teams, and IDEX to support the emergence of a small and select number of alliances and mergers. These instruments were conceived as the French version of the German Excellence Initiative; in other words, this policy – particularly the IDEX – concentrated resources on a few “world-class” universities, perceived as the key drivers of economic growth in a knowledge-based economy.

It is important to note the quick succession and pileup of initiatives – some of which were pulling in different directions. Eric Froment, who played a role in the Lyon PRES and is a keen observer of French higher education and research development, noted (private communication) that the PRES emphasised partnerships and cooperation but that the LRU introduced an individual logic: indeed,

the universities had to apply and be given approval in order to be allowed to implement the newly enlarged scope of autonomy. In a number of PRES, some universities felt they were ready for the LRU whilst others amongst their partner institutions in the PRES were not ready or were even politically against what they perceived as a neoliberal policy. These different approaches weakened these PRES, at least in the short term. When the IDEX were next introduced, they injected once more a culture of partnerships but with a new twist: a stress on excellence and a competitive and elitist bent, which was not as strong a feature in the initial culture of the PRES.

In addition, some of the funding instruments were in contradiction with the historic way that research had been funded. National funding policy had not always been linked to evaluations and wavered between excellence and egalitarianism (depending on the political orientation of the government). Research funds were sometimes allocated to universities that did not have the appropriate research capacity even if a nearby institution had more research capacity. In such cases, research would be carried out by a UMR that would include CNRS (or equivalent) researchers and university researchers, thus providing a weaker university team the opportunity to conduct higher quality research. This was done in an attempt to level off regional differences. The planning arm of the state tried (theoretically) to ensure that the *aménagement du territoire* was as fair as possible. Although this approach ended in the 1990s, regional devolution meant that the criteria for funding research continued to include some consideration of the need to build regional research capacity.

Given this history, the IDEX and associated competitive funding instruments created tensions at multiple levels:

- Tensions within the university community at large: a total of eight mega-alliances of universities were funded through the IDEX. This extra funding was concentrated in Paris and four other regions, leading to resentment and questions of fairness and sustainability, such as: Will this policy result in turning big stretches of France into an “academic desert”? What would be the effect of such a policy in the long haul? Is it sustainable to concentrate resources to this extent? Are these mega-universities sustainable and will they succeed?
- Tensions between the IDEX-funded alliances and the neighbouring universities that were not part of the alliances, e.g., between the universities located in the centre of Paris and those in the immediate suburbs; in Alsace, between the Université de Strasbourg and the nearby Université de Mulhouse.
- Tensions across the different alliances within Paris, for instance, over which alliance would seize the coveted Sorbonne brand name (since all the Parisian universities are the daughters of the August alma mater).
- Tensions within each university that received IDEX or Labex funding: by pitting the staff unions against the university leadership, whom they criticised for the lack of collegial decision making in constituting the alliances, and in playing off one laboratory against another as a result of the competitive Labex funding model.

Thus, these tensions and the pace of recent change have been reverberating across all levels, within each university and up to the level of the sector at large, including, therefore the French conference of university presidents (CPU), which has been struggling, at times, to find consensus amongst its members. Indeed, diverging views have found their ways into the printed press, with one group or another of university presidents signing a letter putting forward minority views on crucial issues for the sector. For instance, 11 presidents signed an open letter denouncing the LRU, the recent law on autonomy (AEF 2013). Alternatively, the statements emanating from the CPU have been sometimes qualified as *de l'eau tiède* (lukewarm water), an expression referring to their lack of punch as they strive to reach consensus. Needless to say, these challenges were understandable and many other associations of universities across the world have had to find a way to deal with increased competition within their midst.

2.6.2 *The Increased Role of Regional Governments*

The shift towards concentrating resources and supporting a few pockets of excellence should also be seen in the context of a shift of power from the central to the regional governments in France. The gradual devolution of power toward regional governments meant that these became increasingly sensitive to the need to have a regional knowledge strategy. Those regional governments with a good tax base and strong universities (that produced the regional political elite) were well placed to provide funding instruments to their knowledge institutions, thus also contributing to diversification and rivalry from a national perspective.

Increasingly, the regional governments learnt how to support their universities to the point that some wanted to go so far as defining the universities' strategy. This prompted the then minister for higher education and research (Laurent Wauquiez) and the then director for higher education (Patrick Hetzel) to warn the university presidents during their 2012 annual colloquium about the danger of "*glisser d'une tutelle à l'autre*", i.e. the risk of losing the hard-earned autonomy that had been bestowed by the central government in exchange for less autonomy vis-à-vis the regional governments.

The tension between the central and regional governments was exacerbated during the Sarkozy era because the vast majority of regional governments were in the hands of the Socialist Party. This also had consequences for higher education, particularly in the Paris region, where some projects became hostage to fortune. For example, the new Condorcet campus in Paris and nearby Aubervilliers, specialised in the social sciences, has been in the planning stage since 2007. It brings together four universities, several research organisations, several institutes, about 200,000 m² of new buildings, the Paris City Hall, the regional authorities and the ministry. So far, no building has risen from the ground. Tensions between the socialist regional government and the Sarkozy government over how to co-finance the Condorcet development seemed to have slowed down the start of the project. The Sarkozy

government favoured Public Private Partnerships (PPP) for the *plan campus* projects, including this one, whilst the regional government favoured a public offer and funding. The vice president of the regional authority, Isabelle This Saint-Jean, is quoted as saying:

The former government wanted to impose PPP and considered the regional authority as a cash cow; its communication about the project was inaccurate whilst nothing had ever been built. This arm wrestling has considerably slowed down the project (Stromboni 2013b).

The Condorcet campus is also emblematic of the confusion that is being created by multiple, interlocking initiatives: here is one new organisation – Condorcet – that is composed of ten different institutions, some of which are involved in different Parisian PRES. Thus, Université Paris 1 is part of a PRES called HéSam; universities Paris 3 and 13 are part of the Paris Cité PRES; and Université Paris 8 is part of the Paris Lumière PRES. It is difficult to see how these overlapping affiliations will be managed and guided down a coherent path.

2.6.3 The Recent Mergers

It is a relief then to travel from Paris south to Marseille or northeast to Strasbourg and the Lorraine. There, universities have managed to merge and to consolidate. As was mentioned earlier, universities across France were restructured in the 1970s. The first to merge were the three universities in Strasbourg (2009) followed by the three universities in Aix-en-Provence and Marseille (2012) and the three universities in Nancy with the University of Metz in Lorraine (2012). Other mergers have been announced in Bordeaux, Montpellier, and Toulouse, to name a few; whether these will be successful and all-inclusive remains to be seen.

If the PRES include universities and non-universities (grandes écoles, etc.), the mergers are only taking place amongst universities. The Université de Lorraine includes the schools of engineering that were the constituent parts of the Institut national polytechnique although this institute has the same legal status as universities. This consolidation movement has been accelerated by the IDEX funding. Once the decision to fund eight big projects was taken, it accelerated mirroring strategies elsewhere even if questions were being asked about the “*mastodontes*” (mammoths) that such a dynamic was creating. Was big really that beautiful? Wasn’t the California Institute of Technology tiny and successful? Is going big the only strategy open to an underfunded sector and its only chance to exist on the world stage? The answer is tentatively positive if, for instance, the Shanghai ranking is taken as a measure of success since its indicators are calculated in absolute rather than relative numbers. In this case, big is indeed better! (Rauhvargers 2011).

Regardless of these lingering questions, many had changed their minds and come to realise that French universities needed to be reformed in order to increase the span of their interdisciplinarity, rationalise the educational offer and built on

specific research strengths. The mergers and alliances were a way of triggering such a strategic change process. It remains to be seen if this was the most effective and least painful way of achieving such objectives. At the same time, some universities are resisting the movement. Thus, in Bordeaux and Montpellier, the humanities universities have dissociated themselves from their local merger projects. In other parts of France, it is the engineering schools that were concerned in preserving their identity and independence. It will be interesting to see if these institutions will encounter difficulties in creating a niche for themselves in the future.

Other French universities decided to link closely some of their units (e.g., in Créteil and Marne-la-Vallée, and Dijon and Franche-Comté). These experiences offer the opportunity to practise a rapprochement on a small scale and prepare a more ambitious institution-wide merger, with its attendant administrative challenges. Most importantly, it often gives a role to the rank-and-file who also see immediate academic benefits ([...] or not) in increasing their critical mass.

Still other universities (such as those in Lille, Lyon, Rennes, etc.) decided to strengthen cooperation without going through the obstacle course that mergers represent. Each of their individual stories – and their twists and turns – shows the extent of the difficulties entailed. For instance, the three universities in Lille (Lille 1, 2 and 3) were not always on the same page: at some point, Lille 2 decided against a closer alliance and stayed on the sidelines whilst Lille 1 and 3 made progress in discussing cooperation; recently Lille 2 changed its position and joined the closer alliance again but on condition that merging is no longer an option. Therefore, in an attempt to lower the tensions, the future shape of the Lille project is now shrouded in ambiguity and its contours are no longer defined.

A very candid interview with Fabienne Blaise, the new president of Université Lille 3, is very revealing in this respect (Stromboni 2013a, b). She identifies the following three sets of factors that have contributed to the meanderings and the delays:

- The focus of the early discussions in Lille was about the institutional aspects of the project; these were the most complex (Although she does not say this, presumably, it would have been more useful to discuss the academic benefits of the merger instead of the administrative ones; this would have served to stimulate and motivate the academic community).
- Although working groups had been organised, the lack of university-wide discussion was evident. This project was being discussed within the top leadership teams and involved presidents and vice-presidents. This led to conspiracy theories and resulted in the failure of two university presidents to get re-elected. The third president was re-elected but “understood that he needs to work in a different way”, i.e., consult more effectively. (It is interesting to note that the third president led the scientific university and that he is the only one who survived his critics.).
- The social science and humanities university asked for reassurance that its needs would not be overshadowed by those of the science university.

2.6.4 The University Leadership vs. The Rank-and-File

All these experiences helped to indicate to the university leadership that the time for single solutions to complex problems was over. A very strong consensus emerged amongst them around a key word: “souplesse” (flexibility). In other words, they insisted that the legal framework should remain sufficiently open to allow a range of institutional solutions.

The academic rank-and-file, however, was in a different place. Some of the staff unions have been resisting the double shift: the shifting power from the central state to the regional authorities and, more worryingly for them, to the presidential teams in the universities. Naturally, they could only view as a threat any strategy that made power more distributed and therefore more proximate. Their strengths derived from being able to organise themselves as a bloc against central national policies. Introducing greater differentiation, regional devolution and institutional autonomy could only dilute their collective punch.

In addition, excellence-driven policies have a cost, including human ones as noted by Patricia Pol:

Permanent stress, pressures and frustrations generated by competition are some of the factors contributing to unhappiness and imbalance. The time spent negotiating risky agreements, the cost of coordinating these new cooperative structures increase the workloads of academics at the risk of driving their attention away from their core mission of research and teaching (Pol 2012).

It is in this context that the Hollande government decided to conduct a thorough review of the most recent reforms with the stated aim of correcting the negative effects of past initiatives via a new law. At time of writing (Feltesse 2013), Vincent Feltesse, the parliament rapporteur for the new law, was conducting preliminary hearings in preparation for the parliamentary debate. His blog sought to reassure its readers by stating that the law will give flexibility to a range of groupings – mergers, alliances (*communautés*) and associations (*rattachements*). These groupings could straddle administrative boundaries and the ministry would be required to sign a contract with each grouping.

Rumour had it, however, that the contracts would be signed by the grouping of all institutions within each *academy* (with the exception of Paris). These *academies* are administrative units led by a *recteur d’académie*, who represents the state on all matters pertaining to education and higher education.

It is easy to see why the ministry would prefer to operate in this standardised bureaucratic way, given the increased complexity caused by the interlocking of structures, as shown for instance in the Condorcet example discussed earlier.

When the idea that the ministry would deal with only a single grouping was broached with Fabienne Blaise in Lille, she responded in a sharp tone that there were four groupings rather than one in the Lille “académie” and that the ministry would have to make do with the situation: “They can’t tell us, just like this, with a snap of their fingers: ‘we want to talk to one grouping’. This irritates me. It won’t push us to cooperate and it won’t reduce complexity. Most importantly, I would not want this to act as a break on the grouping dynamic.” (Stromboni 2013a, b).

2.7 Concluding Remarks

It is clear that the sector has undergone a number of major policy changes and challenges. Their accumulation has been difficult to manage and the situation is far from being stabilised. The gains that have been made over the years could be lost as the sector is still prone to wide policy swings with respect to the links between the universities, the research organisations, the *grandes écoles* and both the national and regional authorities.

Stronger institutional leadership is emerging but it remains to be seen if it will be able to motivate staff and students and provide incentives for change in an unfavourable economic context. In addition, leadership is a necessary but not sufficient condition. University leadership is exercised in an arena that includes multiple actors – staff and student and their unions, “*grandes écoles*”, research organisations, national and regional authorities – and these will not be necessarily pushing in the same direction. The historical tendency toward centralisation and fragmentation might once again prevail unless good university leadership is combined with the capacity of the central state to change and adapt and if the regional authorities resist the siren call of increased power.

Acknowledgements I am grateful to Jean-Pierre Finance and Eric Froment for their careful reading of this paper and their invaluable comments.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- AEF. (2013). *Lettre ouverte à Madame la Ministre de l'Enseignement Supérieur et la Recherche et aux élus de la Nation: "Pour une loi de l'Enseignement Supérieur et la Recherche ambitieuse, concertée, à la hauteur des enjeux réels"* [Online]. Available at: <http://blog.educpros.fr/pierredubois/files/2013/02/11-présidents-contre-la-loi-Fioraso-cliquer-ici1.pdf>. Accessed 28 Feb 2013.
- Aust, J., & Crespy, C. (2009). Napoléon renversé? Institutionnalisation des Pôles de recherche et d'enseignement supérieur et réforme du système académique français. *Presses de Sciences Po: Revue française de science politique*, 59, 915–938. <http://www.cairn.info/revue-francaise-de-science-politique-2009-5-page-915.htm>
- Bourdieu, P., & Passeron, J. C. (1990). La Reproduction: Éléments pour une théorie du système d'enseignement, Editions de Minuit. In *Reproduction in education, society and culture* (Theory, culture and society series). London: Sage.
- Feltesse, V. (2013). Mon journal de rapporteur. Rapporteur. République française: Assemblée Nationale Commission des affaires culturelles et de l'éducation. <http://monjournalderapporteur.tumblr.com>
- Finance, J. P. (2012). La gouvernance et l'organisation. In F. Frédéric (Ed.), *Les universités en France: fonctionnement et enjeux* (pp. 40–56). Paris: Presses Universitaires de France.

- Laperche, B., & Uzunidis, D. (2011). The impacts of reforms on research and innovation in France: Direction, planning and co-ordination. *Higher Education Management and Policy*, 23(2), 9–26. <http://www.oecd.org/edu/imhe/HEMP%20v23-2%202011.pdf>
- Monteil, J. M. (2004). 0403249 Direction de la recherche et de l'enseignement supérieur. Circulaire. République Française.
- Musselin, C. (2001). *La longue marche des universités françaises*. Paris: Presses Universitaires de France. The long March of French Universities, New York, Routledge.
- Pol, P. (2012). *La passion de l'excellence dans l'enseignement supérieur en Allemagne*. Mai: Repères.
- Rauhvargers, A. (2011). *Global university rankings and their impact* [Online]. http://www.eua.be/pubs/Global_University_Rankings_and_Their_Impact.pdf
- Stromboni, C. (2013a). Interview of Fabienne Blaise (Lille 3): “Nous ne sommes pas encore tous d'accord sur la pertinence d'une université unique” [Online]. Available at: <http://www.letudiant.fr/educpros/entretiens/fabienne-blaise-lille-3-nous-ne-sommes-peut-etre-pas-encore-tous-d-accord-sur-la-pertinence-d-une-universite-unique.html>. Accessed 27 Mar 2013.
- Stromboni, C. (2013b). *Opération campus: Condorcet avance. a son rythme* [Online]. Available at: <http://www.letudiant.fr/educpros/actualite/operation-campus-condorcet-avance-a-son-rythme.html>. Accessed 19 Feb 2013.

Chapter 3

Mergers and Classifications in Romania: Opportunities and Obstacles

Liviu Andreescu, Radu Gheorghiu, Alina Irimia, and Adrian Curaj

3.1 Introduction

The classification of Romanian universities, the first results of which were made public in 2011, and to a lesser extent the ranking of academic programs completed a few months later, have been among the most disputed recent additions to higher education reform in this country. While sometimes denounced, they seem to have been at least partly accepted by most academic actors as well as by the public. Nevertheless, this may have been the case because the effects of the classification and the rankings, at least as contemplated under the 2011 Law on national education which mandated them, as well as by the policy-makers which advocated them, have been slow to materialize.

The classification and the rankings were supposed to alter the resource-allocation mechanisms in higher education (or at least the funds allocated under such mechanisms), as well as to increase transparency and to reduce institutional homogeneity and mission creep by promoting organizational diversification.

L. Andreescu (✉)

Faculty Administration and Business, University of Bucharest, Bucharest, Romania
e-mail: andreascul@gmail.com

R. Gheorghiu

Institute of World Economy, Institute for World Economy, Bucharest, Romania
e-mail: gheorghiu.radu.cristian@gmail.com

A. Irimia

Faculty of Sociology and Social Work, UEFISCDI, Bucharest, Romania
e-mail: alina.irimia@uefiscdi.ro

A. Curaj

UNESCO Chair on Science and Innovation Policies, National University of Political Studies and Public Administration (SNSPA), Bucharest, Romania
e-mail: adrian.curaj@uefiscdi.ro

More broadly, they were designed to impact on the very dynamics of the university system. One of the less talked about – though hardly ignored – goals of the classification and of the rankings was to promote academic concentration. Mergers were mentioned explicitly in the Law on national education “the Law” and often came up in statements by the previous education minister while he was promoting the law or discussing the efficiency or performance of the academic system.

The commotion which initially greeted the publication of the classification and ranking results has recently died out. The budding interest in mergers seems to have subsided as well. Nonetheless, the two exercises remain legally-mandated and will be repeated periodically (new methodologies are in the process of being devised). They will likely continue to introduce significant incentives for and (arguably) barriers against new academic alliances and amalgamations. Changes in methodology notwithstanding, organizational strategies in Romanian higher education will be oriented in the future also by the potential impact of university collaborations or mergers on the institutions’ positions in the periodic classification and rankings.

International practice in the field suggests that, especially where such exercises have a relatively strong bearing on institutional funding, as in Romania under the 2011 Law (e.g., Art. 194), mergers are either encouraged from the top down, by the decision-makers, or become tempting from the bottom up. As Rowley (1997) found in a meta-analysis of the relevant literature, changes in the funding model were the key secondary driver of university mergers (alongside institutional compatibility or complementarity, as the key primary driver). Some of the recent efforts in Romania (discussed presently) to explore possible mergers suggest that, indeed, improving one’s standing in the classification and, thereby, one’s access to the public purse may become an important strategy for consolidating the academic organization.

This chapter looks at the possible effects of the university classification exercise on the strategic options of Romanian academic organizations insofar as the question of academic concentration is concerned. Will mergers become a tempting option given the logic of the classification exercises and the Law’s provisions on institutional funding and mergers? What are the likely barriers against academic amalgamation in the current legislative environment? Might higher education institutions (HEIs) look beyond the university system for merger opportunities? These are some of the key questions we approach below, partly by building on an analysis of the (so far only) university classification exercise in Romania.

The chapter starts by outlining the legislative framework governing academic concentrations and some of the recent, pioneering university merger initiatives. The following section sketches the classification exercise and spells out some of its likely implications on HE amalgamations. It then explores a set of succinct concentration scenarios from the perspective of said exercise. The final main section of the chapter takes a closer look into one of these scenarios – the merger of Romanian universities and public research and development institutes, a policy issue with potentially major repercussions for the RDI system as a whole.

3.2 The Legal Framework and the First (Modest) Wave of Merger Projects

3.2.1 A Brief Outline of Romanian Higher Education

In Romania as elsewhere in Europe and beyond, the drive to formally classify higher education institutions (HEIs) emerged as the expression of at least three types of preoccupations on the part of policy-makers. The first relates to the homogeneity of the higher education system; the second, to the reduced competitiveness and social and economic relevance of universities; and the third, to the questionable effectiveness of the allocation of public resources.

Almost two decades and a half after the change of political regime in late 1989, the Romanian university system is still quite homogenous. It is true that, along several dimensions, the higher education landscape appears increasingly diverse. For example, of the around 90 currently accredited universities, about half are private. Among both the private and the state HEIs there are large institutions (though the largest remain the public ones) as well as small universities. Some universities are comprehensive, some (e.g., the polytechnics) have a more specialized focus, while still others are more narrowly vocational (medical, arts, economics HEIs). Several universities offer doctorates, others do not; some provide distance education programs, some do not, and so on.

This being said, the system as a whole remains markedly homogenous (Miroiu and Andreescu 2010). Universities are almost identical in their organizational structures, partly as a result of the legislative framework(s) after 1989. They currently offer “Bologna-type” bachelor’s, master’s, and doctoral programs – and little beyond that. Indeed, programs in the same specialisms are frequently quasi-identical in structure wherever they are offered, partly due to overly prescriptive accreditation regulations. The learning experience is very similar across university and program types (with the exception of a few vocationally-oriented schools). Nor is this surprising, in light of the fact that the higher education system as a whole still caters to the traditional student fresh out of high school. The country has one of the lowest European rates of engagement in lifelong learning, far below the EU average, and distance or “open” education programs are few in number and questionable in quality.

This systemic homogeneity has been considered a hindrance to increasing the relevance of a university education, whether by responding to a wider audience, by providing a larger or more adequate spectrum of competences, by generating useful research results, or by engaging more directly the various societal stakeholders.

The second concern mentioned previously is the reduced competitiveness of universities, both nationally and internationally. The poor standing of Romanian HEIs in international university rankings (no university has yet gained entry into the top 500, much less the top 200, of the best-known international rankings) is commonly cited as a sign of the system’s weakness and of its low research productivity. It may have also contributed to the fact that the public opinion – executives

included (WEF 2013)¹ – has become increasingly unfavourable or indifferent towards universities, thus hampering their efforts to recruit the very best high school graduates, many of whom now go to study abroad.

Thirdly, there is the matter of the inefficient allocation of public money, which partly explains the chronic underfunding of the (state) universities (the private, not-for-profit institutions have no access to public resources beyond the competitive R&D grants, European structural funds, and tax exemptions). The higher education financing system allocates the “core funding” by fully supporting the “non-fee-paying” students in public universities, currently amounting to roughly half of the student population in these institutions,² with the other half paying the full fee.

The financing arrangement has been criticized for dissipating funds among too many universities, in the absence of appropriate mechanisms for rewarding the quality of teaching, supporting significant research or responding to societal needs. It also resulted in extremely low tuition fees – usually around 500–700 Euros a year – in both the private and the usually more prestigious state universities (Andreescu et al. 2012). The low fees have been keeping the institutions perpetually starved of funds.

As a result, the university classifications and program rankings were proposed also as an instrument enabling decision-makers to improve the allocation of public money. The latest report by the National Council for Funding Higher Education (CNFIS), for instance, recommended that so-called “supplementary” funding for universities be distributed by taking into account performance in the program rankings exercise, rather than the older quality indicators which referred to universities as a whole (CNFIS (National Council for Funding Higher Education) 2013).

3.2.2 *The Legal Framework Governing University Collaboration*

The Law on national education was particularly emphatic in voicing some of the concerns above, while the classification of universities and the ranking of academic programs³ were explicitly promoted as means to address these issues. A draft of the

¹ The World Economic Forum in its *Global Competitiveness Report* asks executives in each country to rate their country’s HE system on a scale from 1 to 7 in response to “How well does the educational system in your country meet the needs of a competitive economy?”. In the 2012 edition of the report Romania, with a score of 3.1, ranked 108 out of 144 countries (the mean value was 3.7) (WEF 2013, 442). According to a recent survey commissioned by the Romanian Ministry of Education, 45 % of the students, 41 % of the parents, and 34 % of the teachers stated they believed corruption is present “to a large degree” and “to a very large degree” in Romanian universities (UTM 2013, 45).

² According to a “formula” which takes into account traditional enrollments in the state universities as well as the type (field) and level of programs in which the “state-budgeted” (non-fee-paying) students are enrolled.

³ Although the law sets out that the ranking should be one of “academic programs”, the first ranking exercise did not consider programs per se but rather “fields” (*domenii*) encompassing all the relevant programs in a university.

Law even set out (in Art. 12.2.d) that a future law on mergers would be submitted specifically in order to ensure that competitive universities absorb poorly performing institutions. This provision was not included in the final text, but the statute ties the classification to measures aimed at lowering administrative costs and at better allocating public money in higher education. It also clearly specifies that the legislation favours the absorption of weak universities by stronger institutions and that in the allocation of public funding preference will be given to universities which are either part of consortia, or have undergone a merger.

Despite this apparent directness of the Law on national education as far as academic concentrations are concerned, the broader legislative framework still contains a number of major uncertainties. The laws governing institutional cooperation in HE, while introducing some welcome clarifications, fail to adequately address formal types of collaboration such as consortia or mergers, despite the fact that the latter constitute the main target of these statutes. While decision-makers have repeated time and again that the country needs fewer HEIs or at least a more targeted concentration of public resources, it is important that this be appropriately addressed in national legislation.

The somewhat older Law on university consortia (no. 287/2004) is, to begin with, rather restrictive in a number of respects. At times, it inhibits significantly the potential and options for institutional cooperation. For example, it provides that an HEI may participate in only one consortium; it restricts the organizational objectives which may constitute the formal rationale behind joining such an entity; and it further limits the amalgamation of universities participating in a consortium to a merger by absorption. This last provision effectively rendered mergers resulting in the creation of a new academic entity a non-option until the adoption of the 2011 Law.

The Law has been only partly successful in clarifying this inadequate legal framework. While it enhances the range of merger options from absorption alone to merger to form a new institution (Art. 194), it does not provide additional details on how the concentration of public academic institutions should be realized. (While this lack of prescriptiveness is not unwelcome in itself, it does leave many key legal and procedural matters unanswered.) Furthermore, the Law applies, as far as university amalgamation is concerned, to public institutions alone. This leaves open major questions, particularly concerning the merger of public and private HEIs (which are currently roughly equal in number, though not in size and other respects). For instance, given the current state of Romanian higher education and the increasing pressures on private universities (Andreescu et al. 2012), strong/weak and weak/weak mergers (Harman and Harman 2008)⁴ might prove tempting to both private and public universities, with the latter playing the role of the strong

⁴The meaning of “weak” and “strong” in this context hinges on a set of criteria specific to a particular HE system at a particular time. In other words, the terms reflect not only – or not necessarily – some objective attribute of an organization, but also a normative perspective frequently pervading official views on what is desirable and what is not in the HE system in question.

actor. This is so especially if one takes geographical proximity into account (Rowley 1997; Patterson 2000), since in the large academic centres in Romania there is only one comprehensive public university. Nonetheless, public-private mergers remain completely outside the purview of the current legal framework.

The first attempts at forging university mergers in post-communist times were made in the context of the 2011 Law. It is not entirely clear to what extent the university classification played a part in these explorations, especially since, in some cases, they predated the publication of the final results of the exercise. Nonetheless, it is evident that some of the merger initiatives hit a legislative wall – the vague legal provisions alluded to above.

So far, only one important public-public merger took place, that between the Technical University in Cluj-Napoca (UTCN) and the University of the North in Baia Mare (UNBM). (On the legal barriers encountered during the merger and the hands-off approach of the education ministry, see the Munteanu-Peter Chap. 13 in this volume). Most of the other merger projects which engaged the attention of the public also involved the concentration of state universities, usually between or among institutions in the same major academic city.⁵ There are also reports of a major university in one of the country's northern cities exploring a merger with a local private institution, but abandoning the project due to, among others, legal uncertainty concerning the fate of the latter's post-merger assets. Last but not least, a private HEI in Iasi recently absorbed a smaller one in the same city.⁶

Given the dearth of successful mergers so far, it remains risky to generalize about the extent to which such endeavours are rendered considerably more difficult by the current legislative framework. Nonetheless, it seems relatively safe to claim that, while we may expect bottom-up public-public projects to pass muster with the government, the current laws do little to directly encourage such undertakings. They do even less to promote ample top-down merger initiatives such as those embarked on by governments in, for instance, Australia, Canada, or China.

3.3 University Concentrations and the Logic of the Institutional Classification Exercise

3.3.1 The Classification and Its Context

What the Law on education fails to address directly, it may, nevertheless, tackle indirectly. The institutional classification and the program rankings it mandates may eventually provide good incentives for some HEIs to embark on the merger journey. The last merger case referred to, that between the two private universities

⁵ For example, the University of Medicine and Pharmacy and the Polytechnic in Timisoara; the University of Arts, the University of Medicine, and the Petru Maior University in Targu-Mures.

⁶ The two are Petre Andrei University and Gheorghe Zane University.

in Iasi, was undertaken – at least officially – so that the larger institution may take over the smaller university's single successful program.

However, besides the legally more accessible public-public and private-private mergers, the classification may also encourage, as we shall see, mergers between universities and national research and development institutes (NRDIs) or other similar research entities. The current emphasis of the classification exercise on research may provide state⁷ HEIs with an incentive to absorb public R&D institutes – the subject of a full section below. Furthermore, the recent decision to move some NRDIs from their current location in the ministries of the Economy, Environment, Regional Development, Communications, Labour, Health a.o. to the Ministry of National Education might facilitate such initiatives. Finally, since the privatization of (some) R&D institutes has been on the government's agenda, their amalgamation with private universities is at least conceivable.

Returning now to the classification exercise and its impact on Romanian HEIs, both the Law and various political statements by the former education minister and other policy-makers have underscored several objectives relevant to our discussion of university mergers. Specifically, it has been stated that the classification would have the following implications as far as the funding of universities is concerned:

- a more rational allocation of resources, depending on both the quality and the institutional profile (the “class”) of the university;
- the preferential allocation of resources to merged universities or to institutions participating in consortia;
- the concentration of public resources targeting scientific research (for example, through differentiated public allocations for doctoral schools and master’s programs).

As noted, it is still not very clear how public funding will be allocated in the longer term on the basis of HEIs' performance in the classification and rankings. So far, the promises in the Law have not been kept, but it may be too soon to expect this, given the radical nature of the statute. Furthermore, in this respect the law directly affects public universities exclusively. Nevertheless, both the classification and the program rankings would likely provide incentives for tighter collaboration and even merger beyond state higher education, to the extent that they are able to generate a reputational system affecting the academic market performance of public and private HEIs alike.

There are grounds to support the thinking that the current demographic and educational context might render the classification and similar instruments capable of triggering a restructuring of the higher education market in this country in the long-term. The key relevant trend is the marked recent drop in the number of viable candidates for studentship. The background relates to a broader demographic crisis: the birth rate dropped substantially in the nineties compared to the previous

⁷ We refer to public-public HEI-institute mergers simply because of the legal uncertainty of public-private amalgamations.

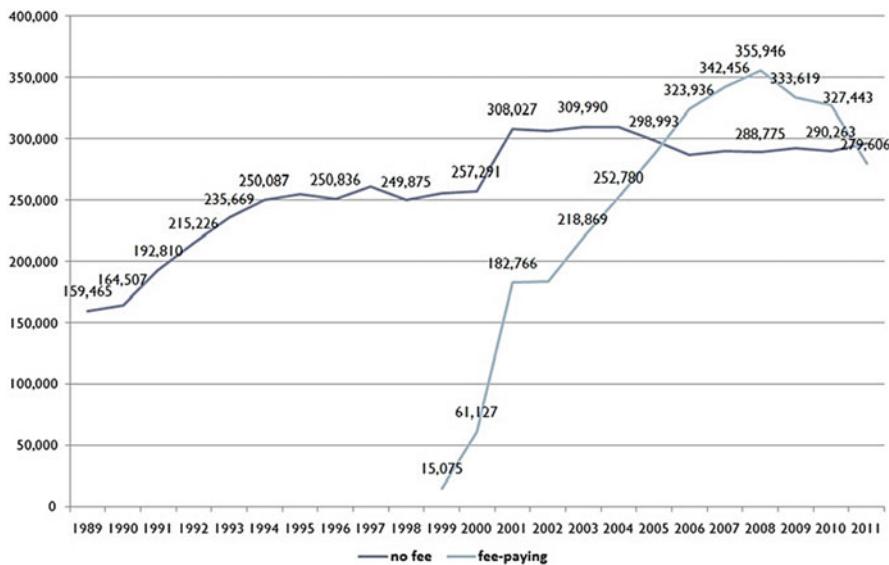


Fig. 3.1 Fee-paying and non-fee-paying students in public universities (1989–2011) (Source: Georgescu 2011, March 30–April 1)

decades, a tendency which continued into the new millennium.⁸ Young men and women reaching high school graduation age today were born in the mid-nineties, the years with the lowest birth rate in at least half a century.

The demographic crisis is compounded by what the press has persistently dubbed “the disaster of the baccalaureate” (in Romania, the high school graduation exam). This alone means that the pool of candidates has become severely restricted as compared to recent years. Only around 50–60 % of high school graduates passed the exam over the past 4 years, an abrupt drop from the 90 % or more in and before 2009.⁹ As a result, after the student population reached a peak in 2007–2008, it started a steady decline (Fig. 3.1).

This trend heralds a period of increasingly fierce competition for students in the coming years. Under such circumstances, institutional and program reputation will play a growing role in a HE market with a relatively large number of higher education providers (around 90 authorized or accredited universities, approximately half of which are private). As a result, the institutional classification and the program rankings are likely to have a significant effect on enrolments, given their impact on the perceived attractiveness of individual universities. This will further impact on changes in organizational behaviour.

⁸ The birth rate plummeted from 13.6 live births per 1,000 citizens in 1990 to 9.9 births two decades later (INSSE 2012b, 12), with the lowest plateau reached in the mid-nineties.

⁹ See the maps at “Comparatie promovare bacalaureat 2009–2010–2011”, <http://examenebac.blogspot.ro/2011/08/comparatie-promovare-bacalaureat-2009.html>

Beyond such broad considerations, what specific incentives would the classification of Romanian universities, as deployed in the first and so far only exercise of the type, provide for academic merger? What types of organizational strategies might prove fruitful from this perspective? The answer doubtlessly hangs on the broader framework conditions in Romanian HE, some of which were alluded to previously, and on the structure and implementation of the exercise. A key factor is the role of decision-makers, in particular the interest and ability of the Ministry of Education to keep mergers on the agenda and to create an adequate legal framework. Before probing further into the classification exercise, our assumptions in the following analysis are as follows:

- The broad logic, if not the exact detail, of the classification exercise will remain relatively similar over a number of iterations.¹⁰
- The classification exercise will become, as stipulated by the Law and the Ministry, a functional public policy instrument, with palpable consequences on the funding of students and institutions, on the allocation of research money, and so on.
- In retaining its current rationales, the classification exercise will have a non-negligible impact on institutional reputation, and the resulting classes will continue to be regarded as situated along a spectrum from most to least desirable.

3.3.2 The Classification and Its Classes

The current classification starts by specifying three predefined institutional classes of university. The relevant documents, and in particular the ministry order which details the classification and its methodology,¹¹ fail to properly explain why the classes were predetermined. The alternative way of designing the classification would have been to define the classes *after* a pilot exercise or even subsequent to one or more classification rounds, depending on the findings and on the structure of the HE system as revealed therein. (Of course, a “classless” classification would also have been possible, as in the U-Map exercise (van Vught 2010).)

The main rationale for the predefined classes becomes apparent from various analyses or pronouncements on the current state of Romanian education, such as the influential 2007 Report of the Presidential Commission on Education (Presidential Commission on Education 2007) or the public debates centred on this document and the 2011 Law. Specifically, the three categories of universities were defined so as to enable decision-makers to direct a larger share of public resources to

¹⁰ Any radical shift, for instance to a “European” classification system such as that advocated by U-Map (<http://www.u-map.eu/>), could change the game completely. Given Romania’s mimetic policy-making in education, such a development is not unthinkable, though there is nothing to announce it yet.

¹¹ The methodology is detailed in the Order of the Ministry of Education (OMECTS) no. 5212 of 26 August 2011 and its Annex 1. This serves as the basis for our summary below.

universities performing more and/or better research. Secondly, they aimed to incentivize universities to merge, thereby reducing the overall number, as stipulated by Law and in response to frequent complaints about the excessive number of academic institutions in Romania.

There has been no formal explanation why the classification failed to consider anything beyond its three very basic categories – *research-intensive universities*, *research-and-education universities*, and *education-centred universities*. This is perhaps somewhat striking because the classification was designed at a time when “Europe” is considering a classification system which follows an entirely different logic (van Vught 2009). Indeed, the standard American university classification produced by the Carnegie Foundation for the Advancement of Teaching has been undergoing a process of substantial revision of its own, also in terms of its institutional classes (McCormick and Zhao 2005).

Under these circumstances – the specific classes adopted and their semi-transparent rationale – it is not surprising that the public opinion, a number of universities and academics, and occasionally even decision-makers treated the outcomes of the classification as a ranking of Romanian universities. The instrument was regarded by some scholars as heavily prescriptive rather than descriptive in nature (Vlasceanu et al. 2011). The press presented the findings under titles such as “The best/the worst higher education institutions in Romania”,¹² thus turning the classification into a reputational instrument. The fact that there are no institutional rankings in the country certainly helped in this respect (the ranking of academic programs was introduced at the same time as the classification and its results were published later). The general sense that being classified as an education-centred university signalled a very poor showing made the universities concerned feel, in effect, *declassed*. Sometimes this led to vehement denunciations of the exercise which occasionally escalated to court cases.

It is also worth pointing out, in this context, that the publication of the classification results was not followed by any analysis of the variation within the three classes. Not only were the three categories pre-established, but neither the decision-makers, nor the analysts and commentators made an effort to distinguish among subtypes, to discuss the variety of organizational profiles or patterns under each category, or point to differences in performance within the classes. The prescriptive interpretation of the findings was dominant, particularly because the descriptive power of the instrument was slender by design. The outcome, quite easy to anticipate in fact, left the most influential academic actors relatively satisfied.

¹² See Mediafax, at <http://www.mediafax.ro/social/clasificarea-universitatilor-din-romania-care-sunt-cele-mai-bune-institutii-de-invatamant-superior-8705359>. Or: “Cele mai bune și cele mai slabe universități din România”, http://www.realitatea.net/clasificarea-universitatilor-din-romania-vezi-topul_868158.html

3.3.3 *The Classification and Its Algorithm – An Outline*

The algorithm employed by the Ministry to distribute the Romanian universities among the three classes is too elaborate (for one thing, it involves too many indicators) to be presented in full detail in this limited space. Many of its details are not, however, particularly significant for our purposes. We therefore limit our discussion to an illustrative outline of the algorithm.¹³ This, in short, is the current “formula for success” in Romanian higher education at this time.

The classification exercise entails the following procedure. After the data for the exercise is collected and computed, each university is assigned a number. This so-called “classification index” is the “score” achieved by each university at the end of the exercise. The index itself is expressed as a product of three “main” indicators, of which two – a *research indicator* and an *institutional evaluation indicator* – are relatively simple to compute. The third factor in the product is a more elaborate *aggregated indicator*.

The main research indicator is an extensive one – it accounts for the absolute size (i.e., independently of the size of the institution) of a university’s research output. It is expressed as the sum of (a) the aggregated article influence score of all Web of Science articles and (b) the number of books published with international publishers by the academics in the relevant HEI (Fig. 3.2). The institutional evaluation indicator is based on the rating awarded by the Romanian Agency for Quality Assurance in Higher Education (ARACIS) during the most recent institutional

Classification index =

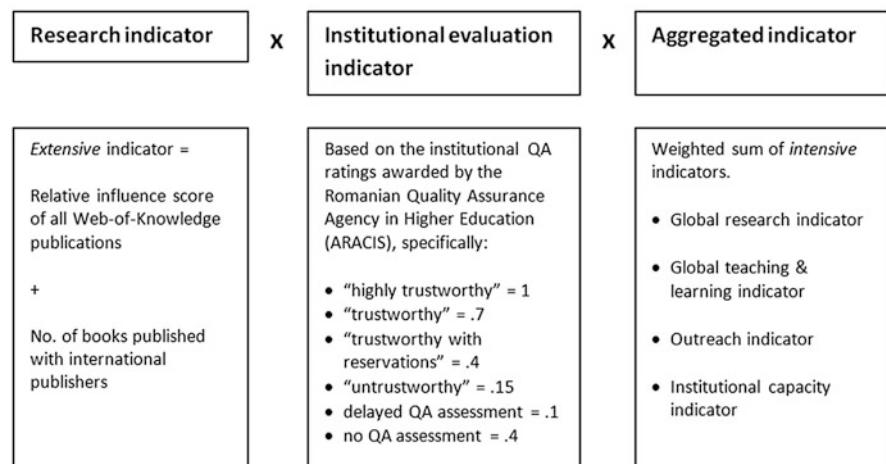


Fig. 3.2 A simplified outline of the classification formula (I)

¹³ See Annex 1 to Ministry of Education (MoE) Order no. 5212/26.08.2011.

Aggregated indicator (expressed as a weighted sum, with weights varying for each field of study)

Global research indicator	Global teaching & learning indicator	Outreach indicator	Institutional capacity indicator
<p>expressed as a weighted sum of</p> <ul style="list-style-type: none"> • research output indicator (field-normalized) • research resources indicator (field-normalized) <p>Comprises around 10-20 sub-indicators (depending on field).</p>	<p>expressed as a weighted sum of 9+ (depending on field) field-normalized sub-indicators.</p>	<p>expressed as a weighted sum of 19+ (depending on field) normalized sub-indicators.</p>	<p>expressed as a weighted sum of 24+ (depending on field) normalized sub-indicators.</p>
computed for each field	computed for each field	computed for each field	computed for each institution

Fig. 3.3 A simplified outline of the classification formula (II)

evaluation. The indicator is, in practice, a weighting of the other scores – a coefficient with values ranging from 0.10 to 1.00, depending on the strength of the rating (Fig. 3.2).

Finally, the aggregated indicator is a weighted sum of four intensive (i.e., size-relative) “global indicators” covering scientific research, teaching and learning, outreach, and institutional capacity, respectively (Fig. 3.2). The four intensive indicators are themselves computed as weighted sums (with different weighting values depending on the academic field) of other lower-level indicators (differing in their number depending on the field) (Fig. 3.3). The latter are normalized for each academic field.

To classify HEIs into one of the three categories, the methodology establishes several alternative thresholds between the classes. To offer a single example, a *research-and-education* institution is defined as a university (a) whose extensive research indicator is less than 35 % of the same indicator of the HEI ranked immediately above it within the same type (comprehensive, technical etc.); or (b) whose extensive indicator is less than 70 % and whose aggregated indicator is less than 20 % of the first-ranking institution within the same type.¹⁴

¹⁴ A university is classified as *education-centered* if it ranks below a research-and-education institution and fulfills one of the following conditions: (a) its extensive research indicator is less than 35 % of the same indicator of the university immediately above it in the same type; or (b) its extensive research indicator is less than 70 % of the same indicator of the university immediately above it and it has an aggregated classification index amounting to less than 4 % of the index of the university ranking first within the same type. Furthermore, HEIs with a very specialized profile are pre-classified (and will not concern us in this analysis). This group includes: military schools as well as schools of information, of public order and of national security (classified as research-and-education HEIs); arts schools (separately classified as education-and-artistic-creation HEIs); physical education and sports schools (classified as education-centered); and schools of medicine and pharmacy (which may only be members of one of the two research-oriented classes). All other universities (i.e., except for the research-and-education, education-centered, and pre-classified ones) are categorized as research-intensive institutions.

A cursory look at the classification algorithm suggests that its logic favours (read: rewards with a higher classification index) particular types of institutions:

- those which do not fare poorly in any of the three main indicators: the product (as opposed to, say, a sum) at the core of the classification index penalizes any HEI with either comparatively poor research, or a comparatively modest showing in the institutional evaluation, or with a low aggregated indicator, despite an adequate performance on the other indicators.
- large institutions: the extensive, non-relativized research indicator rewards institutions with an extensive staff irrespective of their per capita output; conversely, a small institution, regardless of its level of productivity in per capita terms, will be almost certainly penalized.
- prestigious institutions: the coefficient of the institutional evaluation indicator amply rewards institutions rated “highly trustworthy”. Since the ARACIS quality assurance evaluations have systematically confirmed the pre-existing public perception of HEIs, the classification algorithm favours, in effect, institutions with a good public reputation. The distance between the coefficients – especially between the “highly trustworthy” (1.0) and the “merely” “trustworthy” (.7) institutions – is sufficiently large to substantially influence the classification index.

It is noteworthy that each of the three factors above rewards traditional state universities. The old, comprehensive or technical, large, prestigious public HEIs are at an advantage particularly due their size and their traditional place at the heart of Romanian higher education, a positioning which probably played a part in their being rated by ARACIS, without exception, as “highly trustworthy”. As far as the algorithm is concerned, these institutions exhibit no glaring weaknesses threatening to lower their classification index.

As expected, the three largest comprehensive state universities, the four largest technical universities, one large agricultural and veterinarian university, the pre-classified medical schools and the main state economics university all ranked as research-intensive. The rest of the smaller state universities in large urban centres, whether technical, professional or comprehensive, were classified – with a single exception – in the research-and-education class. The only (mild) surprise in the first classification exercise was the absence of any real surprise.

Three other closely related points underscore the somewhat non-transparent role played by research in the classification exercise. First, the algorithm employs a very large number of indicators. The four “global” indicators which make up the aggregated indicator each rely on no less than 10–25 lower-level indicators, depending on the field of study. Yet best practice in the field suggests that an index (set of indicators) of this type should be parsimonious (Bartelse and van Vught 2009; McCormick and Zhao 2005). Parsimony is essential not only because it lowers the costs and the administrative burden of collecting the data,¹⁵ but more importantly, simpler formulae are comparatively clear and easy to relate to

¹⁵ Which is the reason why parsimony was considered an important principle behind U-Map and U-Multirank (Bartelse and van Vught 2009; CHERPA 2010, 69).

the expressed goals of the exercise. In other words, the outcome of a classification thus designed is easier to interpret. This is plainly not the case with the Romanian university classification.

Secondly, at least one dimension in the classification algorithm is covered by several indicators (to a greater or lesser extent), be they higher- or lower-level. This is most obvious in the case of academic research, which is composed of:

- the extensive indicator (the first term in the classification index product);
- the institutional evaluation by ARACIS (the second term in the product), which considers scientific output as well;
- the first indicator below the aggregated indicator, the so-called “global scientific research indicator”, which is concerned with research exclusively;
- several other lower-level indicators spread out among the other three global indicators.

In effect, in the classification algorithm research is cubed: it is present to different degrees in each of the main terms of the index.

Thirdly, the thresholds previously mentioned are likely to render the classification inherently unstable. It is hardly clear, for instance, that changes at any point in the classifications – including changes resulting from mergers – will not generate ripple effects affecting the order of the scores in major and unpredictable ways. We are not aware of any experiments testing the algorithm’s stability, but the convoluted and apparently arbitrary way of defining classes in terms of these particular thresholds is not convincing.¹⁶

As a result, the classification formula is less transparent than it should be. It privileges research, both in its relative dimensions (the field-normalized intensive lower-level indicators) and, significantly, in its absolute dimension. The algorithm appears to favour traditional public universities by design. In doing so it responds to the declared goals of the government in charge of HE policy until around the middle of 2012, particularly that of encouraging the concentration of universities around the best-performing institutions. Indeed, in many countries which have pursued top-down approaches to academic concentrations, this has usually been the dominant trend – “[...] to move from relatively small and often highly specialised institutions towards fewer, larger and more comprehensive institutions [...]” (Harman and Meek 2002).

3.3.4 The Classification and University Concentrations

Returning now to our original question: which are the types of academic concentration favoured by the classification algorithm? In other words, which types of HEI

¹⁶ We are even less persuaded by the presence of alternative thresholds, not to mention the fact that they are never justified.

are expected to score better – all other things being equal – in the classification through mergers? The assumption is that if the classification provides institutions with incentives to move towards the desired class; and if, furthermore, decision-makers incentivise mergers as a way of resolving the HE system's various challenges, then universities will consider merging to accede to the desired class or to retain their desirable position.

A simple look at the algorithm suggests that the university classification exercise favours mergers between:

- *very similar institutions*, since two identical institutions would double their score simply by doubling the value of the first term of a product (the extensive research indicator);
- *structurally isomorphic institutions*, i.e., very similar in structure, though possibly different in size, since, joined together, these institutions would significantly improve their extensive indicator and maintain intensive indicators similar to those of the individual, pre-merger institutions;
- *universities and research institutes*, since such a move could substantially increase the value of the extensive indicator.

A related point is that it always makes sense for the large, traditional state universities, which have been systematically rated in the QA evaluations as “highly trustworthy”, to simply absorb smaller universities. They would thus preserve their “institutional evaluation” coefficient in spite of taking over a potentially less well-rated “unit”.

Based on these observations, a typology of university merger scenarios from the perspective of the university classification exercise is outlined below. Terms such as “weak”, “well-ranking”, “higher class” or “middle category” are used, although they are, in principle, ill-suited for a classification exercise understood as a descriptive rather than a prescriptive undertaking. Nonetheless, the logic of the first classification and its impact on the public perception and on organizational reputation render such terms adequate in this context.

3.3.4.1 Typology of Mergers

Six main types of mergers can be identified in this context as described below:

1. *The absorption of smaller (perhaps mono-profile) but well-performing universities by large, prestigious universities.* This merger strategy would be attractive to the former, as they would be granted access to the advantages afforded by the superior class, namely more research resources, funding for doctoral schools etc. Currently, they would almost certainly be excluded from these benefits simply by virtue of their size, i.e., their comparatively small extensive research indicator. The large and prestigious universities would, on the other hand maintain their position in the first echelon.
2. *The absorption of smaller, poorly-ranking universities by large and/or high-ranking ones.* This kind of merger would assist the former in resolving a

reputational problem and would grant them access to new programs (e.g., more master's students funded from the public budget, as the Law promised to research-oriented institutions). The larger HEIs could secure a wider recruitment base and better capitalize on their access to resources. If their choice of a smaller university is smart, they could even secure their position in the research-oriented classes, since the extensive research indicator would go up anyway, and the institutional evaluation indicator would stay the same. The trick is not to lose too much on the intensive indicators.

3. *The merger of two or more small, poorly- or moderately-ranking universities.* A new, larger, and potentially better-ranking HEI might emerge as a result. The extensive indicator would certainly improve, while the institutional classification indicator would be retained (in the case of an absorption) or potentially improved (in the case of a new legal entity and a new QA assessment). These higher scores should be enough to offset any losses on the intensive indicators.
4. *Large, comprehensive universities in either of the two research-oriented categories absorbing professional (technical, medical, arts, agricultural) research-and-education universities.* Sheer size would be enough to improve substantially the extensive indicator, particularly in mergers involving technical, medical or agricultural schools, which typically have an adequate research output. The absorbing comprehensive universities would possibly attain the research-intensive class or consolidate their position in the latter. Professional universities would improve their chances of making it into the most prestigious category, gaining access to more funding for graduate education as well as the right to establish doctoral schools, which are currently limited to the top-class universities.
5. *The merger of traditional public comprehensive universities and research-intensive professional universities into “super-universities”.* This is a special case of the previous scenario. Such universities would dominate the classification exercise. By exploiting the thresholds between the classes discussed above, they could even push some of the other traditional comprehensive institutions out of the top class. This is likely to generate more mergers of the same type, so, conceivably, the research-intensive category would come to accommodate 3–4 HEIs compared to the current 12 – the super-universities in Romania's largest academic centres, having emerged out of the merger of the local traditional comprehensive university, the traditional technical university, and possibly the local medical or agricultural school.
6. *The absorption by large and/or strong universities of one or more research institutes.* This move would be appealing to the former as it could substantially increase their extensive indicator. We develop this scenario in more detail in the next section.

This brief typology does not consider a variety of factors which are, ultimately, essential for the viability and success of academic concentrations: geography; the compatibility of organizational cultures (although it is important to note that the Romanian academic system is rather homogenous in this respect); institutional

complementarity and overlaps at the level of programs, recruitment pools etc.; historical relationships among the HEIs considering a merger, and so on. All these factors should be carefully considered in specific merger scenarios, but they are beyond the scope of this discussion. In the final section we focus on the last merger scenario proposed above, that between universities and research institutes, in an attempt to impart more depth to our analysis.

3.4 An Emerging Scenario: The Amalgamation of Universities and Public Research Institutes

In its most recent report on research, development and innovation (RDI) in Romania, the World Bank recommended efforts to reduce the fragmentation of resources by either privatizing or consolidating national research and development institutes (NRDIs) or, alternatively, by integrating them into universities (WB (World Bank) 2012). Though the latter proposal was, to our knowledge, never thoroughly considered by decision-makers, it did generate a political echo. The option is tempting as a way of reforming the system of national R&D institutes and, in the context of the ranking exercises, the weight accorded to scientific research in the classification algorithm might make such amalgamation attractive to various HEIs. There are early signs, for instance, that a few universities have already invested in full-time researcher positions, which are currently almost totally absent in the Romanian academic system (and the local academic tradition). Thus, in the summer of 2012, some universities advertised positions for scientific researchers – an atypical move in a system where practically every academic has a substantial teaching load.

We put forward here a broad-brush analysis of the reasons why the absorption of NRDIs (and possibly of other types of research institutes) by universities could be an attractive option to both parties, as well as to decision-makers in the field of RDI.

3.4.1 *The Case for HEI-NRDI Mergers*

HEI-NRDI mergers could help to address the following challenges and opportunities:

The increasing pressure to boost R&D in the universities, not least due to increased transparency resulting from the university classification and the academic program rankings. The strategic absorption of research institutes by HEIs would enhance the latter's research capacity and, as a result, their research performance as assessed in the classification exercise.

The currently peripheral role of higher education institutions in the Romanian R&D system. According to Eurostat data for 2011, a mere 11 % of all research

and development activities are carried out in universities, compared to a European average of 49 %. This is likely to reflect the recent entry of universities (or faculties) into the research arena. Taking over well-performing R&D institutes could boost HEIs' presence in this sector.

The fragmentation of the current research landscape. In Romania, there are currently several types of public R&D entities: NRDIs, institutes of the Romanian Academy, as well as university institutes and a few other institutes directly accountable to sundry public ministries. The merger of some institutes into universities could reduce this fragmentation and alleviate some of the problems it creates, such as the inefficient allocation of public R&D resources.

The large number of public research institutes in Romania. Not only is the R&D landscape fragmented, it is also very populous: there are now over 150 public R&D institutes, compared to, for example, 18 in Finland, a country with a much higher GDP per capita. This generates confusion as to the individual mandates of these institutions, as well as a lot of duplication in the system. Mergers with HEIs could help to either reduce the number of institutes or relocate them within an organizational context where they would play a more definite role.

The relative success of public universities in producing scientific publications in recent years. In 2011, scientific production in Romania was concentrated in state universities (59 % of the total), with the institutes of the Academy, the NRDIs and the medical institutes lagging considerably behind (at 18 %, 18 %, and 2 %, respectively) (Ad Astra 2011).¹⁷ The absorption of public institutes by universities could offer the former an institutional environment which stimulates productivity (measured in publications), while the latter could benefit from dedicated research staff.

Conversely, the relative success of institutes in raising research funding from companies compared to HEIs, though the numbers remain low in both cases. Thus, according to Eurostat data (Business R&D expenditures according to sector in 2011), only 3 % of business R&D expenditures go to universities, compared to 25 % in the case of institutes. This disparity might signal better transfer activities or infrastructure in institutes, as well as a higher level of trust on the part of business. By comparison, universities are still struggling to demonstrate their relevance to market-relevant research and innovation. By absorbing RDI institutes, HEIs could increase their reputation on the RDI market.

Similarly, the institutes' comparatively greater success at securing patents, although the numbers are low in both camps. As the table below (Fig. 3.4) shows, the institutes have traditionally performed better in this respect, although the gap has been much reduced over the past 3–4 years.

“The compatibility of HEIs and NRDIs in terms of the type of scientific research and of their scientific cultures”. Both the national institutes and the universities devote most of their efforts to fundamental research (56 % and 63 %, respectively,

¹⁷ The figure for private universities was an insignificant 0.6 %.

Fig. 3.4 Number of national patents per holder type (Source: Romanian Office for Patents and Trademarks)

	2006	2007	2008	2009	2010	2011
Individuals	483	499	465	535	567	645
Companies	146	113	123	155	168	164
Research institutes	127	116	207	218	292	322
Universities	48	91	179	137	354	291
Other	10	8	20	9	1	2
TOTAL	814	827	994	1054	1382	1424

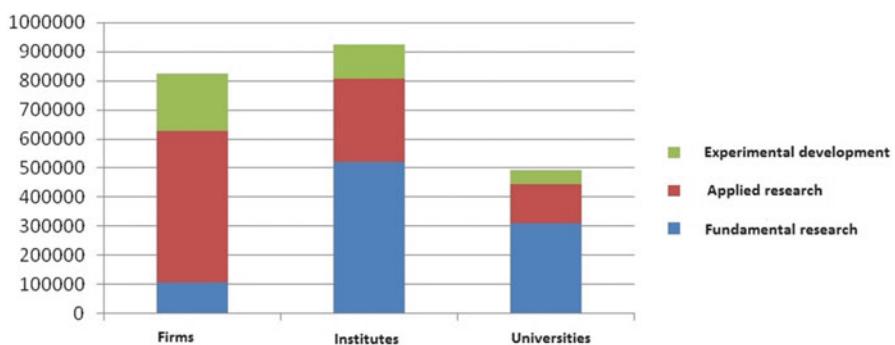


Fig. 3.5 R&D expenses according to institutional type (2011, 1000 RON) (Source: World Bank 2012)

of their total research expenses). The relative size of their applied and experimental research is also comparable (Fig. 3.5). Admittedly, this is probably an indication of both institutions' inability to connect their research to business, rather than a sign of their ambitions to excel at frontier research. This being said, in the case of HEI-NRDI mergers this compatibility might decrease the likelihood of a clash of professional cultures, at least as far as research is involved.

The complementarity of human resources. Although research output has become a (if not “the”) key success indicator in higher education, both at individual and organizational level, even the most research-intensive universities engage a very small number of full-time researchers. Most of those who do research in academia also bear the burden of standard teaching loads, while the research load is in most cases poorly defined, if at all. Taking over institute researchers would ensure a substantial infusion of dedicated researchers, presumably without leading to an excessive duplication of roles. The broad structure of human resources in institutes and universities is also strikingly similar in certain respects, such as for example age (51 % of institute staff is below 45, compared to 56 % in the universities).

The reorganization of PhDs into doctoral schools (away from individual mentoring). The reform of the doctorate has shifted the centre of doctoral training to the universities, the exception being the institutes of the Romanian

Academy. The consequences are already becoming visible: although teaching remains paramount in universities, the latter are rapidly increasing the percentage of PhDs among their staff (60 %), while institutes are lagging behind (37 %) (INSSE 2012a). The absorption of institutes into universities could improve the linking of doctorates to scientific research, as well as enhance the employment opportunities.

Last but not least, one may add to the list above the general drive to reform the Romanian RDI sector, which is putting pressure on institutes and universities both to improve their research, and to make the latter more relevant to social needs and business interests. Romania's international commitments, the "conditionalities" in accessing European funds for R&D, and the struggle to keep up with global trends in the pursuit of knowledge and innovation are the most visible manifestations of this pressure. The merger of universities and research institutes could contribute to efforts to reduce fragmentation in the RDI system and enable each party to capitalize on the other's relative strengths.

3.4.2 Caution Concerning University-Institute Mergers

Notwithstanding the above, there are several reasons to regard the university-institute mergers with a level of caution. Firstly, Romanian universities are currently confronted with an accelerating decrease in their traditional student recruitment pool (fresh high school graduates). As noted previously, the poor *bacalaureat* success rates signal a crisis in pre-university public education. The demographic contraction has also led to a dwindling number of potential students. In these circumstances, intensifying research activity in the universities by turning some of the imminently excessive teaching-and-research positions into full-time research posts (research quality permitting), could become a way of alleviating the level of redundancies. Should this strategy be pursued in the HE system, the notion of bringing in new researchers will likely be met with resistance from academics.

Secondly, universities have no demonstrated expertise in managing R&D institutes. Currently, the number of functional entities of this type in Romanian HE is small and, with the exception of a few fields, there is no academic tradition to speak of in this respect. University administrators lack expertise in managing research institutes, while academic senates have limited skill in overseeing them. Organizationally, university decision-making remains to a considerable extent collegial, while the faculties enjoy substantial autonomy. This may complicate the position of absorbed research institutes, especially if they remain independent from the faculties. They would have little clout in the academic senate and restricted means to look after their long-term welfare. There is a danger that absorption could lead to the institutes' slow death.

Thirdly, there is the question of funding. Research and development institutes currently receive basic funding from the public RDI budget. The NRDIs are

allocated such institutional support through the NUCLEU program, while the institutes of the Academy are funded separately. Universities, however, receive little institutional funding strictly speaking, as the basic funding for HEIs – by far the largest part of the public funds they receive – is allocated for teaching students. The absorbing of institutes which do not generate additional matriculations could increase the already considerable financial burden on universities at a time when student numbers are in decline.

Fourthly, while we have argued that HEIs might have good reasons to want to absorb NRDIs, it is not immediately clear that the latter have an incentive to merge in this way. The evaluation of R&D institutes has, so far, remained mostly formal. The old accreditation system has been replaced with an evaluation-cum-certification formula officially designed to identify the best performing institutions and to restrict access to the basic funding scheme which came into force in 2012. The certification, which among others ensures access to basic funding, is awarded to institutions rated “A minus” or above. So far, however, all of the evaluated NRDIs – about a third of the total – were thus certified. This would ensure basic funding for all and call into question the notion that institutes are ready or compelled to seek other ways to secure their (already impoverished) existence. Basic funding at current levels seems able to support the system of R&D institutes in its present state – fragmented, non-competitive, and unproductive.

Finally, the risk of incompatibilities in organizational culture should not be completely discounted. Notwithstanding the similar profile of the research produced, the different primary orientation of activities in HEIs and NRDIs (teaching and, respectively, research) could lead to conflicts or to a failure of accommodation in the case of concentration. Furthermore, in many Romanian universities or faculties the culture remains essentially one of academic “locals”.¹⁸ As a result, resentment towards any “intruders”, especially if they come from a different type of institution, would be unsurprising.

3.5 Conclusions

A question which has not been addressed directly in this chapter is whether university mergers are a viable and attractive option in Romania’s current higher education system. Arguments in support of a merger drive have occasionally been put forward by decision-makers, while the complaint that Romania cannot afford its many universities has been heard quite frequently. Nonetheless, there is, to our

¹⁸ The academic cultures of “locals” and “cosmopolitans” were described by Gouldner (1957) in a series of classic pieces on the subject. One problem with Romanian universities is that the widespread practice of recruitment and promotion from within tends to make academics wary of outsiders.

knowledge, no study that seriously explores the desirability of academic mergers in this country.

This being said, mergers did appear on the government's agenda a few years ago. The Law on education openly advocates academic concentration, and the recently undertaken university classification and program rankings were justified as efforts to incentivize the absorption of small and under-productive universities by their larger and more research-intensive counterparts. It is appropriate therefore to explore scenarios of academic merger which could be supported, in practice, by the current classification of universities.

The scenarios we looked into briefly are, of course, ideal types. Some of them may also be hampered by the legal uncertainties we examined in the first part of the chapter. It is a task for future explorations to thoroughly flesh out these scenarios by considering other relevant criteria – geography, history, organizational culture, complementarity, and, indeed, legal obstacles. They may also require a re-thinking with the future classification and ranking exercises in mind, especially since the latter were subject to both methodological (Vlasceanu et al. 2011) and more general criticisms, not to mention contestation in the courts. Nonetheless, we believe that such scenarios are a relevant starting point in defining and calibrating higher education policy in this country, and particularly policies aiming at concentration in academia or, indeed, in the RDI system as a whole.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Ad Astra. (2011). *Cartea alba a cercetarii din Romania*. [Online] Available at: <http://www.ad-astra.ro/cartealba/>
- Andreescu, L., Gheorghiu, R., Proteasa, V., & Curaj, A. (2012). Institutional diversification and homogeneity in Romanian higher education: The larger picture. In A. Curaj, P. Scott, L. Vlasceanu, & L. Wilson (Eds.), *European higher education at the crossroads*. Dordrecht: Springer.
- Bartelse, J., & van Vught, F. (2009). The European higher education classification: Objectives and concepts. In F. van Vught (Ed.), *Mapping the higher education landscape*. Dordrecht: Springer.
- CHERPA-Network. (2010). *U-multirank: Interim progress report*. CHERPA. www.ireg-observatory.org/pdf/U-MultirankInterimReport.pdf
- CNFIS (National Council for Funding Higher Education). (2013). *Starea finantarii invatamantului superior si masurile de optimizare ce se impun* (Raport public annual, 2012). Bucuresti: CNFIS.
- Georgescu, L. (2011, March 30–April 1). *Evolutia finantarii sistemului de invatamant superior din Romania*. Presented at the conference “Perspective in finantarea invatamantului superior”. Bucharest.
- Gouldner, A. W. (1957). Cosmopolitans and locals: Toward an analysis of latent social roles (I). *Administrative Science Quarterly*, 2(3), 281–306.

- Harman, G., & Harman, K. (2008). Strategic mergers of strong institutions to enhance competitive advantage. *Higher Education Policy*, 21, 99–121.
- Harman, K., & Meek, V. L. (2002). Introduction to special issue: “Merger revisited: International perspectives on mergers in higher education”. *Higher Education*, 44, 1–4.
- INSSE. (2012a). *Evolutia natalitatii si fertilitatii in Romania*. Bucuresti: INSSE.
- INSSE. (2012b). *Stiinta si tehnologie*. Bucuresti: INSSE.
- McCormick, A. C., & Zhao, C. M. (2005). Rethinking and reframing the carnegie classification. *Change*, 37(5), 51–57.
- Miroiu, A., & Andreescu, L. (2010). Goals and instruments of diversification in higher education. *Quality Assurance Review*, 2(2), 89–101.
- Patterson, G. (2000). Findings on economies of scale in higher education: Implications for strategies of merger and alliance. *Tertiary Education and Management*, 6(4), 259–269.
- Presidential Commission on Education. (2007). *Romania educatiei, Romania cercetarii*. http://edu.presidency.ro/upload/raport_edu.pdf
- Rowley, G. (1997). Mergers in higher education: A strategic analysis. *Higher Education Quarterly*, 51(3), 251–263.
- UTM (Universitatea Titu Maiorescu). (2013). *Prevenirea coruptiei in educatie prin informare, formare si responsabilizare: Raport de Cercetare*. Bucuresti: UTM. <http://administaresite.edu.ro/index.php/articles/20519>
- van Vught, F. (Ed.). (2009). *Mapping the higher education landscape: Towards a European classification of higher education*. Dordrecht: Springer.
- van Vught, F. A. (ed.). (2010). *Mapping the higher education landscape*. Dordrecht: Springer.
- Vlaseanu, L., Miroiu, A., & Paunescu, M. (2011). *Propunere de politici pentru incurajarea diversitatii institutionale in invatamantul superior* (ARACIS policy paper). Bucuresti: ARACIS.
- WB (World Bank). (2012). *Functional review of the research, development & innovation sector in Romania*. S3 Platform Smart Specialisation Strategies. Platform. http://s3platform.jrc.ec.europa.eu/documents/10157/516355/Web_DUBLIN_Romania_background_19June2014.pdf
- WEF (World Economic Forum). (2013). *Global competitiveness report*. http://www.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf

Chapter 4

Collaboration Between Universities in Sweden

Daniel Ljungberg and Maureen McKelvey

4.1 Introduction

For the last decades, the European university sector has faced a major, and still on-going, transformation, affecting the role of universities in the knowledge economy. The university is shifting from a social institution providing public goods towards a knowledge business providing a mix of public and private goods and services (Deiaco et al. 2009). The transformation has primarily entailed:

1. increased competition, for resources such as students, academic staff and funding; as well as
2. increased autonomy of universities (Geuna 2001; Lawton Smith 2006; Vincent-Lancrin 2006; McKelvey and Holmén 2009).

Across Europe, the new globally competitive regime for universities has meant, amongst others, the introduction of competitive funding mechanisms, reduced relative share of government funding and less centralized governance of universities (e.g. Henkel and Little 1999; Geuna 2001; Vincent-Lancrin 2006; Lawton Smith 2006).

The increased competition and autonomy facing universities has led some researchers to argue that universities are gradually being forced to learn how to compete, and that they are therefore increasingly facing a need to act strategically, not least through specialization and differentiation (Clark 1998; Bonaccorsi and Daraio 2007a; McKelvey and Holmén 2009; Deiaco et al. 2012). Mergers among

D. Ljungberg (✉)

Department of Economy and Society, Institute for Innovation and Entrepreneurship,
Gothenburg, Sweden

e-mail: daniel.ljungberg@handels.gu.se

M. McKelvey

School of Business, Economics and Law, University of Gothenburg, Gothenburg, Sweden
e-mail: maureen.mckelvey@handels.gu.se

universities are arguably considered to be among the strategic responses to the on-going transformations, and we have indeed witnessed an increase in the number of mergers across Europe in the last decades (see e.g. Harman and Meek 2002).

The purpose of this chapter is to outline the Swedish experience of university mergers, from the perspective of the broader pressures for change and strategic behaviour resulting from the on-going transformation. In doing so, we have two particular objectives. First, we draw out the main pressures facing Swedish universities, here referred to as higher education institutions (HEIs), by outlining the significant trends and key changes in public policy affecting the Swedish university system during the last decades.

Secondly, we present and analyze three university mergers taking place in Sweden during this period. In line with our purpose of examining mergers from the perspective of strategic behaviour, in this chapter we focus upon “voluntary” mergers. These are mergers initiated by the merging HEIs themselves, and thereby resulting largely from bottom-up processes, as opposed to “forced” mergers that are initiated and driven by actors external to the merging HEIs (cf. Skodvin 1999; Harman and Meek 2002).

Determining whether a merger is voluntary or forced is however not straightforward, since “voluntary ones are often forced by circumstances” (Skodvin 1999). We have here chosen to consider a merger as forced if it to a large extent was the outcome of centralized decisions, by the government. For example, the Stockholm Institute of Education was merged with Stockholm University in 2008. This merger was initiated by the HEIs themselves through the commissioning of an assessment of the potential merger. When the report was delivered, proposing the two HEIs to merge, the Stockholm Institute of Education decided not to take part of it after all. In the end it was the Ministry of education and research that drove the merger to completion, by simply deciding that the two HEIs should merge.¹

The three mergers presented in this chapter are all the mergers taking place in Sweden during the last two decades, which were identified as “voluntary”, meaning that they were largely driven – from initiation to implementation – by the merging HEIs themselves. We treat these three mergers as small case studies: For each case, we present the experience in terms of the background, explicitly stated rationales and outcomes of the merger.² To address the question of mergers as strategic behaviour of universities, we moreover analyze these three cases from the perspective of “strategic positioning”, following Bonaccorsi and colleagues (e.g. Bonaccorsi and Daraio 2007b; Dario et al. 2011). This is a conceptualization of universities as strategic actors with multiple inputs, such as personnel and funding, and multiple outputs, such as scientific publications and graduated students (see Bonaccorsi and Daraio 2007a, b). Using this conceptualization, it is possible to analyze whether and how universities strategically differentiate by studying how individual universities

¹ See for instance a press release issued shortly after the Stockholm Institute of Education backed out of the merger, in which the then Minister of education and research Lars Leijonborg stated that “Stockholm Institute of Education ‘will’ be merged with Stockholm university.” The teaching education provided by the Stockholm Institute of Education had for long been considered to be lacking in quality, and the government viewed this merger as key for remedying this problem.

² We do not provide any detailed presentation of the merger processes in these cases.

position themselves, relative to other universities, in terms of their inputs and outputs. This positioning can be seen as reflecting the strategic profiles of individual universities.³ Here we use the concept of strategic positioning to relate the rationales of the mergers to the profiles of the universities prior to merging. Moreover, we analyze whether any changes in the positioning of the universities studied within the Swedish university sector can be discerned after the mergers.

While the three cases represent all voluntary mergers taking place in Sweden during the last two decades, we also believe that they provide different insights with regards to the phenomenon of university mergers in general. The first case (Mid Sweden University) is a merger between two small regional HEIs, taking place in the early 1990s. It is an example of a largely horizontal merger, i.e. a merger between two universities with similar profiles (Harman and Meek 2002). This is an interesting case, since it took place already 20 years ago, thereby providing a long time span for studying the results. Moreover, this merger took place in the very beginning of the transformation of the Swedish university sector, meaning that resulting (post-merger) HEI had to deal with the increasing changes and pressures during its development phase.

The second case is a merger between two regional HEIs – one university and one university college⁴ – resulting in the foundation of the new Linnæus University in 2010. As the first case, this was a largely horizontal merger. Unlike the first case, however, this merger took place during the more “competitive” regime currently facing universities.

The third case (Uppsala University) is a recent merger between a large comprehensive university and a small regional HEI. While the two other cases are examples of horizontal mergers through “consolidation”, i.e. the foundation of a new “stand-alone” university, this third case can be viewed more as a vertical merger through a take-over, in the sense that the smaller HEI was transformed into a campus within the large university. While this merger was implemented in the summer of 2013 and therefore not providing a time period long enough for analyzing its outcomes, this case provides interesting insights into the rationales for vertical mergers.

4.2 The Swedish Context

This section presents the Swedish university context with a specific focus on major trends and policy changes taking place from the 1990s onward. The first “proper” science policy in Sweden was established during the World War II period, and

³ In this conceptualization, strategy is an emergent, rather than deliberate, property of changes over time.

⁴ Traditionally, the difference between universities and colleges in Sweden was that universities had the right to grant doctoral degrees. Since early 2000, however, university colleges have the right to apply for examination right within certain disciplines.

focused on developing a research funding structure and the long-term indirect benefits from public basic research (Benner 2001; Jacob and Orsenigo 2007).

During this period, Sweden had only a handful of universities, all located in the major cities, or first tier of cities. Education exploded in the post-World War II period, and several colleges were founded as regional branches of existing universities during the 1960s and 1970s. These regional branches were placed in the next tier of cities, such as Linköping, mainly for reasons related to regional politics. The main task of these colleges as defined by the politicians was to attract more students into higher education, in order to provide the regional industry with workers. During the 1980s and 1990s, many of these organizations expanded and became independent universities or colleges.

Another wave of foundations of new regional university colleges took place in the 1990s. These regional colleges were placed in even smaller towns, often further from metropolitan areas. This was also a turbulent period, when Sweden again underwent major changes in research and education policy. The underlying mechanisms behind these changes include an economic recession, accompanied by a new belief in universities as driving economic growth.

Jacob and Orsenigo (2007) identify two major trends in Swedish research and higher education policy from the 1990s onward. First, public policy has had the ambition to make HEIs and research the means for achieving economic progress in (weaker) regions. The second trend was to utilize HEIs and research as a source of “renewal” in the transition to a knowledge economy. In relation to these trends, Jacob and Orsenigo (2007) argue that contemporary Swedish policy has had three broad objectives:

1. to promote the development of an entrepreneurial culture in higher education and research;
2. to support a greater degree of interaction between HEIs and society, primarily industry; and
3. to increase the pace of commercialization of academic knowledge. These developments are of course in line with changes in the US, Europe and Asia, but are different from the earlier objectives of Swedish public policy towards universities.

These broad policy objectives have led to three types of reforms being undertaken in Sweden during the last two decades. The first set includes reforms that changed the balance between fixed and competitive funding. These changes include a reorganization of the research financing system to promote more reliance on competitive funding, through redistribution from fixed funding to external funding through research councils and foundations, and the creation of infrastructure to commercialize research results (e.g. Benner 2001; Jacob and Orsenigo 2007).

Similar to the general trend in Europe, there has been a decrease in the relative share of direct government funding during the last few decades in Sweden (Hällsten and Sandström 2002; Heyman and Lundberg 2002). This more competitive environment and the restructuring of public authorities were facilitated by the introduction of new public research foundations, intended to stimulate strategic

research and to enhance co-operation and interaction with industry (Schilling 2005). This led to a decrease of fixed research funding, which has meant that education, and not research, has become the major source of fixed income for Swedish HEIs.⁵ In other words, in Sweden, as in Europe in general, we can observe an increasing importance of external research funding and a more competitive environment for research funding.

Secondly, public research was expanded during this period, with more HEIs receiving fixed research funding. Since 1997, all universities and university colleges receive research funding from the government. Earlier, fixed research funding was related to university status,⁶ but from 1997 university colleges also receive such funding, although initially rather limited amounts (e.g. Sörlin and Törnqvist 2000; Benner 2001). However, the total amount of fixed research funding given to HEIs was not originally significantly increased, but rather spread out more thinly amongst more actors.

The third set of reforms includes changes that increased the autonomy of independent HEIs. These changes pertain particularly to reforms in postgraduate education and in the appointment system. Importantly, professors are no longer appointed by the government in Stockholm but instead by the HEIs themselves. Moreover, reforms in the 1990s increased the organizational autonomy to hire and promote at all levels (Benner 2001; Jacob and Orsenigo 2007). Unlike many southern European countries, Swedish university professors (and all other university employees) are not national civil servants, but employees of the individual organization. The reforms of the 1990s also shifted the science policy system away from the previous, more German-inspired system of resources concentrated around ‘chair professors’ to a more American-inspired one of tenure as related to promotion, albeit in a context of European labour laws regulating employment.

More recently, public policy has changed from a focus on “quantity”, which dominated the agenda in the 1990s with the research expansion, towards a focus on “quality” during the last few years. Two main assumptions can be seen as underpinning this new focus. The first public policy assumption is that Sweden needs elite universities, which are able to compete not just nationally but also at an international level. The second assumption is that the resources available in Sweden are currently too limited to achieve this aim (e.g. Björklund 2011).

This new focus has lead to changes in recent years, both in public policy and locally within individual universities. Of significance is the fact that the total amount of fixed research funding given to HEIs has increased substantially for the first time since the mid-1990s, starting in 2007 (HSV 2012a). Since 2009, 10 % of the fixed research funding is allocated based on universities’ research

⁵ In contrast to research funding, all income from education comes from fixed funding, which is based on the number of enrolled students and passed degrees.

⁶ Traditionally, university status was related to the right to examine doctoral students, a right that university colleges did not have. However, this distinction between universities and colleges has become less straightforward, during the last decade.

performance. The assumption is that allocation based on performance will encourage increased research quality. Universities' research performance has so far been evaluated based on publication and citation records and on the amount of external research funding that the universities have attracted. From 2013, the proportion of performance-based research funding has doubled (20 %), and the evaluation will be based upon peer review.

The increased focus on quality has also led to a trend towards evaluations of mainly research but also education, both nationally and locally at individual universities. Several universities have undertaken internal research evaluations in recent years, as well as allocating a portion of the fixed research funding based on performance, usually measured through (self-reported) publications.⁷ Moreover, a national evaluation of higher education was launched in 2012, starting with evaluation of all Master programs provided by Swedish HEIs in a chosen set of fields. Moreover, a number of different national rankings of universities have been introduced, such as Urank,⁸ and these have gained increased attention in the last years, both from the public, policymakers, and from universities themselves.

As in the rest of Europe, higher education has expanded dramatically since the 1960s in Sweden. Moreover, the Bologna reform to a Bachelor-Masters degree structure together with the Swedish policy of no fees (even for non-Swedish residents) up until 2011 has lead to a huge increase in students from abroad for Masters programs. Some universities and colleges had almost exclusively (up to 96 %) foreign students in Masters programs (HSV 2012a), before national fees were introduced in 2011. However, fears have now been expressed that the student enrolment into the universities peaked in the last years, and that it will decrease significantly in the coming years.⁹ The reason for this is changing demographics, with the cohorts eligible for higher education studies significantly decreasing in size in the coming decade (HSV 2012a).¹⁰ This together with a decrease in the number of foreign students due to the introduction of student fees for non-EU/EES residents in 2011 suggests that Sweden will face an increasing contraction of education in coming years.

To some extent this contraction might however be mitigated by the dramatic increase in distance education during the last decades, which currently stands at approximately 20 % of all students as compared to around 6 % in 2002 (HSV 2012a). One indication that distance education might to some extent mitigate the

⁷ Such local evaluations have taken place, in, among others, Lund University, Uppsala University and University of Gothenburg.

⁸ <http://www.urank.se>

⁹ Such fears can for instance be seen in a recent article in one of Sweden's largest newspapers, in which the vice-chancellor of Uppsala university is interviewed (Tenfelt 2012). In the article, the vice-chancellor predicts that the number of students will decrease by up to 10 % in the coming 7 years, based on available demographic statistics.

¹⁰ For instance the number of 19-year olds in Sweden, which is the cohort that commonly enter into higher education, will decrease from around 140,000 in 2010 to below 100,000 by 2015 (HSV 2012a).

contraction of education is the fact that it is to a large extent relatively older people enrolling into this type of education, with more than 40 % of the students being older than 40 years (HSV 2012a).

Finally, policy makers and the government have during the last years discussed and actively encouraged collaborations and (voluntary) mergers among HEIs. While the government has not formally demanded or driven any mergers, they have openly and consistently highlighted the rationale of small regional HEIs merging with large research strong universities, in terms of achieving scale effects, such as critical mass of researchers, in order to survive in an increasingly bootstrapped environment (see e.g. Björklund 2011). To facilitate potential mergers, the government has earmarked funds to financially support merger processes.

4.3 Overview of the Swedish University Sector

The Swedish university sector comprises more than 50 HEIs providing education, including 16 universities, 22 university colleges and several independent education providers. Table 4.1 presents an overview of the 29 HEIs that conduct research and teaching in a broad set of subjects, including all universities and all but seven specialized university colleges.¹¹ The majority of these HEIs are state controlled, while three are private foundations.

In 2011, approximately 320,000 full-time students were enrolled in higher education in Sweden (HSV 2012b).¹² Roughly 20 % of these students were only enrolled in distance education. The expenditure of higher education and research in the Swedish university sector was 58 billion SEK in 2011, corresponding to approximately 1.7 % of Sweden's GDP (HSV 2012b). Research accounts for slightly more than half of these expenditures, amounting to approximately 32 billion SEK. Fixed research funding stands at around 45 % of the research expenditures, while the rest is external research funding from e.g. governmental agencies and public and private foundations.

Table 4.1 suggests a wide diversity of HEIs in Sweden, ranging from relatively large universities with large expenditures and many students to quite small ones.¹³ In fact, a handful of the larger universities account for the lion's share of the research expenditures. Indeed, the Swedish university sector is highly polarized into two different categories of HEIs (see Ljungberg et al. 2009). On the one hand, there are the (older) teaching and research-intensive universities. These are largely

¹¹ These 29 HEIs account for almost all research and education expenditures. Seven of the university colleges are specialized within one narrow subject, such as arts.

¹² The number of individual students was around 400,000.

¹³ Sweden has, by international comparison, no large universities, but rather only small and medium-sized ones, with the largest HEI educating around 30,000 students annually and employing 2,000 researchers.

Table 4.1 Overview of the Swedish HEIs (2011/12)

	Foundation year	Students	PhDs	Academics	Researchers	Education expenditures	Research expenditures
Blekinge IT	1989	4,018	15	226	122	316,931	168,444
Borås UC	1977	6,214		342	169	450,266	147,420
Chalmers TU ^a	1829	8,364	138	1,088	803	890,588	2,147,989
Dalarna UC	1977	6,877		408	172	473,783	97,548
Gävle UC	1977	6,382		363	166	433,679	110,230
Gotland UC	1998	2,307		116	58	164,822	38,558
Halmstad UC	1983	5,475	1	290	155	376,851	115,430
Jönköping UC ^a	1977	8,288	14	355	182	557,806	205,450
Karlstad U	1977	8,602	23	612	332	670,658	320,534
Karolinska institute	1810	6,097	349	1,770	1,525	923,540	4,294,424
Kristianstad UC	1977	5,890		322	138	392,918	49,026
Linköping U	1970	17,914	145	1,524	1,112	1,391,036	1,789,493
Linnaeus U	2010	15,372	41	889	471	1,106,000	395,327
Luleå TU	1971	7,726	69	557	396	624,283	782,258
Lund U	1666	28,586	339	2,737	2,363	2,349,571	4,208,251
Mälardalen UC	1977	7,921	17	438	194	609,204	178,499

Malmö UC	1998	12,529	10	740	398	979,453	226,728
Mid Sweden U	1993	7,929	24	512	280	543,058	377,835
Örebro U	1965	9,866	61	522	319	669,058	334,556
Royal IT	1826	12,441	235	1,460	1,026	1,205,901	2,398,591
Skövde UC	1977	4,492		266	159	330,230	85,814
SLU	1977	4,039	110	1,443	1,181	653,747	2,006,595
Söderörn UC	1995	7,362	3	372	268	408,675	267,150
Stockholm SE ^a	1909	1,659	19	94	92	187,715	146,849
Stockholm U	1904	30,003	225	2,437	1,698	1,826,688	2,404,455
U of Gothenburg	1891	26,467	265	2,405	1,869	2,078,248	3,194,156
Umeå U	1965	16,697	180	1,908	1,321	1,564,193	2,145,522
Uppsala U	1477	23,330	309	2,501	2,065	1,604,671	3,586,621
Väst UC	1990	5,042		315	138	358,401	87,757

^aPrivate HEI

the old large traditional universities, which conduct most of the research and also educate the bulk of students in Sweden. On the other hand, there are the (younger) regional small and education dependent HEIs. These are the younger regional universities and colleges, which are relatively weak in research and financially highly dependent on education, although they educate only a small share of students.

4.4 Mergers in the Swedish University Sector¹⁴

This section presents the three cases of mergers identified in the Swedish university sector. All of these three mergers were voluntary in the sense of being initiated by the merging HEIs. Moreover, all mergers have met with little opposition, and have entailed a process of consultation with several stakeholders, including student unions, municipalities, and trade unions.

4.4.1 *Mid Sweden University*

The first case is Mid Sweden University, which is the result of a merger between two regional university colleges in 1993. The merger was initiated by the two HEIs, and the process was driven together with, among others, the regional authorities. The two merging HEIs had similar but complementary profiles, as well as a history of collaborations. While, as we shall see later, the goal was to create a university that contributes nationally to research and education, the merger was partly driven in response to perceived needs of the region. At the time of the merger, the region had no university; the share of highly educated people was low in comparison to Sweden overall; and there existed few institutions conducting research outside the academic environment. One rationale for the merger was that the presence of a university would strengthen the region, in terms of research and higher education.

4.4.1.1 Rationales for Merging

Underlying the merger, leading to the foundation of Mid Sweden University College in 1993, was the explicit long-term goal of the two merging HEIs and regional authorities to create the region's first university by 2000. With this goal in

¹⁴ The cases are based on analysis of available documents for each case, such as letters of intent, evaluation reports, debate and newspaper articles, and annual reports. To analyze the strategic profiles, we complement each case with quantitative data, drawn from public administrative data on Swedish HEIs, see the [Appendix](#).

mind, the focus was on receiving fixed research funding,¹⁵ and to create a relatively large environment for higher education and research. As such, the explicit goal was to have 8–10,000 students enrolled annually and to employ 100 professors by 2000.

The slogan behind the merger process was “Sweden needs a new university”. This did not mean that Sweden needed a new university per se, but rather a new type of university: a so-called collegiate university, meaning a multi-campus university without strong centralized governance and in which the campuses have different focus and high independence. The inspiration for this came from international experiences of this university type, mainly from Australia. Thus, after the merger, Mid Sweden University College (which later became a university) was founded. It has three largely independent campuses, on the pre-existing locations of the merging HEIs. In line with the collegiate university model, Mid Sweden UC from the very start had a strong focus on networks as well as on what they called “geographically independent” education. The latter entailed a focus on distance education in general as well as on “local” solutions, meaning that students living and studying in one campus are given opportunities to take courses at one of the other campuses without having to relocate and commute.

Moreover, the merger was initiated with some explicitly stated rationales:

- Pool and efficiently use resources for research and higher education.
- Contribute nationally and not only regionally in terms of higher education and research.
- Better meet society’s demands and need for continuing professional training.
- Internationalize research and education in the region.

4.4.1.2 Outcomes of Merger

The long-term goal of the merger was that the resulting HEI would become a university by 2000. This goal, however, took considerably longer time than was predicted during the merger process. University status was applied for and denied twice. The reason for the rejected applications was that Mid Sweden UC was considered to be lacking in terms of research capacity, scientific productivity and “critical mass” of researchers. One step towards the university status was taken in 2001, when Mid Sweden UC was granted the right to examine PhD students in natural sciences. Finally, university status was granted for the HEI from 2005.

The stated goal of a volume of 8–10,000 students was reached before 2000. For instance, when higher education was increased in Sweden in the 1990s, Mid Sweden University was granted the highest number of new students of all HEIs. Moreover the university has become rather “efficient” in terms of student “performance” relative to education expenditure in relation to most other universities in

¹⁵ As mentioned in Sect. 4.2, university colleges did not receive fixed research funding prior to 1997.

Sweden (see Fig. A.3 in the Appendix).¹⁶ Partly, this might be explained by the strong focus on distance education, which generally incurs lower costs than on-campus education.

Over time, one can distinguish an emergent focus on distance education at Mid Sweden University, increasing from around 830 full-time students (17 % of all students) in 1994 to over 6,000 students (71 %) in 2011. This is in line with the idea behind the adopted collegiate university model and, consequently, the university has become one of the largest actors in distance education in Sweden.¹⁷

In terms of achieving its goals for improving research capacity, the university has faced more problems. It was however granted fixed research funding in 1997, together with several other regional HEIs. Moreover, in relation to similar HEIs, Mid Sweden currently is relatively well balanced between research and education in terms of expenditures (approximately 40 % of the expenditures is research) (see Table 4.1). However, it is significantly lagging behind other universities in terms of research output (e.g. publications and PhD students), the ability to attract external competitive funding and achieving critical mass in research (See Table 4.1, Figs. A.1 and A.2 in the Appendix). In line with this, Mid Sweden has not yet reached the goal of employing 100 professors. In 2000, the university had 19 professors among its staff, increasing to 71 in 2011.

4.4.2 *Linnæus University*

The second case relates to the merger between two regional HEIs: Växjö University and Kalmar University College. The merger was initiated in 2007, following a strategic alliance between the two HEIs.¹⁸ The merger was initiated by the two HEIs, and the government supported the initiative and also financially aided the merger process.¹⁹ The result of the merger was the foundation of Linnæus University in 2010, a new university with two (independent) campuses on the locations of the two merging HEIs.

The merging universities were both regional small and education dependent HEIs, with high orientation towards education, low research productivity and low shares of external research funding (see Fig. A.4 in the Appendix; Ljungberg

¹⁶ A full time school year, where the student completes all courses, comprises 60 ECTS credits. Thus, the student “Annual Performance Equivalent” (APE) is the aggregated amount of credits completed in a year at a university divided by 60. Thus it can be said to measure the educational output of universities.

¹⁷ In terms of the number of students enrolled in distance education, the HEI is the second largest actor after Linnaeus University. Moreover, Mid Sweden U has the second highest share of students enrolled in distance education (SCB 2012).

¹⁸ The strategic alliance originally had a third partner, Blekinge Institution of Technology, which decided to end the collaboration prior to the merger initiation.

¹⁹ The government allocated 60 million SEK to aid the merger process.

et al. 2009). At the time of the merger, the two HEIs were similar in size and had similar, and complementary, profiles (see Table A.2 in the Appendix). Moreover, both were ranked low in national rankings.²⁰

4.4.2.1 Rationales for Merging

The vision underlying the merger was, in line with the recent policy focus presented in Sect. 4.2, to become a stronger and larger university with focus on quality and competitiveness. As part of this vision the goal was to pool and efficiently use resources for research and higher education, which in this case meant to consolidate the existing research and teaching fields, while increasing the potential to develop new ones. The underlying rationale for this goal was that pooling and efficiently using resources would lead to increased quality and competitiveness, not the least in terms of increasing visibility for both students as well as researchers and teachers, and to enhance research. This can be seen for instance in the explicitly stated aim of the new university to attract an increased number of students.

4.4.2.2 Outcomes of Merger

The new university, resulting from the merger between Växjö and Kalmar, has been active for 3 years at the time of writing. While this might be a too short time frame to see all potential outcomes of the merger, it is sufficient to make some observations.

First of all, the overall position of the new university largely resembles that of the two merging HEIs (see Table A.4 in the Appendix): it is highly dependent upon education in terms of funding, relatively weak in research, and so far, no significant improvement in rankings has been achieved.

Turning to education, one can first observe that the merger lead to the new HEI becoming the second largest regional university in terms of the number of students.²¹ They also managed to attract an increased number of new students after the merger, indeed the university had higher increase in student enrolment than any other HEI in Sweden (8 %) between 2009 and 2012. It is, however, notable that this expansion of the education can almost entirely be attributed to an increase in the number of students in distance education. In fact, due to the merger and this increase in enrolment, the university currently has the highest number of students in distance education in Sweden, with around 4,900 full-time students.

²⁰ In 2009, Växjö was ranked at place 17 of 30 HEIs in the Urank ranking. Kalmar UC was ranked at place 25 in the same year. See <http://www.urank.se>

²¹ In 2012, the university had approximately 15,000 full-time students, which also makes it larger than several older universities.

Moreover, the university also became more “efficient” in education, in terms of lower cost per full-time student (see Figs. A.3 and A.4 in the Appendix). It also has a significant broader scope in terms of the number of education subjects offered to students (see Table A.2 in the Appendix).

It is, however, more difficult to discern any significant changes in terms of research capacity after the merger, apart from the fact that the new university employs more researchers after the merger, and it has a broader scope in terms of research subjects. In relation to this, one can also observe an increase in the “density” of research subjects, meaning the average number of researchers per subject (cf. Ljungberg et al. 2009). However, the HEI has almost the same number of research subjects as significantly larger universities, indicating that it might still suffer from a lack of “critical mass” of researchers in several of the research subjects. Moreover, there is no significant difference in the university’s ability to attract external research funding, where it is still lagging behind other universities of similar size (see Table 4.1). Interestingly, after the merger the HEI has had a decrease in terms of its research productivity (in terms of publications).

4.4.3 Uppsala University with Campus Gotland

The third case is the recent merger between Uppsala University and Gotland University College. The merger process was initiated by the two HEIs in 2011, following up on existing collaboration. A proposal for merging, including the rationales and envisioned benefits, was presented in 2012, and the government decided to approve the merger in December of the same year.

The merger was finalized in July 2013. In contrast to the two previously presented cases, this was not a horizontal merger leading to the foundation of a new university. Instead, it can be understood as a vertical merger, with Gotland incorporated as a campus within Uppsala University.

Uppsala is one of the largest and most research-intensive comprehensive universities in Sweden (see Table 4.1 and Figs. A.1 and A.2 in the Appendix). Gotland on the other hand was the smallest HEI with research funding, and it was highly education dependent (see Table 4.1). Moreover, Uppsala has commonly ranked highest among the comprehensive universities in national rankings while Gotland has ranked the lowest overall.²²

²²In the national ranking Urank (University Ranking), Uppsala was ranked number five in 2011, after four universities specialized in technology, medicine and agriculture. In the same ranking, Gotland UC was ranked lowest. See <http://www.urank.se>

4.4.3.1 Rationales for Merging

The stated objectives of this recent merger were to create:

1. a unique profile within Uppsala; and
2. a sustainable and competitive academic environment at Gotland.

The envisioned unique profile within Uppsala concerns a focus on distance education and liberal arts education, both of which were a strong feature at Gotland. Before the merger, Gotland had a major focus on distance education, with around 1,770 full-time students, which corresponds to approximately 85 % of all students. At the same time, distance education has been seen as a weak spot of Uppsala, both in terms of competencies and number of enrolled students. However, if the recent merger is successful, Uppsala will become the traditional comprehensive university with the highest number of students in distance education in Sweden.²³

Another rationale for the merger is for Uppsala to take advantage of Gotland's experiences and practical competencies in distance education solutions. This rationale can be seen in the following quote, taken from a debate article by the previous vice-chancellors of the two HEIs: "Together we can combine practical experience with scientific theories and methods regarding state-of-the-art pedagogics and didactics" (Åkesson and Tholin 2012).²⁴

Gotland UC had strong focus on Liberal Arts education, which was the model used for all on-campus education. This educational model, in this setting, is centred on students choosing a major, which is combined with elective courses in other disciplines. In other words, the model is envisioned to combine depth with breadth, in terms of multidisciplinarity. Part of the unique profile envisioned through the merger is to become an international centre for Liberal Arts education at Campus Gotland. The objective here is that Uppsala will gain a Liberal Arts program, and Gotland will be able to broaden its courses provided in the program, drawing on the existing education at Uppsala.

The second objective of the merger is to create a sustainable and competitive academic environment at Gotland. The merger is seen as a means to ensure the continuation of research and higher education in the region. Gotland can take advantage of the strong Uppsala brand, as well as its competencies in research and education (as seen in the quote above). Also, the merger will lead to pooling resources, which is seen as especially important for sustaining small research and education subjects: "By merging, environments are created where some small subjects can become nationally and internationally leading" (Åkesson and Tholin

²³ However, Uppsala will, after a merger, still be substantially smaller in distance education, with potentially around 3,500 full-time students, than some regional universities such as Linnaeus U or Mid Sweden U, which both have around 4,500–5,000 full-time students.

²⁴ Authors' translation. Original quote in Swedish: "Tillsammans kan vi kombinera praktisk erfarenhet med vetenskapliga teorier och metoder om nyskapande högskolepedagogik och didaktik."

2012).²⁵ One such subject that is explicitly mentioned is archaeology, which is present at both HEIs, but with relatively few students and researchers.²⁶

4.5 Lessons Learned

In this section, we will outline some lessons learned from the Swedish experiences of university mergers, from the perspective of strategic positioning.

The main external pressures facing Swedish universities can be summarized as:

1. increased competition among HEIs;
2. shifting policy focus from quantity towards (increased) quality;
3. forthcoming contraction of education; and
4. governmental encouragement of mergers between small HEIs and larger universities.

The Swedish university sector has faced increased competition for resources during the last decades, largely due to expansion of research (and education) in terms of actors and redistribution of research funding. Firstly, the university sector has been expanded through the setting up of several regional HEIs from the 1970s onwards. This was followed by the expansion of research in terms of actors when fixed research funding was awarded to non-university HEIs starting from 1997, without significantly increasing the funding. Secondly, research funding was redistributed toward more competitive research funding, with the share of direct government funding decreasing and the share of external research funding increasing.

Mid Sweden University was founded with the goal that the merger would provide the critical mass and resources needed in the already competitive environment to be able to receive fixed research funding and ultimately university status. When competition was enhanced further, this proved more difficult than envisioned, and the new HEI was denied university status several times before finally succeeding. Even 30 years after its foundation, Mid Sweden University has still not met some of its original goals and is to some extent lagging behind in terms of research.

In recent years, public policy has increasingly focused on “quality” of research (and education), underpinned by the assumptions that Sweden needs elite universities that can compete internationally. This emphasis on quality has lead, among other things, to the introduction of research and education evaluations and performance-based allocation of research funding, which has further increased the competition in the university sector. In line with this policy focus, Linnæus

²⁵ Authors' translation. Original quote in Swedish: "Genom sammangåendet skapas miljöer där vissa små ämnen kan bli nationellt och internationellt ledande."

²⁶ Authors' translation. Original quote in Swedish: "Genom sammangåendet skapas miljöer där vissa små ämnen kan bli nationellt och internationellt ledande."

University was founded with the explicit aim of consolidating resources to increase quality, in order to become a more competitive university.

Following expansion (massification) of education for many decades, there now seems to be a forthcoming contraction of education facing Swedish universities, due to changes in demographics and the introduction of fees for non-EU/EES residents in 2011. Given that education is the major source of fixed funding in the Swedish system, this poses a threat not in the least to the smaller regional universities that already are resource constrained as well as highly dependent on education. The dramatic increase in distance education during the last decade might, however, provide one way to overcome the contraction. After the merger, Linnæus University managed to significantly increase its enrolment solely by attracting more students in distance education.

Finally, policy makers and the government have actively encouraged voluntary mergers, especially between smaller regional HEIs and larger universities, in order to pool resources and increase quality of research. While so far there have been no governmental demands for such mergers, the influence of this drive can be seen indirectly in the two more recent mergers in terms of explicitly stated rationales such as pooling resources and increasing quality. Moreover, this expressed “wish” for mergers makes the future uncertain for other HEIs: Will mergers sooner or later be forced by the government, rather than voluntary?

The external pressures mentioned here, together with the accompanied increased autonomy of Swedish universities, suggest a need, at least for smaller regional and resource constrained HEIs, to react in different ways in order to compete. A merger can, to some extent, be seen as a strategic response to these pressures, as indicated by the focus on resource pooling, for example, as one explicitly stated rationale for the mergers presented in this chapter.

The three mergers in the Swedish university sector presented in this chapter to a large extent show similar rationales underlying the mergers. The main rationales for merging identified in the studied cases are:

1. to achieve scale and scope by pooling resources;
2. increase quality; and
3. differentiate into or change position in existing market or profile (see Table 4.2).

When it comes to the outcomes of mergers, the reviewed cases suggest that it may be easier for HEIs to strategically position themselves through mergers in education than in research. The two cases relevant to discuss in terms of outcomes – Mid Sweden and Linnæus universities – both show a post-merger increase in the volume of students as well as (increased) efficiency in education relative to expenditure. However, these merged universities still show a deficiency in terms of research capacity and critical mass of researchers. The question then is if mergers are less conducive to improve research performance in (regional) small and resource constrained HEIs?

On a final note, distance education is, in these cases, one of the most obvious “successful” outcomes of (post) mergers in terms of positioning, which is visible in all three cases. In the case of Mid Sweden University, the adopted collegiate

Table 4.2 Main rationales for merging as found in the cases

Main rationales	Sub-rationales	Relation to studied cases
Achieve scale and scope by pooling resources	Critical mass of researchers	Mid Sweden U was merged in order to achieve critical mass.
	Scale in education	In order to sustain in the long term, Gotland initiated the merger with Uppsala in order to overcome its resource constraints
Increase quality	Pooling and efficiently using resources	Linnæus U and Gotland were merged for reasons of increasing quality and consolidating disciplines.
	Consolidating disciplines	
	Accessing competencies and/or brands	Uppsala U lacked competencies regarding distance education, but by merging with Gotland gained theirs.
Differentiate into, or change position in new markets or profiles	Vertical merger	Uppsala U radically changes position in distance education by incorporating Gotland as a campus, as well as moves into the Liberal art education market.
	Pooling resources	Through the merger, Linnæus U became the largest actor within distance education in Sweden.
		The merger of Mid Sweden U as a collegiate university led to an emergent focus on distance education, making them an early entrant into that market and over time one of the largest actors in Sweden in this area

university model, with its accompanied focus on networks, led to an emergent focus on distance education, making it over time one of the largest actors in Sweden in this area. In the case of Linnaeus U the merger led to the foundation of the largest actor in Sweden within distance education, which is also the area where they managed to attract a surplus of new students in the post-merger period. In the recent merger between Uppsala U and Gotland U, distance education was lifted up as one of the main rationales of the merger.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

Appendix: Strategic Positioning in the Swedish University Sector²⁷

Table A.1 Mid Sweden university's profile (2011/12)

Education	Number of education subjects	Research	Number of research subjects	Profile
HumSoc, (Med), Tech, Nat,	49	Tech, Nat,	46	Specialist (education), generalist (research)

Education subjects: The lowest level of teaching subject classification used in Sweden, 180 education subjects in total. Research subjects: The lowest level of research subject classification used in Sweden, 250 education subjects in total. The university profile is based on a concentration index, constructed to make a basic distinction between “generalist” and “specialist” universities. We calculate the index for both education and research. This was done by calculating the distribution of students and researchers respectively over the four main disciplines. Following earlier research (Bonaccorsi and Daraio 2007a), we define a university as being a specialist if $c1 > 70\%$, meaning that the largest discipline concentrate more than 70 % of students/researchers, or $c2 > 90\%$, meaning that the two largest disciplines concentrate more than 90 %. In all other cases, universities are considered as generalists

Table A.2 Profile of Linnæus University (2011/12) and the two merging HEIs (2008/09)

HEI	Education	Number of education subjects	Research	Number of research subjects	Profile
Linnæus University	HumSoc, (Med), Nat, Tech	78	HumSoc, Nat, Tech, Med	52	Specialist (educ), generalist (res)
Kalmar UC	HumSoc, Med, Nat, Tech	55	HumSoc, Nat, Med, (Tech)	43	Generalist
Växjö University	HumSoc, Nat, Tech (Med)	68	HumSoc, Tech, Nat	41	Specialist

²⁷ Data comes from a public database, comprising administrative data on Swedish universities (the NU-database), run by the Swedish National Agency for Higher Education. (<http://www.hsv.se>). Publications were gathered from Web of Knowledge, by searching for different variants of each HEI's name in the organisation field.

Table A.3 Profile of Uppsala U and Gotland UC (2011/12)

HEI	Education	Number of education subjects	Research	Number of research subjects	Profile
Uppsala University	Hum, Nat, Tech, (Med)	110	HumSoc, Nat, Med, Tech	63	Generalist
Gotland UC	HumSoc, Tech	29	HumSoc, Tech (Nat)	18	Specialist (educ), Research

Table A.4 Description of the variables for analyzing strategic positioning of Swedish HEIs

Indicator	Measure	Comment
Orientation		
PhD recipients per student	The number of recipients of PhD degrees over the total population of students. Normalised over the population of HEIs.	Indicator of research orientation, i.e. the share of PhD recipients in relation to students (see Geuna 2001; Bonacorsi and Daraio 2007a)
Share of research expenditure	The share of research expenditure of all expenditures. Normalised over the population of HEIs.	Indicates the general orientation towards research, in relation to the population of HEIs.
Intensity of the three academic roles		
Research intensity	The average number of publications per researcher	
Education intensity	The student “annual performance equivalent” (APE), which could be comparable to labour market “full time equivalent”, per academic employee.	
Third mission intensity	Industry funding per researcher	Can also be seen as a rough measure of the ability to attract external funding.
Cost of research and education input and output		
Student APE cost	Education expenditure over aggregated student APE	
Publication cost	Research expenditure over aggregated number of publications	
Research expenditure per researcher		How much the universities, in relation to each other, spend on research in relation to their size.
Education expenditure per academic		How much the universities, in relation to each other, spend on education in relation to their size.

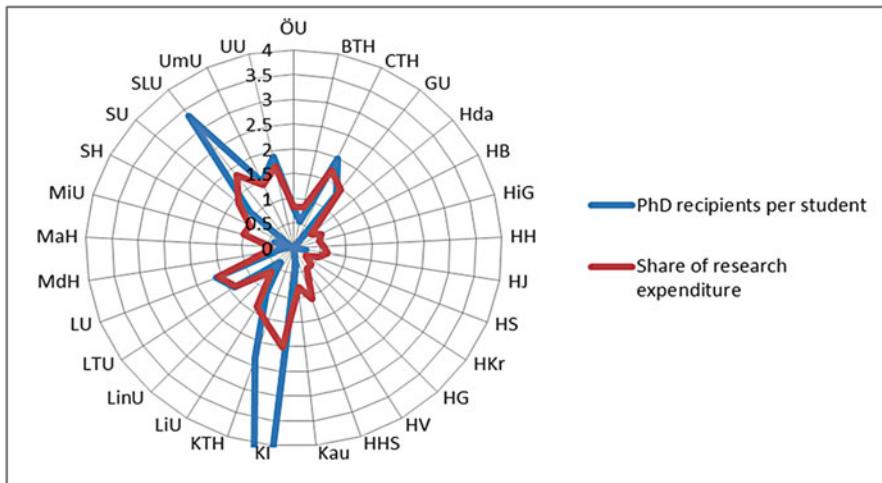


Fig. A.1 Research orientation (2011)

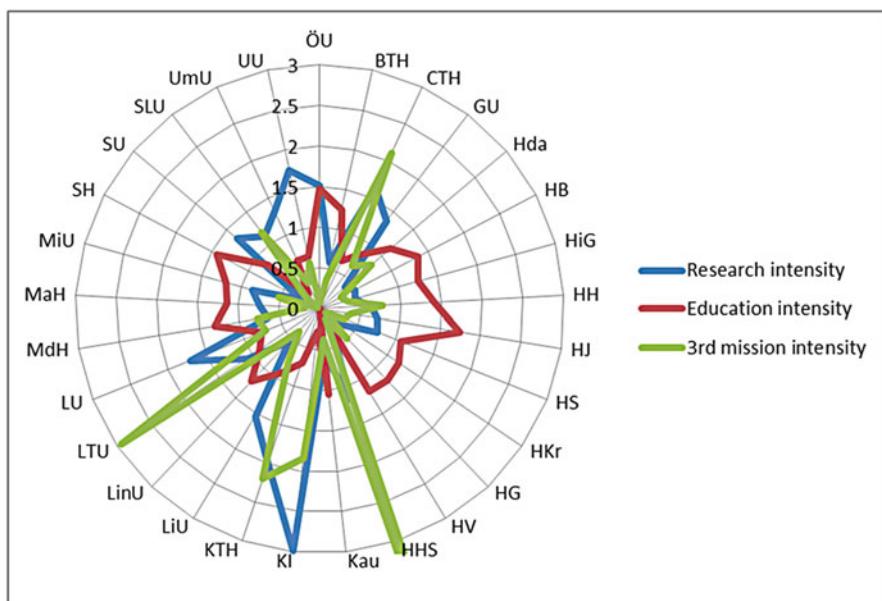


Fig. A.2 Research, education and third-mission intensity (2011)

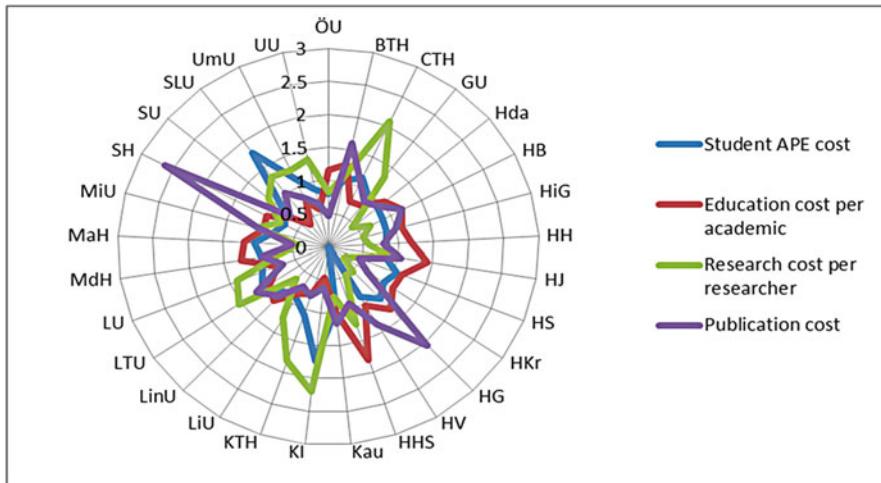


Fig. A.3 Cost per research and education outputs and inputs (2011)

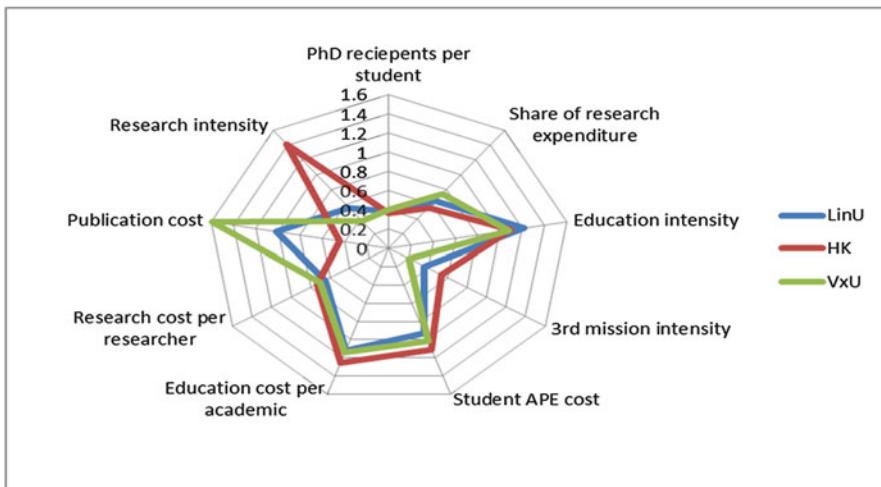


Fig. A.4 Strategic positioning indicators for Kalmar UC and Växjö U (2009) and Linnæus U (2011)

References

- Akesson, E., & Tholin, J. (2012, April 19). Vi har mycket att vinna på sammanslagning. *Svenska Dagbladet* (Debate article).
- Benner, M. (2001). *Kontrovers och konsensus*. Nora: Bokförlaget Nya Doxa.
- Björklund, J. (2011). Högskolor behöver slas ihop med de starka universiteten. *Debate*.

- Bonaccorsi, A., & Daraio, C. (2007a). Theoretical perspectives on university strategy. In A. Bonaccorsi & C. Daraio (Eds.), *Universities and strategic knowledge creation*. Cheltenham/Northampton: Edward Elgar Publishing.
- Bonaccorsi, A., & Daraio, C. (Eds.). (2007b). *Universities and strategic knowledge creation*. Cheltenham/Northampton: Edward Elgar Publishing.
- Clark, B. (1998). *Creating entrepreneurial universities: Organizational pathways of transformation*. Oxford/New York: Pergamon Press.
- Dario, C., et al. (2011). The European university landscape: A micro characterization based on evidence from the Aquameth project. *Research Policy*, 40(1), 148–164.
- Deiaco, E., Holmén, M., & McKelvey, M. (2009). From social institutions to knowledge business. In M. McKelvey & M. Holmén (Eds.), *Learning to compete in European universities*. Cheltenham/Northampton: Edward Elgar Publishing.
- Deiaco, E., Hughes, A., & McKelvey, M. (2012). Universities as strategic actors in the knowledge economy. *Cambridge Journal of Economics*, 36, 525–541.
- Geuna, A. (2001). The changing rationale for European university research funding: Are there negative unintended consequences? *Journal of Economic Issues*, 35, 607–632.
- Hällsten, M., & Sandström, U. (2002). *Det Förändrade Forskningslandskapet*. Region och trafikplanekontorets rapportserie.
- Harman, K., & Meek, V. L. (2002). Introduction to special issue: “Merger revisited: International perspectives on mergers in higher education”. *Higher Education*, 44, 1–4.
- Henkel, M., & Little, B. (1999). *Changing relationships between higher education and the state*. London: Jessica Kingsley.
- Heyman, U., & Lundberg, E. (2002). 2002:4 *Finansiering av svensk grundforskning*. Swedish Research Council. Stockholm: Vetenskapsrådet.
- HSV. (2012a). 2012:10 *Universitet och högskolor: Högskoleverkets arsrapport 2012*. Swedish National Agency for Higher Education: Vetenskapsrådet.
- HSV. (2012b). 2012:18 *Swedish universities & university colleges*. Swedish National Agency for Higher Education: Vetenskapsrådet.
- Jacob, M., & Orsenigo, L. (2007). *Leveraging science for innovation: Swedish policy for university–Industry collaboration 1990–2005*. Stockholm: SNS Förlag.
- Lawton Smith, H. (2006). *Universities, innovation and the economy*. New York: Routledge.
- Ljungberg, D., Johansson, M., & McKelvey, M. (2009). Polarization of the Swedish university sector: Structural characteristics and positioning. In M. McKelvey & M. Holmén (Eds.), *Learning to compete in European universities* (pp. 128–160). Cheltenham/Northampton: Edward Elgar Publishing.
- McKelvey, M., & Holmén, M. (Eds.). (2009). *Learning to compete in European universities*. Cheltenham/Northampton: Edward Elgar Publishing.
- SCB. (2012). *Higher education. Students and graduated students at first and second cycle studies 2010/11*. Statistics Sweden (SCB).
- Schilling, P. (2005). *Research as a source of strategic opportunity? Re-thinking research policy developments in the late 20th century*. Ph.D. dissertation. University of Umeå.
- Skodvin, O. J. (1999). Mergers in higher education – Success or failure? *Tertiary Education and Management*, 5(1), 65–80.
- Sörlin, S., & Törnqvist, G. (2000). *Kunskap för välvärde*. Stockholm: SNS Förlag.
- Tenfelt, T. (2012, August 20). Högskolor tvingas dra in 15 000 platser. *Dagens Nyheter*.
- Vincent-Lancrin, S. (2006). What is changing in academic research? Trends and futures scenarios. *European Journal of Education*, 41, 169–202.

Chapter 5

Reorganising the Welsh University System

Philip Gummett

5.1 Introduction

Restructuring Welsh higher education came under active consideration from the start of the millennium, when a broad policy consensus emerged that the country had too many universities, often of a scale that limited their potential. From 13 higher education institutions then, the total is now 8 (plus the Open University in Wales). This chapter reviews the major policy positions and phases of these developments, from one in which the funding body for higher education sought institutions' own proposals to one in which, at the Minister's request, it offered a structural "blueprint". It illustrates developments with reference to specific cases, and highlights the key role of institutional and political leadership in these processes, and the challenges involved in securing change in a context of high institutional autonomy. Finally, it identifies the tension, perhaps particularly evident in small countries, between responsibility for governance of individual institutions, and for securing the best possible overall higher education system.

5.2 Context

Wales is a small country on the western edge of Europe. It has a long history as a distinct nation within what eventually became the United Kingdom of Great Britain and Northern Ireland (UK). The population is three million (about 5 % of the UK), mainly concentrated in the south-east and north-east – both close to the English border which spans its entire eastern edge. The rest of Wales is largely rural with a number of prominent towns.

P. Gummett (✉)
Higher Education Funding Council for Wales, Cardiff, Wales, UK
e-mail: phil@gummett.com

Many functions of government have long been administered somewhat separately via a special central government department, the Welsh Office. In 1999 the majority of its powers were devolved to a new National Assembly for Wales and a separate Welsh Government. Under the devolved system, the Welsh Government (and counterparts in Scotland and Northern Ireland) receives funding from London the scale of which is related to overall public expenditure for England. The Welsh Government then distributes this funding according to its priorities – similarly to “autonomous regions” elsewhere in Europe.

Since the early twentieth century, policy in the UK for higher education (HE – mainly meaning universities, but also some other providers, principally, and to a degree, further education (FE) colleges) has been administered “at arm’s length” from government, by a statutory intermediary body functioning between government and the HE sector. This arrangement reflects long-established respect for the principle that universities work best as legally autonomous, self-governed bodies. However, and to flag an issue that has been central to the politics of mergers in Wales, at the same time government, as the main source of funds for HE as a whole, and especially as the scale of that funding has increased with the growth of student numbers, has always had a broad sense of what it expects for the public investment, and this has become more specific over time.

This tension was expressed by the Welsh Government ([2009](#): paras. 73–75), in the context of a new plan for HE published in 2009:

The plan recognises and respects the autonomy of higher education institutions in the sense that they are free to determine their own strategies, set their own direction, seek diverse forms of funding, determine their own curricula, appoint staff, and make their own awards without any reference to government. It also recognises the importance of leaving a high degree of freedom for institutions, which are closer to the market than government, to make their own judgements about how best to respond to the market, in both teaching and research.

However, this level of autonomy has to be balanced against the responsibility of the Assembly Government to ensure that higher education delivers the best it can for Wales in the long term future. It will therefore look to the £450 m public funding deployed to support higher education via HEFCW as the key lever of change in delivering this action plan.

In future, public funding investment in higher education “[...] will be steered towards investing to achieve the changes necessary to meet our vision and expectations. Only institutions that can deliver those priorities can expect to be the beneficiaries [...]”.

The intermediary body – initially known as the University Grants Committee (UGC), then the Universities Funding Council – has therefore always received guidance from ministers over the broad principles for the allocation of government funds ([Shattock 1994](#)). But the purpose of having an intermediary body – with a Council made up of people with significant experience of HE and of other “walks of life”, and an expert Executive – is to allow it to interpret the guidance in ways that make sense within the limits of funding and the practical experience of the HE sector, and that enable the sector as a whole (as distinct from individual institutions

within it) to function efficiently and effectively. The intermediary body has also long been recognised as an important source of advice to government on higher education policy – not least in terms of assessing the implications of any proposed action. In more recent years, its regulatory role has also increased, especially in respect of assessing the financial soundness of institutions, controlling funded student numbers, and assuring the quality of teaching.

For their part, the universities, with legal bases that in some cases stem from Papal Bulls, in others from Royal Charters and, more recently, from incorporation as Higher Education Corporations, have fiercely guarded their autonomy.

Against that background, finally, we need to note that under the Further and Higher Education Act of 1992, which saw the transfer of what were then called polytechnics, administered by local authorities, to full university status (hence the phrase “post-92 universities”), separate HE intermediary bodies “funding councils” were established for England, Scotland and Wales, with a different arrangement for Northern Ireland which had only two universities. With the devolution of government from London to Wales in 1999, therefore, came, among other things, responsibility for higher education, and an already operating Higher Education Funding Council for Wales (HEFCW).

5.3 The Diagnosis: The System Needs Restructuring

This chapter is about developments over restructuring the Welsh HE system since the start of the millennium. The first word on the subject, though, dates from 1406. In that year, Owain Glyndŵr (a Welsh ruler and the last Welsh Prince of Wales), in the course of a long-running revolt against English rule, appealed to the King of France for support, including (Glyndŵr 1406):

[...] that we shall have two universities or places of general study, namely, one in North Wales and the other in South Wales, in cities, towns or other places to be hereafter decided and determined by our ambassadors and nuncios for that purpose [...].

Matters evolved differently, however, with institutions beginning to be established in the nineteenth century. By 1999, the newly established National Assembly found itself funding 13 HE institutions (Table 5.1), with some FE colleges also delivering some HE.

A number of these institutions were already the products of mergers – most notably the largest, and strongest in research terms, Cardiff University (Wales’s only “Russell Group” university – the UK’s “club” of leading research intensive universities). In 1987, its precursor, University College Cardiff, became something of a *cause célèbre* in UK university history because of grave financial mismanagement. From that case flowed a new approach by the then UGC (maintained by all successor funding councils) to seeking assurance over institutional financial planning. The resolution of the financial crisis included a requirement that the college merge with a neighbouring institution, together with, the

Table 5.1 Higher education institutions in Wales, 2003

Institution	Student enrolments (all levels, full & part time)
University of Wales, Newport	8,700
North East Wales Institute of Higher Education (later Glyndŵr University)	6,397
University of Wales Institute, Cardiff (later Cardiff Metropolitan University)	8,594
University of Glamorgan	19,350
Swansea Institute of Higher Education (later Swansea Metropolitan University)	4,974
Trinity College Carmarthen (later University of Wales Trinity Saint David)	1,803
University of Wales, Lampeter	3,493
University of Wales, Aberystwyth (later Aberystwyth University)	9,835
University of Wales, Bangor (later Bangor University)	9,599
Cardiff University	19,929
University of Wales, Swansea (later Swansea University)	11,727
University of Wales College of Medicine	4,144
Royal Welsh College of Music and Drama	583

Source: HEFCW Annual Report 2003–2004

chairman of the UGC wrote (Swinnerton-Dyer and Sir Peter 1987), “The resignation – or, if necessary, dismissal – of the Principal”. Forceful intervention is not new.

In January 1999, HEFCW was asked by the Welsh Office to identify the scope for mergers in HE and to make recommendations to the new National Assembly. HEFCW recommended that there should be five or six institutions in Wales, and that the Assembly should invite it to consult with institutions with a view to a strategic, structural reorganisation over a period of some 3–5 years (HEFCW 1999).

The Assembly’s Education and Lifelong Learning Committee (2002) followed up with a review of higher education. Its report confirmed the need for structural reform but was equivocal about mergers. Instead, it urged a “cluster model” in which HE institutions should collaborate in regional groupings with each other and with other educational providers, such as FE colleges, to improve provision of all types.

By early 2002 there was a clear consensus among policymakers, widely but not universally shared in the university sector, that there were too many universities in Wales, with some of them being too small to be able to function optimally, hire the best staff, develop research groups on the scale required by current competitive conditions, take risks over the sort of investment that was needed to remain competitive, and that the pattern of provision, geographically and in terms of subject coverage, regardless of the strengths of individual institutions, could be improved to the general benefit of the population.

In this context, the then Education Minister launched a new strategy for higher education (Welsh Assembly Government 2002). This spoke of a disproportionately large number of small institutions in Wales with a range of consequences for performance; and of the need to take forward the idea of restructuring in clusters, with shared missions, though it eschewed prescription about their form or nature. It was emphatic that unless there was firm evidence of engagement with structural reform, ‘the case for the development and supplementary funding for the sector cannot be sustained’. In the meantime, funding was being made available to support restructuring, and the first call on any extra resources for HE for the foreseeable future would also be for restructuring.

A few months later, HEFCW established a new Reconfiguration and Collaboration Fund (HEFCW 2002). This invited bids for funding to support reshaping in the interests of major performance gains and enhanced competitiveness. Proposals would have to be strategic, substantial and sustainable when transitional funding ended: in brief, they should be “landscape changing”. The fund covered mergers and significant cross-institutional teaching and research collaborations and, once in a steady state, was spending about €20 million per year. A variant of the fund continues today. However, with sharply reduced funding for HE since the global financial crisis, from 2011 it has been focused sharply on mergers and regional collaboration, and only exceptionally on research (HEFCW 2011b).

With hindsight, what followed fell into three phases: an early phase, from 2002 to 2006, in which HEFCW sought to facilitate, but not prescribe, desired changes; a more interventionist phase, from 2006 to 2009, in which it took the opportunity presented by developments at a couple of institutions to accelerate restructuring; and a phase from 2010 onwards in which HEFCW developed a more explicit “blueprint” for change.

5.4 Early Phase – Funding Council as Facilitator (2002–2006)

The 2002 initiative deliberately did not prescribe which institutions should merge or collaborate: the Council was serious about institutional autonomy, believed that there was never only one way forward, and welcomed institutions own proposals. These were also more likely to succeed than externally imposed proposals.

Four proposals for mergers or major strategic alliances arose quickly, together with others for a measure of subject rationalisation between neighbouring institutions, and for major multi-university collaborations to address the issue of uncompetitive scale and scope in research that HEFCW had identified.

5.4.1 Cardiff University and University of Wales College of Medicine

The first of these was to merge Wales's largest university, and strongest in research terms, with its only medical school. Cardiff University was unusual among its Russell Group peers in not having a medical school. The University of Wales College of Medicine (based primarily in Cardiff, but using teaching hospitals throughout Wales) was also unusual in being a stand-alone medical school: by the early 2000s, almost all UK medical schools were part of large research intensive universities.

In practice, however, a lot of the early years teaching in the medical school was already done by Cardiff University, and a good deal of biomedical and health-related research was also done jointly between them. A key aim was to build on this existing partnership to form a biomedical and health research powerhouse.

Importantly, new vice-chancellors took office in both institutions in 2001. Both had decided, beforehand, to explore the possibility of merger, for the reasons outlined above. Crucially, they had also agreed, to repeat, even before taking office, who would head the new institution. Hence, discussions between themselves proceeded smoothly, although many issues had to be resolved along the way, including the concerns of some of the leading Cardiff researchers that the process of merger would, for a while, reduce their effectiveness; and concerns of medical school staff and students about loss of their traditional identity. The funding council assisted with some of these concerns – for example, by funding six “linked chairs” to enable the appointment of internationally renowned new professors and associated teams in fields of joint interest to both institutions and so help maintain research momentum through the transition period.

All in all, though, the process was fairly smooth, with funding of £15 million. As is standard practice for HEFCW investments, an evaluation was done after an appropriate elapse of time, and this painted a largely positive picture of achievements relative to merger ambitions (HW Corporate Finance 2007).

5.4.2 Bangor University and North East Wales Institute of Higher Education

The second proposal was for exploratory talks between Bangor University and Wrexham based North East Wales Institute of Higher Education (NEWI) – later to become Glyndŵr University – about 70 min apart by road, and with Bangor already conducting certain activities in Wrexham. NEWI was a community focused institution with a strong emphasis upon widening access to disadvantaged groups. In sharp contrast to Bangor, it made no claims to broad research strength, and so the cultures of the two institutions were significantly different. Nevertheless, HEFCW provided £0.25 million for an appraisal of the scope to offer better all-round support

to the people, businesses and other employers in north Wales by integrating their activities across the length of the north Wales corridor. It was no great surprise when, in 2004, the partners concluded that the cultural differences, especially in terms of the significance of research, were too great, and the talks ended amicably.

5.4.3 University of Glamorgan and University of Wales Institute, Cardiff

Not so in a third case, a proposal to merge two teaching-led institutions in south-east Wales. The University of Glamorgan was Wales's largest teaching-led university, but located 19 km north of the capital city, Cardiff, in the heartland of the former south Wales coalfield. In contrast, the smaller University of Wales Institute, Cardiff (UWIC – later to become Cardiff Metropolitan University), was based in the capital. Many observers saw logic in merging the two (and there had been previous discussions between them), bringing the best of each to bear across their entire geographical area – in the process creating for Wales a “metropolitan” university like those in other major UK cities.

HEFCW funded exploratory work to the tune of £0.25 million, but the talks were never easy. Issues of identity, future leadership, relations between existing leaders, and attitude towards the use of University of Wales awards (UWIC wanted to keep them, Glamorgan never had and did not wish to start) were among the sticking points. Interestingly, the main staff trades unions favoured merger provided there were no compulsory redundancies, arguing that this would secure safer future employment for their members. Discussions reached the stage of a formal public consultation document on the proposed merger being issued in August 2003 but then UWIC abruptly suspended the process in September citing issues of trust and confidence, and formally terminated it in December (GAELWa (Gwasanaeth Archwilio Elwa/ELWa Audit Service) 2004).

This was the subject of considerable disappointment in political circles. I personally found it regularly cited over the next several years as the key instance of higher education in Wales having failed to act to strengthen the system as a whole.

(UWIC was later to engage in discussions with University of Wales, Newport over possible merger, which did not advance far; and Newport similarly with a neighbouring FE college).

5.4.4 Aberystwyth and Bangor Universities

The fourth case from this period relates to two medium-sized research-intensive universities in west and north-west Wales, Aberystwyth and Bangor. Neither is

close to major population centres, and the question was raised about their long-term sustainability. Their proposal was not to merge (recognising, among other matters, that it takes over 2 h by road between them) but to strengthen their research by integrating activity in four areas important to both institutions. The effect would be to roughly double the size and scope of the relevant research groups, thus making them competitive with bigger groups elsewhere. HEFCW invested £11 million in this development, which has proved extremely successful and has led on to a joint learning and teaching strategy, and a combined operation for commercialising the results of research and engaging with users (Aber/Bangor Partnership 2011).

5.4.5 *Other Developments*

Space precludes discussion, but this period also saw a number of agreed transfers of departments between universities. It also proved possible to agree multi-institutional collaborative structures and integrated research strategies in fields such as low carbon, cognitive neuroscience, mathematics and computational sciences, climate change, and social and economic research, data and methods that pulled together large numbers of researchers across Wales (up to about 150 in one case), significantly increasing their collective scope to address major agendas and win large grants.

Useful summaries of many of these developments, with links to further detail, including some evaluations, can be found at Parken (2011) and HEFCW ([n.d. a](#), [n.d. b](#)).

5.5 A More Interventionist Phase (2006–2009)

In 2006–2009 HEFCW took the opportunity presented by developments at a couple of institutions to accelerate the restructuring agenda.

5.5.1 *University of Wales, Lampeter*

HEFCW had become increasingly concerned about the strategy and financial sustainability of a small rural university in Lampeter (Wales's, and one of the UK's, oldest). The university had considerable academic strength, but in a very limited number of fields, and there was a significant mismatch between them and student recruitment. In late 2007 HEFCW and the vice-chancellor agreed that HEFCW should engage consultants to review the university's strategy and business model, and its managerial capability. The resulting report (HW Corporate Finance 2008) identified a range of serious issues, with the result that the governing body

recognised the need for action and began to work actively with HEFCW. Most of the senior management team departed, an interim vice-chancellor was appointed, and discussions were opened with the then Trinity College Carmarthen over potential merger. This was achieved in 2009, albeit with more generous HEFCW funding (£14 million) than would have been countenanced in more straightforward circumstances.

The outcome of this merger – the new University of Wales Trinity Saint David, with campuses in Lampeter and Carmarthen – was still a very small institution with a fairly restricted subject range. With an eye to better provision across south west Wales, HEFCW made it a condition of funding that talks be opened with a further small institution in the region, Swansea Institute of Higher Education (later Swansea Metropolitan University).

The result, by October 2012, was merger between the two HEIs, with further plans in hand for integrating strategies for student progression, course provision and governance structures with neighbouring FE colleges, aimed at establishing an innovative regional “dual-sector” university.

5.5.2 Royal Welsh College of Music and Drama

The second case during this phase concerned Wales’s only conservatoire, the Royal Welsh College of Music and Drama. Located in Cardiff, the College required a major capital investment to raise its facilities for performance in music and drama to UK and international standards. The College could not proceed without substantial HEFCW support, but HEFCW considered that the scale of the construction project, and the challenges of raising additional funds and then managing an institution with the desired profile, exceeded the existing managerial capacity.

HEFCW therefore required the College to find a larger and suitably experienced partner, and initially discussions were held with Cardiff University, conveniently located just across the road, which had a very strong Department of Music.

There were some unusual features of the discussions. In particular, it was considered vital for the merged College to be able to continue to project itself to students as a conservatoire, within the distinctive recruitment channels of that market. It was also believed important, again for comparability with leading conservatoires in England and Scotland, to retain the word “Royal” in the title and, because in this case the College’s leading patron happened to be the Prince of Wales, the word “Royal” was unlikely to be retained unless accompanied by “Welsh”. Hence, a solution such as absorbing the College into the Department of Music, or designating the College plus Department as a faculty of the University, was unlikely to work. At the same time, it could not remain a self-governing entity under the umbrella of a larger institution partly because the University would, properly, require control commensurate with its ultimate governance responsibility, and also because legal constraints prohibited the formation of what would be, in effect, a “university within a university”.

These proved, however, to be less significant issues than a perceived reluctance within part of Cardiff University to proceed. The question was raised of the possible effect on the strong research reputation of the Department of Music of association with an organisation whose purpose was the intensive training of prospective performers rather than scholarship and research. While these issues may have been soluble, a sense grew that, given the very small scale of the College relative to the University, and with the University facing other challenges at the time, this was not the best use of senior management time.

An alternative avenue was then explored with the University of Glamorgan. After the terminated merger discussions with UWIC in 2003, Glamorgan had proceeded with expansion plans. In 2007 it was opening a new School of Creative and Cultural Industries in the heart of the capital city Cardiff, and there was scope for complementarity between part of this activity and the College. In addition, Glamorgan's vice-chancellor by this time had previous experience of the sensitivities of linking a university with the performing arts when, working previously at the University of the West of England, he had negotiated a relationship with the Bristol Old Vic Theatre. Building on some of the groundwork from the Cardiff University discussions, and without the concerns this time about research performance, progress was swift. Solutions to the brand issue were found: the College would continue to be known as the Royal Welsh College of Music and Drama. Legally, it would cease to be a Higher Education Corporation and instead become a Private Limited Company wholly owned by the University of Glamorgan, with its own board of directors, which would in effect be a subsidiary of the Glamorgan board. The merger was completed in 2007 within the remarkably short time of 12 months.

5.6 Towards a Blueprint (2010 Onwards)

Throughout this entire period HEFCW had steadfastly not defined a desired shape for the Welsh HE system. Respecting institutional autonomy, and insisting that there was more than one way to reconfigure into a stronger and more sustainable system of higher education for Wales, it had declined invitations from, among others, some of the universities themselves, to offer a blueprint.

With the appointment of a new Education Minister, Leighton Andrews, in December 2009, fresh urgency was injected into all aspects of education policy, including higher education (See, for example, a speech to university governors on the theme of “adapt or die” – (BBC 2009)).

HEFCW decided to move towards a more explicit position. By this time the 13 higher education institutions of 2000 had reduced to ten (plus the Open University in Wales). In December 2010 HEFCW set a target of six (as it had done in 1999), with no more than two to be below the UK median income. It had already begun to structure higher education policy to a degree by three regions within Wales, with a view to improving provision geographically. It now called for two

universities per region, delivering both research-intensive and community focused/teaching led capacity between them. It deliberately did not say (in a way that would have echoed the UK's pre-1992 "binary line" between polytechnics and universities) that there should be one of each type per region, allowing instead the prospect of both foci being provided by single institutions (HEFCW 2010).

5.6.1 *Advice to the Minister*

This step sharpened the debate. In March 2011 the Minister asked HEFCW for specific, evidence based, advice on its preferred structure for higher education. He asked only for the preferred outcome, not how to get there. The process that the Council adopted is probably of wider interest than the discussion of individual institutions, and the following sub-section reflects that assumption.

In its response, published in July 2011, the Council argued that the current structure did not serve Wales as well as it could. It added that it recognised that it was moving beyond a fully evidence-based position to an exercise of judgment. Nevertheless, it believed that the available evidence, coupled with the extensive experience that the Council was able to bring to bear, made its preferred outcome reasonable (For the advice, and reactions to it, see HEFCW 2011a; National Assembly for Wales 2011; Welsh Government 2012a).

This observation, which the Council saw as an unremarkable recognition of its long-held view that there was always more than one way to address the issue, so that a judgment was inevitably required, was, to its great surprise, later used by one institution to support an allegation that the Council had admitted that there was no evidence for its position (8.2).

In forming its 2011 advice, the Council made clear that its focus was strategic and not derived from short term concerns about financial sustainability at any university. The issue was more that Wales was not achieving the full potential from its investment in HE including, for example, the capacity to secure additional funding, to capture research grants, or to sustain a broad subject portfolio. As a result, the sector was not offering as good a service as it could to learners and employers. No one was doing a bad job, or failing by any of the usual measures – but the sector, in the Council's view, was not as strong as it could be or, crucially, as it needed to be in the face of increasing challenges across the UK as a whole.

The Council went on to say, in a passage that went to the heart of much of the subsequent debate, that it was in this sense that it would react to any suggestion that discussion about merger was either irrelevant to, or detrimental to the interests of, individual institutions. It referred to existing language in its Corporate Strategy that committed it to:

- Development of a system of higher education in Wales, with universities and further education colleges working together in an integrated fashion;

- More coherently organised provision in each region of Wales, for the benefit of local learners and employers;
- Research performance at international standards of excellence, organised within and between institutions in ways that were sustainable, and strongly linked to users and beneficiaries;
- A clear understanding of how each institution contributed to the system as a whole; and
- All institutions being financially sustainable into the medium term and beyond.

With an eye to media reaction, the Council re-emphasised that no institutions were at imminent risk of collapse, even in what by then was a very uncertain financial climate (with the combination of the global financial crisis and dramatic UK developments in how universities were to be financed, following decisions about fees and student support in England). It did, though, warn of the risk that institutions might manage increasingly difficult finances through cost reduction, particularly via reduction in the breadth of the teaching portfolio offered (i.e., closing uneconomic departments). It also expressed its view (based on its prior experience with mergers) that smaller institutions struggled more to accommodate resource pressures, to make significant investments, and to afford the management capacity to cope with financial and other pressures. It accepted that systematic analysis of the relationship between institutional scale and sustainability or effectiveness is limited, but noted nonetheless a number of studies across the world (including Denmark, Finland, Canada and Australia, as well as the UK) which illustrated the impact of scale in terms of sustainability, capacity for investment, and academic synergies. Generally, these studies supported the case that smaller institutions are less sustainable and effective, though some evidence from Australia suggested that if an institution grows too large – to a scale not envisaged in Wales – then the benefits of scale can diminish (On evidence about mergers, see also (HEFCE (Higher Education Funding Council for England) n.d.)).

The Council reviewed evidence in respect of learning and teaching, research, innovation and engagement, and sustainability. On learning and teaching, it looked particularly at quality, regional subject coverage, provision relative to population, the role of FE colleges, and widening access. On research, it looked at the most recent (2008) UK-wide Research Assessment Exercise and Wales's record in winning Research Council grants, as well as at work then in progress within the Welsh Government to frame a revised science policy for Wales, with an expected focus upon areas of real strength, building critical mass, and reducing the “tail” of underperforming research. On innovation and engagement it looked at the record on commercialisation and other evidence of use of research from Welsh universities. Finally, on sustainability, it looked at evidence on economies of scale and at institutions' financial health.

5.6.2 Uncontroversial Recommendations

The details of the Council's recommendations can be found in HEFCW (2011b). Four of these were uncontroversial:

- Cardiff University should remain committed to securing a position as a world-class research intensive university, while collaborating with others within Wales and across the border wherever this improved delivery;
- Swansea University should also continue to develop as a major research intensive university, building research partnerships in some areas with Cardiff, and also deepening regional coordination in south-west Wales;
- University of Wales Trinity Saint David and Swansea Metropolitan University should merge as, by now, was already planned, and should deepen regional coordination with Swansea University. In an additional complexity, which we will not pursue here, the Council also endorsed the potential addition to this merger of what was by now an ailing University of Wales (essentially an awarding body that was still used by some of the Welsh institutions – having been much more important to them in the past – but which was mainly, and controversially, known by now for its overseas validation activities);
- Aberystwyth and Bangor Universities (both with relatively new vice-chancellors) should substantially widen and deepen their strategic partnership, including development towards integrated governance processes, building capacity of sustainable scale in a range of subject areas, and develop a longer term plan for merger.

Apart from the Aberystwyth – Bangor merger proposal, which neither warmed to, but which did not create any particular tension because of its longer term status, all the above was received straightforwardly by the universities concerned and wider political circles.

This was not true of two other recommendations.

5.6.3 Controversial Recommendations

Glyndŵr University (formerly NEWI) in Wrexham, north east Wales, lies in one of the relatively more populous regions of Wales, very close to the border with England and several English universities, some very large. HEFCW saw Glyndŵr, with an income in 2011 of only £44 million, and with a relatively restricted teaching range, as facing a challenging future. To this was added the question of the breadth of support that the university, as currently constituted, could provide to local learners and employers. At the same time, the Council recognised Glyndŵr's excellent work with students from backgrounds that did not traditionally enter higher education, and its good graduate employment record. Before devolution, a natural step would probably have been to explore some form of structural

partnership or merger with a neighbouring English university, but by 2011 the education and other agendas in Wales and England, including approaches to funding universities and students, had diverged so much that this would have been difficult.

Faced with these considerations, the Council recommended that, to broaden the range of programmes and achieve significant mass, provision in north east Wales should be managed by Aberystwyth and Bangor Universities in a regional group structure, with a combined turnover of £290 million, perhaps on the model already seen in England in Suffolk (See University Campus Suffolk [n.d.](#)).

The reaction locally was very sharp. Glyndŵr had achieved university status only in 2008 – a matter of much local pride – and had worked hard to establish itself as a valuable partner within Wrexham (for example, by rescuing the stadium of the local football club, located adjacent to the campus, for use as a university and community facility). Anything that could be represented as a threat to “Wrexham’s university” was bound to be received hostilely – even though the aim was to increase the range and quality of teaching and research available to the town and region.

The second controversial recommendation concerned south east Wales. As discussed at 4.3, merger discussions between Glamorgan and UWIC (later Cardiff Metropolitan University) were ended in 2003 by UWIC. In 2011, the Council’s view of Glamorgan was that it was of sustainable size for an institution with its mission, with a good subject range and some significant research activity. It was, though, still small relative to other major post-92 institutions (such as the University of the West of England, in nearby Bristol) and it did not do too well in league tables, often because its dedication to recruiting students from disadvantaged backgrounds lowered the intake and retention variables used in many tables. But combined with other universities in the region, it could offer a more comprehensive subject range, rationalise some provision, and give Wales, and its capital city, a major post-92 university.

UWIC, meanwhile, was seen as small relative to similar city centre institutions, and with a portfolio of courses not as focused as it could be on meeting local needs. HEFCW observed that the case previously advanced by the institutions themselves for merger had been compelling at the time, and was no less so now: complementarity of provision, greater breadth, scope for better deployment of provision across the “greater Cardiff” area and into the former coalmining valleys north of the capital, and perhaps some campus rationalisation. UWIC was also relatively low on part-time students, but had a strong emphasis on international students, which reinforced the sense of complementarity.

Finally, in the south east, was University of Wales, Newport, a small institution (income £48 million) with limited scope and a major sustainability challenge in the longer term. The Council considered that its provision could, if need be, be covered by other institutions in the region. The most obvious step would be to merge with Glamorgan, with which a strong partnership already existed to address the challenge of provision in the (hugely socially disadvantaged) upper reaches of the former mining valleys.

From this analysis came the recommendation of a three-way merger in south east Wales.

5.7 Ministerial Response

By the time this advice was published, there had been in May a further National Assembly election. The outcome was a single party government (not a coalition as before) with the same Minister (Leighton Andrews) as before. The new government's election manifesto referred to the pattern of HE in Wales having been determined largely in the nineteenth century and not being fit for purpose in the twenty first. It spoke of not allowing structural problems to get in the way of success, and of the need for the universities to adapt. It promised "through legislation where necessary" to seek more coherence and efficiency in higher education policy, adding that it would "Continue to drive the transformation and rationalisation process that is beginning to take shape in Wales creating a smaller number of stronger universities" (Welsh Labour 2011).

There was, therefore, continuity of policy, but with increased legitimacy, in the Minister's view, because this commitment had been explicitly voted upon.

When Mr Andrews published HEFCW's advice in July, he said that it made "a persuasive case for change and offers a clear rationale for the preferred structure proposed by the Council". He was, therefore, "minded at this stage to accept the broad thrust of HEFCW's recommendations", and now encouraged wide discussion of the recommendations (National Assembly for Wales 2011).

As expected, there were strong reactions in south east and north east Wales. The bigger of the two issues, politically and in higher education terms, was in the south east, and it would clearly require a great deal of energy.

5.7.1 North East Wales

It was perhaps partly for that reason, but also in recognition of the intrinsic difficulty of the issues, that he took the heat out of the debate in the north east by announcing on 29 November 2011 his decision not to accept HEFCW's advice but instead to consider more closely the pattern of provision in NE Wales and to examine further the options for securing greater regional coherence in the delivery of FE and HE. In February 2012 he announced the formation of a review group to do this work (National Assembly for Wales 2012a).

Their report (Welsh Government 2013) was received in June 2013 and published in September. It broadly endorsed HEFCW's diagnosis, noting strong commitment to access, and responsiveness to some of the core needs of employers and the economy, together with lack of scale and breadth in HE delivered in NE Wales. It spoke of Glyndŵr University as being perceived to act "opportunistically within a commitment to survival rather than having a strategic approach to the balance of provision needed or to improvement of its standing". Many stakeholders had argued for a rebalancing of provision between FE and HE, with some saying that Glyndŵr's provision appeared too like an FE college. The concerns of the leading

local manufacturing employer (Airbus UK) over the quality of provision for its undergraduate apprentices were reported. No evidence was found for a claim by the university that HEFCW had discriminated against it over funding.

The report was clear about the need for a solution “owned” by NE Wales, and concluded that this required a far more strategic and collaborative approach than currently existed. It recommended a “hardwired” federal partnership between Glyndŵr and the neighbouring FE college (one of the UK’s largest), both of which would remain legally independent. A high level strategy board would set their overall approach, including the development of an HE/FE strategy to meet the needs of the region, oversight of shared services, and allocation across the two of all funds arising from the Welsh Government and HEFCW. A partnership with Chester University, just a few miles away in England, was also called for.

If for any reason this model proved unworkable, there should instead be a similar federal partnership between Glyndŵr and Bangor universities.

There was also a key prerequisite of any progress:

Effective leadership and governance must sit at the core of any solution if it is to deliver the truly strategic and collaborative approach needed in the region. A significant body of stakeholder opinion believes that the provider system has fallen short in this regard.

In publishing the report, the Minister said that he would take further advice and issue another statement in the Spring.

5.7.2 *South East Wales*

In the south east, the Minister announced on 31 January 2012 the start of more focused discussions with the three institutions and other relevant stakeholders (National Assembly for Wales 2012c).

He commissioned Professor Sir Steve Smith, vice-chancellor of Exeter University and a very senior figure in UK higher education, to advise on the options, and published his report, which strongly endorsed the three-way merger, in July (National Assembly for Wales 2012b).

Near the end of Smith’s work, on 4 July, Glamorgan and Newport announced that they wished to merge. Smith called this a “game changer”, and said that what by now was called Cardiff Metropolitan University (CMU) was “being tactical not strategic” in announcing on 9 July that it did not wish to engage in merger talks. In his view and, he said, that of almost everyone he had spoken to outside of CMU itself, a merger of all three was necessary and CMU faced “fiscal attrition” year by year if it stood outside this consensus.

CMU, nevertheless, continued its vigorous opposition. Over the next months, arguments advanced, including the alleged unmanageable scale of the new university (it would indeed have been among the top few in the UK, but HEFCW saw no reason not to be so ambitious), complexity of managing a three-way merger (a point that HEFCW accepted, with the expectation that the merger would need to be

planned carefully), loss of identity for activities such as student sports clubs at CMU (a university with a very strong emphasis on sport), and the lack of a detailed business case for the merger.

As noted at 6.1, the Council's statement on the role of evidence and judgment in its advice was also cited but used, perversely, to claim not that judgment had been added to evidence, but that there was no evidence. As for the lack of a detailed business case, HEFCW considered that, as in all earlier instances (including the terminated discussions between UWIC and Glamorgan) and, as also seen in the then current talks between Glamorgan and Newport (see below), this could only be developed by the institutions themselves once serious discussions had begun. Indeed, the Council had a number of times contributed to institutions' costs – including UWIC's – in developing such business cases.

In process terms, the Minister, reinforced by what he contended was the legitimacy conferred by his party's 2011 manifesto, had made repeated references to the possibility of using his powers under the Education Reform Act 1988 (section 128) to dissolve one or more of the three institutions. On 6 August 2012 he wrote, as required by law, to the three and to HEFCW to consult them on two propositions: (a) his preferred option, the dissolution of both CMU and UWN, and the transfer of their assets and liabilities to Glamorgan; or (b) if his preferred option were not adopted, then the dissolution of UWN alone, and its transfer to Glamorgan.

This step took him into uncharted legal territory, on a UK-wide basis. All previous use of the power to dissolve had been by consent (indeed, request) of the relevant institutions.

CMU's media and political campaign intensified, and both the Welsh Government and HEFCW noted an upturn in Freedom of Information requests concerning the preparation of HEFCW's advice. The Government also began to receive detailed letters from CMU's lawyers, requiring huge staff effort to answer, and in the knowledge that anything less than full answers could, if the Minister did invoke his legal powers, trigger a case for "Judicial Review" – a form of legal challenge that tends to focus more on whether or not due process has been followed than on the substance of the case. In October, both Sir Steve Smith and the Minister issued statements contradicting on matters of fact statements that had been made by the chair of governors of CMU (National Assembly for Wales 2012c).

Meanwhile, discussions between Glamorgan and Newport had proceeded, though not without initial incident. The Vice Chancellor of Newport had claimed, on an unconnected matter to do with changes that HEFCW was introducing because of the new fees and funding regime, that there was a "conspiracy" to force Newport into merger – a view firmly rejected by HEFCW. On 5 May it was announced that he would be retiring for family reasons (BBC n.d.; Matthews 2012).

By 25 October 2012 Glamorgan and Newport had agreed a shared vision for the new university, signed a Heads of Terms agreement, established a programme management framework, completed all due diligence checks, and undertaken discussions with trades unions and student union representatives. The business case was expected in December, and the universities expressed a clear wish to

merge in April 2013 and, importantly, to do so without the complexity of having to manage relations with a third, evidently highly reluctant, partner.

On 6 November the Minister commended this progress, said that he did not wish to hamper it, and announced that in the light of these developments he had decided to cancel the consultation launched in August and await the detailed business case, which was expected to include a request that he dissolve Newport voluntarily. He added that the Government's position remained, however, that it wished to see a single post-92 university in south east Wales. He observed that as recently as 2003, in the public consultation document that had been issued then, UWIC and Glamorgan had said that "Wales lacks, and needs, a university of the size, power and reputation of the leading new universities in England", and that he could not agree more (Welsh Government 2012b).

On 21 March 2013 it was announced that the Minister had agreed to dissolve UWN on 11 April 2013, and that £24.8 million was being made available by HEFCW over the next 3 years to support the transition to the new University of South Wales (South Wales Argus 2013; University of Glamorgan 2013).

5.8 Some Reflections

5.8.1 *Three Phases of Mergers in Wales*

Higher education mergers in Wales have been actively sought by HEFCW and the Welsh Government since the start of the millennium. With hindsight, we can identify three phases: an early phase, from 2002 to 2006, in which HEFCW sought to facilitate, but not prescribe, desired changes; a more interventionist phase, from 2006 to 2009, in which it took the opportunity presented by developments at a couple of institutions to accelerate restructuring; and a phase from 2010 onwards in which HEFCW developed a more explicit "blueprint" for change.

Up to 2006 HEFCW was laying out a policy direction and a framework for funding, but working with institutions' own proposals. It offered support in negotiations, helped to solve problems – sometimes by acting as a broker between institutions, sometimes by clarifying potential confusions in the political realm – and gave moral support (not to be underestimated) to institutional leaders when matters were not moving smoothly. Even though the proposals were coming from institutions, they did not always lead to successful outcomes, most spectacularly in south east Wales.

This phase was also important for the range of collaborative activities in research that were started across the Welsh universities, a number of which have resulted in some powerful groups by any standards; and for establishing the principle that it is possible to organise research effectively on this basis.

The key role of university leaders, especially the vice-chancellor and the chair of governors, became clear during this phase. It was evident from the outset that these

institutional leaders could facilitate or impede – the most dramatic positive example being the two new vice-chancellors who had agreed the case for merger, and who would lead the institution, even before taking office; and negatively, the breakdown of trust between Glamorgan and UWIC. Even when discussions are going well, trust between institutional leaders is still critical: in sensitive discussions about who will take what role later; in having confidence that the other party will effectively manage doubters within their institution; and on how to present the evolving discussions publicly. Trust between university and funding body leaders is also critical, particularly at moments when commitments over, e.g., funding, or various forms of political support, may be needed on timescales that cannot wait for normal governance processes.

In the more interventionist phase between 2006 and 2009 HEFCW acted more opportunistically, seizing chances that arose to accelerate change. It did so, though, with a broad vision in mind of the sort of change that it desired.

The subsequent “blueprint” phase arose in the context of requests from the sector and the Government. The sector was aware of the perception in political circles that, despite all that had happened since 2002 (arguably more than in any other region of the UK), it was not seen as enough. Some in political circles saw the terminated merger in south east Wales as having “got away”, leaving unaddressed one of the major structural issues facing Welsh HE. It was recognised in the sector that this perception coloured attitudes to higher education more broadly – perhaps affecting funding.

Within Government, a new minister re-energised the entire educational portfolio. He repeatedly pressed for action, not talk, to the point where some in the HE sector felt that his approach risked becoming counterproductive. In the latest phase of the debate over merger in south east Wales, his willingness to consider invoking his legal powers was seen as highly novel and contentious by UK standards of government-university relations.

5.8.2 Broader Considerations

Emerging from the Welsh experience, some broader considerations can, finally, be identified.

First, attention to legal requirements is important in all merger discussions. Even when the mutual commitment is firm, there are still agreements to reach, and processes to follow, over the appropriate legal, governance and managerial instruments and associated timescales. Where a funding body or government is pressing the case, this issue is amplified by the risk of legal challenge, though how will obviously depend on the specific national framework in question.

In the Welsh case, it was sometimes asked whether it would help if the funding council had a legal power to require mergers. HEFCW’s response was that more important than any legal power is the political environment. If a funding council invoked a legal power to require a merger in contested circumstances, it would

provoke a political storm, with the risk that in the end the government would not back it. That would be an untenable position. Much better, argued HEFCW, was for funding council and government to be in step on any proposal, so that appropriate arguments and levers could be applied jointly, and with government committed to handling the politics from the outset (See McCormick Review 2011).

Second, the concept of a system has been present in the discourse about higher education in Wales since the turn of the millennium. It was well expressed in 2009 in the government's strategy for HE (Welsh Government 2009, para. 36):

A national higher education system for Wales will be created: different providers will have different strengths and different missions but will work together to complement and enhance their individual strengths and missions. They will form a wider and more coherent system of providers, including FE colleges as well as HE institutions, working together and equipped to deliver sustained high quality higher education.

The general point here is that this sense of system arises particularly from the small scale of the country, and of its higher education provision. Whereas a larger country (such as England) might be able to encourage institutions to go wherever they believe their market leads, and accept some failures, in a small country failure can leave a problem for the learners and employers who might have nowhere else to turn, and for a government that sees higher education as a key resource for the delivery of its agenda, and wishes to ensure appropriate provision in all parts of the country. In Wales, this consideration was reinforced by the political inclination of the relevant governing parties towards collaborative rather than competitive approaches to policy delivery.

Third, funding for the costs of merger (including preparation of the business case and any transitional investment), is a key lever for change. The specific manner of its use will again vary from one national framework to another. But Welsh experience shows that, in a political and legal framework that extols institutional autonomy, funding, while important, is less so than political will and institutional commitment.

Finally, even when, as throughout the UK, institutional autonomy is highly respected, the Welsh experience shows its sharp intersection with the principle of public accountability: that is, government asking whether the public is getting the best possible return on its investment in higher education and pressing for change if not. This tension can reasonably be expected to arise in more and more national cases in times of fiscal pressure and low economic growth, and it raises a question over the traditional role of university governing bodies.

The conclusion reached in Wales by HEFCW was that, regardless of the strengths of individual institutions, the higher education system as a whole was not delivering as well as it could and that restructuring was needed. A tension arose, therefore, for institutional governing bodies, between their normal role of overseeing and protecting their university's interests, and actively exploring some form of institutional metamorphosis. Much of the recent debate has reflected this difference in perspective between the institution (whose supporters might ask what is wrong with it, and why does it need to change) and those responsible for the system as a

whole. Therein lies the rub, and a debate that will continue, possibly in more and more countries.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Aber/Bangor Partnership. (2011). *Research and enterprise partnership*. [Online] Available at: http://www.aberbangorpartnership.ac.uk/documents/16097-ResearchandEnterpriseBrochure-E_web.pdf
- BBC. (2009). *Universities in Wales told to “adapt or die”*. [Online] Available at: <http://www.bbc.co.uk/news/uk-wales-politics-11911375>
- BBC. (n.d.). *University merger “conspiracy” says Dr Peter Noyes*. [Online] Available at: <http://www.bbc.co.uk/news/uk-wales-17746615>. Accessed 18 Apr 2012.
- Education and Lifelong Learning Committee. (2002). *National assembly for Wales*. [Online] Available at: http://www.assemblywales.org/bus-home/bus-third-assembly/bus-committees/bus-committ-ees-previous-committees/bus-committees-first-ell-home/bus-committ-ees-first-ell-policy/bus-committees-first-ell-policy-high_educ.htm
- GAELWa (Gwasanaeth Archwilio Elwa/ELWa Audit Service). (2004). *Report to the Accounting Officer of the Higher Education Funding Council for Wales: Review of the terminated merger discussions between the University of Wales Institute, Cardiff and the University of Glamorgan*. http://www.hefcw.ac.uk/documents/policy_areas/strategic_change/Review%20of%20the%20Terminated%20Merger%20Discussions%20Between%20UWIC%20and%20the%20University%20of%20Glamorgan.pdf
- Glyndŵr, O. (1406). *The Pennal letter*. [Online] Available at: <http://www.canolfanglyndwr.org/pennal-letter.php>
- HEFCE (Higher Education Funding Council for England). (n.d.). *Collaborations, alliances and mergers in higher education: Lessons learned and guidance for institutions*. [Online] Available at: <http://www.hefce.ac.uk/pubs/year/2012/201221/>. Accessed Sep 2012.
- HEFCW. (1999). *A report to the National Assembly for Wales: The scope for institutional mergers at the higher educational level*. [Online] Available at: <http://www.wfc.ac.uk/education/hefcw/pub99/w99101he.html>
- HEFCW. (2002). *Reconfiguration and collaboration fund*. Circular W02/48HE. Cardiff: HEFCW.
- HEFCW. (2010). *The future shape of the HE sector in Wales*. [Online] Available at: http://www.hefcw.ac.uk/documents/news/press_releases/2010%20and%20thence http://www.hefcw.ac.uk/documents/news/press_releases/2010%20Press%20Releases/Full%20Statement%20on%20the%20Future%20Shape%20of%20the%20Sector%20211210.pdf
- HEFCW. (2011a). *Future structure of Universities in Wales*. [Online] Available at: <http://wales.gov.uk/docs/dcells/consultation/110711futureofunihefcwen.pdf>
- HEFCW. (2011b). *Strategic development funding*. [Online] Available at: http://www.hefcw.ac.uk/documents/publications/circulars/circulars_2011/W11%2035HE%20Strategic%20Development%20Funding.pdf
- HEFCW. (n.d. a). *Reconfiguration and collaboration fund: Achievements and lessons learned*. [Online] Available at: http://www.hefcw.ac.uk/policy_areas/strategic_change/reconfig_collab.aspx
- HEFCW. (n.d. b). *Reconfiguration and collaboration funding highlights*. [Online] Available at: http://www.hefcw.ac.uk/policy_areas/strategic_change/reconfig_collab_funding_highlights.aspx

- HW Corporate Finance. (2007). *Review of the merger between Cardiff University and the University of Wales College of Medicine*. [Online] Available at: http://www.hefcw.ac.uk/documents/policy_areas/strategic_change/R%20and%20C%20Report%20of%20evaluation%20of%20Cardiff%20University%20UWCM_merger.pdf
- HW Corporate Finance. (2008). *Review of University of Wales Lampeter*. [Online] Available at: http://www.hefcw.ac.uk/documents/working_with_he_providers/strategic_engagement/Review%20of%20UWL%20Redacted%20Copy%20Oct%202010.pdf
- Matthews, D. (2012). *Newport vice-chancellor to step down*. [Online] Available at: <http://www.timeshighereducation.co.uk/419848.article>
- McCormick Review. (2011). *Achievement and accountability: Report of the independent review of higher education governance in Wales*. <http://wales.gov.uk/docs/dcells/publications/110317hegovreviewen.pdf>
- National Assembly for Wales. (2011). *Ministerial statement on the future shape of higher education in Wales*. [Online] Available at: <http://www.assemblywales.org/bus-home/bus-business-fourth-assembly-written-ministerial-statements.htm?act=dis&id=220560&ds=7/2011>
- National Assembly for Wales. (2012a). *Statement on the review of higher education provision in North East Wales*. [Online] Available at: <http://www.assemblywales.org/bus-home/bus-business-fourth-assembly-written-ministerial-statements/dat20120209-e1.pdf?langoption=3&ttl=Statement%20on%20the%20Review%20of%20Higher%20Education%20Provision%20in%20North%20East%20Wales%20%28PDF%2C%20178 KB%29>
- National Assembly for Wales. (2012b). *Written statement: Report by Professor Sir Steve Smith on Higher Education Reconfiguration in South Wales*. [Online] (<http://www.assemblywales.org/bus-home/bus-business-fourth-assembly-written-ministerial-statements.htm?act=dis&id=237273&ds=8/2012>). Available at: <http://www.assemblywales.org/bus-home/bus-business-fourth-assembly-written-ministerial-statements/dat20120716-e2.pdf?langoption=3&ttl=Report%20by%20Professor%20Sir%20Steve%20Smith%20on%20Higher%20Education%20Reconfiguration%20in%20South%20East%20Wales%20%28PDF%2C%20157KB%29>
- National Assembly for Wales. (2012c). *Written statement: The future shape of Higher Education in South East Wales*. [Online] Available at: <http://www.assemblywales.org/bus-home/bus-business-fourth-assembly-written-ministerial-statements/dat20120131-e2.pdf?langoption=3&ttl=The%20Future%20Shape%20of%20Higher%20Education%20in%20South%20East%20Wales%20%28PDF%2C%20157KB%29>
- Parken, A. (2011). *A review of higher education collaborations across Wales: Context and current picture*. [Online] Available at: http://www.lfhe.ac.uk/filemanager/root/site_assets/research_resources/research/series_3/S3-1%20Parken%20-%20Review%20%20of%20HE%20Collaborations%20in%20Wales%20-%20Context.pdf
- Shattock, M. (1994). *The UGC and the management of British universities*. Buckingham: Society for Research into Higher Education.
- Swinnerton-Dyer, & Sir Peter. (1987, 14 May). *Letter to Lord Elwyn Jones*. London: The National Archive, UGC files.
- South Wales Argus. (2013). *University of Wales, Newport, to be dissolved in April*. [Online] Available at: http://www.southwalesargus.co.uk/news/10305191.University_of_Wales__Newport_to_be_dissolved_in_April/
- University Campus Suffolk. (n.d.). [Online] Available at: <http://www.ucs.ac.uk/About/Abouthomepage.aspx>
- University of Glamorgan. (2013). [Online] Available at: http://glamlifnews.glam.ac.uk/news/tag_all/merger/
- Welsh Assembly Government. (2002). *Reaching higher – Higher education and the learning Country: A strategy for the higher education sector in Wales*. [Online] Available at: <http://wales.gov.uk/topics/educationandskills/publications/guidance/reaching/?lang=en>
- Welsh Government. (November 2009). *For our future: The 21st century higher education strategy and plan for wales*. <http://wales.gov.uk/docs/dcells/publications/091214hestrategyen.pdf>

- Welsh Government. (2012a, March). *Responses to the proposed future structure of universities in Wales*. <http://wales.gov.uk/docs/dcells/publications/120329futureofuniresponseen.pdf>
- Welsh Government. (2012b, November 6). *Statement by the Minister for Education and Skills: Higher Education Reconfiguration in South East Wales*. Cardiff: Welsh Government.
- Welsh Government. (2013). *Review of higher education provision in North East Wales (Webb review)*. [Online] Available at: <http://wales.gov.uk/topics/educationandskills/publications/reports/review-of-higher-education/?lang=en>. Accessed June 2013.
- Welsh Labour. (2011). *Standing up for Wales*. [Online] Available at: <http://www.welshlabour.org.uk/uploads/welsh-labour-manifesto.pdf>

Chapter 6

Institutional Mergers in Ireland

Siobhan Harkin and Ellen Hazelkorn

6.1 Introduction

The importance of knowledge as a driver of social and economic growth and prosperity, and the increasingly competitive “global race for knowledge and talent” (Hazelkorn 2009) have combined to transform the higher education landscape, forcing national governments and higher education institutions (HEIs) to pursue new ways of addressing the challenges of a multi-polar world order. Rising demand for higher education (HE), as part of the broader shift from elite to mass to universal participation, has led to the emergence of new models of provision. At the same time, many governments face restrictions on public resources due to high levels of public and private debt; accordingly, system-level and institutional restructuring has been contemplated as a way to enhance quality, performance and efficiency.

Universities have been forming alliances of one type or another over the decades, giving rise to a remarkable increase in the number and type of partnerships, as well as changes in their nature, structure and complexity (Beerkens 2002). Such alliances or collaborations have arisen for many reasons; traditionally, many have, and continue to be, initiated at the level of the individual academic and derive from a fundamental collegiality, the desire to share and disseminate new knowledge, as well as the need to form linkages to address complex and challenging specialist research questions. Whilst individual academics and scientists will continue to collaborate across regional, national and global networks of their peers, HEIs as “corporate” entities are increasingly entering into partnerships with each

S. Harkin (✉)
Strategy and Quality, Maynooth University, Dublin, Ireland
e-mail: sharkin@wit.ie

E. Hazelkorn
Higher Education Policy Research Unit (HEPRU), Dublin Institute of Technology,
Dublin, Ireland
e-mail: ellen.hazelkorn@dit.ie

other, and with business and industry, public sector and not-for-profit organisations driven by motivations more akin to those underpinning commercial strategic alliances (Eckel and Hartley 2008). The increasingly global nature of knowledge creation and exchange has encouraged the formation of sophisticated networks to further enhance attractiveness, visibility and global reach, and ranking (Harman and Harman 2008; Aula and Tienari 2011). Thus, inter-institutional arrangements have become increasingly strategic in nature, whereby universities and other HEIs form partnerships to achieve aims that they simply could not achieve on their own (Lawton et al. 2013).

Before the onset of the millennium, such partnerships were rare in Ireland, and then only voluntary. Since 2000, global and national economic circumstances have led to and encouraged alliances and mergers across the HE sector. While this period was marked by inter-institutional collaboration and alliance formation, it is only in the years since 2010 that policy-led restructuring came to the fore with the publication of the *National Strategy for Higher Education to 2030* (DoES 2011). Occurring against the backdrop of the worst economic downturn in the history of modern Ireland, growing demands on an already massified HE sector, and the drive to re-engineer Ireland as a twenty-first century knowledge-intensive society, emphasis was placed on system-wide re-organisation, and alliances, mergers and clustering as an integral part of a broader strategy to develop “a coherent and sustainable system of higher education to meet the economic and social needs of the country, within its broad ambition to create an export-driven knowledge economy” (HEA 2013).

This chapter traces these developments. It is divided into four main parts:

1. describes the socio-economic and policy context underpinning developments in Irish HE since the 1970s;
2. traces the origin and evolution of collaboration during the first phase (1996–2011) when alliance-formation was facilitated and incentivized by government funding;
3. looks at the current or second phase (2011) which envisages structural reform and system-wide change as part of top-down policy-steering; and
4. concludes with a discussion of the over-all changes to the HE landscape, and the implications of a shift from a policy of laissez-faire to steering-from-the-centre.

6.2 Overview of Higher Education System

In the early twentieth century, only 3,200 students were enrolled at five universities in Ireland (Coolahan 1981). This included the oldest, Trinity College Dublin (TCD), established in 1592, and four universities loosely federated as the National University of Ireland (NUI). This configuration remained until, beginning in the 1960s, Ireland was transformed from an economy based on agriculture and traditional manufacturing to one focused on enterprise buttressed by foreign direct investment and R&D. Free secondary education, coupled with the changed

economic imperative and the urgent need to produce technically qualified people to support industrial development, drove both the supply and demand for HE. *Investment in Education* (Fitzgerald 1965), produced in co-operation with the OECD, was the first major policy document on education.

A vocational education sector was created “for trade and industry over a broad spectrum of occupations ranging from craft to professional level, notably in engineering and science, but also in commercial, linguistic and other specialties” (Government of Ireland 1967). Nine regional technical colleges (RTC) were established between 1970s and 1990s (Daly 1981; Barry 2005); the government also established two national institutions of higher education, in Dublin and Limerick, as alternative HEIs. During the 1980s, the latter two (present-day Dublin City University and University of Limerick) obtained university designation, and Dublin Institute of Technology (DIT) was formed from an amalgamation of six former science, engineering, business and music colleges (White 2001) and placed on a statutory footing in 1992. There are also a number of publicly-funded teacher training and specialised colleges, and a small group of for-profit institutions.

Rapid expansion in ICT during the late 1980s, adoption of the “information society” paradigm at European level in the 1990s (Bangemann 1994), and passage of the Lisbon Strategy in 2000, combined to help push (higher) education to the centre-stage of government policymaking (Peters 2001; Harpur 2010). The 2004 OECD *Review of Higher Education in Ireland* provided the catalyst for further significant change, noting that, Ireland had a way to go to achieve competitiveness in R&D spending (OECD 2004). Thus followed *Building Ireland’s Knowledge Economy: Action Plan to Promote Investment in R&D to 2010* (Forfas 2004), and the *National Development Plan 2007–2013: Transforming Ireland: A Better Quality of Life for All*. Success was dependent upon an education system producing a highly skilled workforce and creating a pipeline of innovative research and technologies to meet the needs of a burgeoning globally-competitive economy (Coate and Mac Labhrainn 2009).

Higher education benefitted, receiving a significant influx of government investment for R&D, which increased from €204 m (1998) to €713 m (2008) (Forfas 2009). However, resulting from the global financial crisis (GFC), real GDP declined by 5.4 % between 2008 and 2011, while overall exchequer funding for publicly-funded HEIs, (c.95 % of all HEIs attended) fell by c.25 %. Decreases were partially offset by increases in the student contribution (aka tuition fee), and controls and reductions in employment numbers. However, rising demand, due to societal value on higher education credentials, demographic changes and unemployment, has put huge pressure on the system. Today, Ireland’s binary system of 39 HEIs services c.170,000 students, estimated to rise to over 250,000 by 2020; national participation rates have increased from 20 % (1980) to 69 % (2014), with 60 % of total students enrolled in universities and 40 % in Institutes of Technology (IoTs) (HEA 2012a). This has led to a decrease in overall funding (core grant, student contribution, etc.) per student of almost 20 % from 2007 to €8,000 in 2010/11 (Hazelkorn 2014).

Unlike other jurisdictions, such as Australia and the UK in the 1990s, or more recently China, the Netherlands and Finland (Goedegebuure et al. 1993; Chen 2002; De Boer et al. 2007; Aarrevaara et al. 2009), which have undergone significant system level restructuring, Ireland's HE system has been relatively stable or conservative, depending upon one's perspective. Beginning in the late 1990s, a new culture emerged leading to a series of collaborations and alliances within and across the binary divide, in ways previously inconceivable. The *National Strategy for Higher Education to 2030* (DoES 2011) marked a major turning point, heralding an era of strategic merger and alliance building and terminating the *status quo ante* with respect to a system comprising numerous stand-alone institutions. The context for these changes and their development are set out below.

6.3 1996–2011: Collaboration via Incentivisation

6.3.1 Research Collaboration

Prior to 1998, government investment in university-based research was almost non-existent and there was no coherent national policy or strategy for research and innovation. The EU Framework Programme for Research and Technological Development, first introduced in 1984, plus other European initiatives were critical research funding sources, hitherto absent. The capacity and capability of researchers to collaborate with European counterparts became an established necessity at this time. Coincident with economic growth in the 1990s, the Government sought to build critical mass in the public research base from fragmented activity across the sector. The Programme for Research in Third Level Institutions (PRTLI), initiated in 1998, emphasized the 3Cs: consolidation, coherence and concentration. Over €1.2 bn in exchequer and private funding was provided over five cycles between 1999 and 2008. PRTLI was a game-changer not least because research collaboration was a pre-condition for funding; not universally welcomed, HEIs quickly became adept at collaboration to be successful.

PRTLI transformed the level and nature of collaboration. Because the criteria were assessed and evaluation conducted at the institutional level, it forced the “corporate” HEI (not the principal investigator) to consider its research strengths and strategically partner with others to maximise outcomes. Critically and unusually, no restrictions were placed on collaboration between types of HEIs; in other words, collaboration was encouraged across the binary. Over the years, the degree of sophistication in institutional-level planning intensified. HEIs developed their own internal review and approval processes in response to the first-stage assessment by the Higher Education Authority (HEA), which managed the programme. The OECD commented positively on the extent of cultural change required, and especially the way it emphasised “the advantages that can spring from collaboration between research groups in different institutions (and sectors)” (OECD 2004). An

independent impact assessment similarly praised “significant increases in interdisciplinary research, in inter-institutional research collaborations and in joint research ventures between institutions” (HEA 2004). Eddy (2010) also describes the success of the HEA in increasing research efforts and collaboration among tertiary sites in a scant 10 years of funding. The HEA leveraged change through its requirements for funding, namely the requirement to collaborate with other institutions of higher education so as not to duplicate services.

This collaborative impetus subsequently became a feature of other national programmes, most notably those of Science Foundation Ireland (SFI), established 2000 to fund research in biotechnology, information and communications technology (and more latterly, sustainable energy and energy-efficient technologies).

6.3.2 Strategic Collaboration

Despite the above successes and Ireland’s small size and geographic proximity of its institutions, the HE system still operated in a fragmented way. This was reinforced by governance differences between the university and IoT sectors: universities under the HEA and IoTs under the Department of Education and Skills (Clancy 2008). The OECD (2004) identified this challenge:

Irish HEIs need to recognise that they are relatively small and that the undoubted strength of the system will only be fully realised through institutional collaboration whether in research, postgraduate programmes, first degree work or lifelong learning. We believe that collaboration should be incentivised in funding mechanisms in order to break down the sectoral and other barriers that undoubtedly exist. Such collaboration, particularly in relation to widening access and to lifelong learning generally needs to be extended to the further education colleges in order to ensure that ladders of opportunity reach down as far as possible into local communities.

The HEA Strategic Innovation Fund (SIF), the first Cycle of which was launched in 2006, made inter-institutional collaboration a pre-requisite. Both the universities and the IoTs used SIF funding as the basis for a suite of strategic, sector-specific and cross-sectoral collaborative projects between 2006 and 2012 ranging in scale and scope and covering, *inter alia*: labour market-relevant projects, internationalisation, innovation in teaching and learning, graduate education and research, costing/ performance indicators and widening access.

The timing of SIF was unfortunate, being coincident with the financial crisis and reviews questioned value-for-money (C&AG 2010; Davies 2010). Nonetheless, a number of significant strategic alliances outlived the scheme, most notably the Dublin Region Higher Education Alliance (DRHEA) and the *National Academy for the Integration of Research, Teaching and Learning* (NAIRTL), both of which formed the basis of the new National Forum for the Enhancement of Teaching and Learning (IUA 2005). SIF’s major impact was in the way it promoted and encouraged a broader form of engagement and collaboration, including cross-sectoral partnerships. The programme was discontinued in 2012, but not before €92 m was distributed.

6.4 2012: Collaboration via Steering

6.4.1 *National Strategy for Higher Education to 2030 and Its Implementation*

Despite the 2004 OECD review, the political impetus and appetite was lacking at the time to implement its key recommendations. HE leaders consistently and publicly called for a coherent strategy to address fundamental issues such as massification and sustainability, as the system sought to address changing demographic, social and economic realities. In February 2009, the Minister for Education and Science appointed a Strategy Group to develop the new national strategy; it embarked on a process of analysis and planning, and consultation with HEIs and other stakeholders. Published in January 2011, the *National Strategy for Higher Education to 2030*, (commonly called the Hunt report after its chairperson, economist Colin Hunt) (DoES 2011) identified myriad challenges. In addition to recommendations urging reform and innovation in teaching and research, internationalization and engagement, the report recommended changes to the overall structure and organization of the system. This was a radical and controversial point of departure, in which the state sought to transition higher education from a non-directed organization of individual institutions to one where:

The system needs to evolve within a clear framework that is aimed at developing a coherent set of higher education institutions, each of significant strength, scale and capacity and with complementary and diverse missions that together meet individual, enterprise and societal needs (DoES 2011).

The case for greater system-level coherence and coordination was based on the necessity to meet future demand and ensure quality provision at a time of accelerating global competition and reducing state resources. The Hunt Report heralded the end of bottom-up collaboration, facilitated and incentivized by funding, and the start of government-led steering to ensure that the “system” of HEIs could better meet future demands of society and the economy. In this regard, it focused on three significant structural policy developments:

1. Reform of the IoT sector through amalgamations;
2. Consolidation and absorption of smaller institutions into the university sector; and
3. Establishment of regional clusters of collaborating institutions within geographical area.

Table 6.1 sets out the timeline of policy development and implementation from 2009 to the present, including key milestone events and policy documents, as they pertain to the restructuring aspects of the unfolding Irish higher education strategy. The rest of this section discusses the timeline, and the major themes of mergers and clustering.

Table 6.1 Timeline of Irish higher education policy development and implementation, 2009–2014

Date	Policy development	System implications: mergers and collaborations
February 2009	Minister for Education and Science launches process to develop a national strategy for higher education and appoints Strategy Group	Task framed as assessing higher education's fitness-for-purpose, developing a vision and national policy objectives “having particular regard to the difficult budgetary and economic climate that is in prospect in the medium term” (DoES 2011)
May 2009–Dec 2010	Higher Education Strategy Group issues open call for submissions from stakeholders and interested parties; ongoing strategy development	
January 2011	National Strategy for Higher Education to 2030 published	System-level restructuring and reform: Consolidation of IoTs; process for establishing technological universities following mergers; and clustering of HEIs within regions
October 2011	HEA invites consultation on document entitled “Regional Clusters, Consolidation Leading to Mergers, Strategic Dialogue”	Regional: Emphasis on formal regional collaboration of HEIs; mergers appear directed at rationalization of IoT sector
Feb–Aug 2012	HEA publishes “Towards a future higher education landscape” including criteria for technological universities; HEIs make submissions on their future position within HE landscape; submissions received in Summer 2012. International Expert Panel produce advice on “A Proposed Reconfiguration of the Irish System of Higher Education”	System–Level. Bottom-up (from HEIs) and top-down (international experts and national policy advisors) inputs into the development of HE system results in widely differing perspectives on an “ideal” system
April–July 2012	“Report of the International Review Panel on the Structure of Initial Teacher Education Provision in Ireland” (Review conducted on behalf of the Department of Education and Skills)	Thematic. Recommendation that fragmented teacher education provision be consolidated and integrated into university sector
Sept 2012–Feb 2013	“Review of the Provision of Creative Arts and Media Programmes in Dublin” (Review conducted by HEA-appointed international panel)	Thematic. Explore model for integrating smaller specialist colleges and IoTs specialising in creative arts and media. Report proposes vertical and horizontal integration to ensure synergies and fill gaps in provision
April–May 2013	HEA sends “Report to Minister for Education and Skills on system reconfiguration, inter-institutional collaboration and system governance”; Minister responds, endorsing the recommendations	System-level. Advise to the Minister on specific configurations for mergers, clusters and other forms of strategic alliances, as part of system-level reconfiguration

(continued)

Table 6.1 (continued)

Date	Policy development	System implications: mergers and collaborations
Feb 2014	Department of Education and Skills publishes “General Scheme for Legislation on Technological Universities”	Legislative provisions for technological universities, including specifics on merger amongst Dublin IoTs, and more general merger provisions for other IoTs considering re-designation

6.4.2 Implementation of the National Strategy for Higher Education

Between 2011 and the present, there have been a series of specific policy developments and implementation associated with the restructuring aspects of the strategy. To the seasoned observer, the fact that specific recommendations were coherently and comprehensively introduced into policy instruments and modalities was a marked departure from previous fragmented approaches to policy implementation. Following consultations, the HEA embarked on extensive, system-wide re-structuring of the system, known as the “*landscape process*”. Between February 2012 and February 2013, institutional and stakeholder submissions, along with views of international experts the latter through a report entitled “*A Proposed Reconfiguration of the Irish System of Higher Education*” (HEA 2012a), were sought. The result was the HEA-drafted “*Report to Minister for Education and Skills on system reconfiguration, inter-institutional collaboration and system governance*” (HEA 2013).

In addition to the landscape process, views were sought on mergers and regional clusters through a consultation document entitled “*Regional Clusters, Consolidation Leading to Mergers, Strategic Dialogue*” (HEA 2011) and international reviews were conducted on teacher education: “*Report of the International Review Panel on the Structure of Initial Teacher Education Provision in Ireland*” (HEA 2012d) and the creative arts: “*Review of the Provision of Creative Arts and Media Programmes in Dublin*” (HEA 2012c). Interwoven between these different developments, work was undertaken by the HEA to develop criteria for the re-designation of consortia of IoTs, following merger, as technological universities. Draft criteria were prepared by Simon Marginson in February 2011 (Marginson 2011), and in February 2012, as part of a document entitled “*Toward a Future Higher Education Landscape*”, the HEA published the process and criteria for designation as a technological university (HEA 2012d).

Thus, different aspects of the system, as well as the system in its entirety were examined, with clear steerage from the centre, mandated by the Minister for Education and Skills. The three abovementioned policy developments are explored in the sections below. In addition, the system of higher education, proposed by the international experts group, is reflected upon.

6.4.3 Restructuring the Institute of Technology Sector: A “Carrot and Stick” Approach

The Hunt Report broke new ground when it proposed using merger as a system-level tool to address problems of fragmentation and institutional size to create HEIs of sufficient scale and capacity to meet future national and globally competitive demands. However, the report also endorsed the binary system, saying “formal mergers between institutes of technology and universities should not in general be considered: this would be more likely to dilute the diversity of the system” (DoES 2011), in contrast to either Australia in the 1980 and 1990s (Harman 1986; Meek 1991; Gamage 1993) or the UK in the 1990s (Rowley 1997). There was passing reference to the potential for mergers within the university sector; the door was merely left open, should such developments occur where it would advance and improve quality provision. Instead, critical mass could “be created or enhanced through institutional cooperation and collaboration”. Strategic alliances between Trinity College Dublin (TCD) and University College Dublin (UCD), the two most research-intensive and globalised universities, and between NUI Galway and University of Limerick, two regional universities on the west coast, were cited as having the potential to further deepen existing collaborations.

In contrast, the report strongly recommended restructuring the IoT sector, stating that “the development and evolution of institutes of technology into a smaller number of stronger amalgamated institutes should be promoted in order to advance system capacity and performance”. The objective was to enhance capacity and performance, and overcome fragmentation and was accompanied by the “carrot” of re-designation of merged IoTs as technological universities:

When, over time, the amalgamated institutes of technology demonstrate significant progress against stated performance criteria, some could potentially be re-designated as technological universities. (DoES 2011)

But the “stick” was set out in unambiguous language:

The envisaged changes to the funding model for higher education will create a stronger link between student numbers and funding allocations, and this will have implications for all institutes and particularly for the smaller ones. (DoES 2011)

The issue of university designation has been contentious over the last decades, with Dublin Institute of Technology (DIT), Waterford Institute of Technology (WIT) and Cork Institute of Technology (CIT) unsuccessfully seeking designation under the 1997 Universities Act. Hunt, however, opened the door if – and only if – IoTs merged to form a unitary institution, and met strict criteria set out by the HEA in “*Towards a future higher education landscape*” (HEA 2012d).

The policy discourse on merger in the IoT sector, evident in the Hunt Report and subsequent documents, merits mention. On the one hand, consolidation envisaged the possibility for certain IoT consortia to advance and be re-designated as technological universities; on the other, the argument was to maintain the distinctiveness ascribed to the binary system. Any loss of the traditional IoT mission would be

deemed “detrimental” for Irish higher education and society. The carefully constructed and weighed language evinces the struggle at the heart of this debate about the future shape of the Irish HE system – unitary or binary or something else – as a system of diverse institutions, and the need to balance competing and competitive interests between the IoTs and the universities.

Finally, footnotes in reports are rarely the focus of much interest; however, attention should be drawn to footnote 141 in the Hunt Report, which became the topic of much discussion and speculation at the time:

There was not complete unanimity within the (expert) group on this issue. The counter-view expressed was that it would not solve the issue of further mission drift and could result in a third tier of institutions (DoES 2011).

This signalled an ongoing tension between traditionalists and modernizers but also a tension between idealists and political pragmatists; the latter recognized the HE landscape had changed considerably in response to economic demands and massification, and the inability of the current configuration to respond to all those requirements.

6.4.4 *Consolidation of Disciplines*

Although disciplinary or subject-specific consolidation was not a dominant theme, the subsequent implementation phase included consolidation of teacher education and creative arts provision. Reviews also recommended rationalisation to remove duplication and improve quality.

The “*Report of the International Review Panel on the Structure of Initial Teacher Education Provision in Ireland*” (HEA 2012b) concluded that significant consolidation across the existing 22 providers, including incorporation of colleges of education with university partners (Hyland 2012), was highly desirable. Existing and long standing arrangements were already in place for many of teacher education institutions, whereby their programmes/degrees were awarded through partnership with a local university. Further formalisation of such arrangements was the next logical development. Teacher education has been a politically and religiously contested area, and a number of institutions have remained fiercely independent. The upcoming period will prove interesting in terms of how they respond to growing pressure for merger into larger university structures.

The “*Review of the Provision of Creative Arts and Media Programmes in Dublin*” (HEA 2012c) also identified the need for consolidation but stated that “it is vital that implementation strategies, partnerships and mergers do not reduce the rich diversity of programme provision in the creative arts to bland uniformity” (HEA 2012c). Instead, it recommended a more heterogeneous form of collaboration and alliance building, focused on ensuring access, transfer and progression for students across creative arts institutions and better consolidation at postgraduate

level; in the case of the creative arts, and in contrast to moves to consolidate elsewhere across the HE system, small was not necessarily seen as bad.

The recent discourse on restructuring has been dominated by a focus on rationalisation of disciplinary provision. A review of nursing provision is already underway, in line with wider restructuring efforts across Irish health services. A review of apprenticeships provision has been conducted and one in engineering is mooted.

6.4.5 A New Regionalism?

The Hunt Report also introduced new concepts, such as, regionalism and clusters. Porter (1998) promulgated economic clusters as the basis for competitive advantage by creating a critical mass “in one place of linked industries and institutions – from suppliers to universities to government agencies – that enjoy unusual competitive success in a particular field.” Clusters have the ability to “maximise collective capacity beyond individual capability” (Hazelkorn 2010) because innovation is rarely “the result of efforts within a single firm” (OECD 2006, 124). Nordic countries, and the EU have emphasized the role that HEIs can play in regional policy with reference to opportunities for enhanced programme provision, greater efficiency, better access, transfer and progression routes, and improved interaction with enterprise (Charles 2006; Hudson 2006; Konu and Pekkarinen 2008; Goddard and Kempton 2011).

Despite historic references to four provinces, regionalism is not a strong concept in Ireland and does not override much stronger social, cultural, sporting and political allegiance to county. Economic growth during the Celtic Tiger era (1995–2000) and the contrasting decline of the subsequent recession sharpened the divide between large urban centres, particularly Dublin, as sustainable hubs for economic growth, and the rest of country. A more balanced regional development policy had been attempted by a National Spatial Strategy but was widely criticized for lack of attention to implementation (Davoudi and Wishardt 2005). Irish students show a strong tendency to “shop locally” in accessing higher education; broadly speaking, the vast majority of students come from within a 50 km radius (AIRO 2012). The proposal to use regional clusters as the basis for the re-configuration of higher education is therefore interesting for a number of reasons. Ireland’s mode of government is centralized. Whilst regional authorities exist, they have only partial responsibility for aspects such as education and economic development, with limited tax-raising powers, they act primarily as executives of central government policy at local level (Callanan and Keogan 2003). Ireland’s economic regions, as described by the EU NUTs classification (the nomenclature of territorial units for statistics – a hierarchical system for dividing up the economic territory of the EU) (Becker et al. 2009) bear little connection to culturally and historically held sense of place at a regional level.

In this context, the Hunt Report heralded a new kind of collaboration, one motivated by the expectation that HEIs within a region should cluster to meet the needs of a wide range of students, communities and enterprises in their region. This will require joint programme planning, collaborative research and outreach initiatives, agreements on mutual recognition and progression, and joint strategies for advancing regional economic and social development (DoES 2011).

The HEA (2011) reinforced this message when it said: “Mergers might or might not happen but clusters must happen”. Accordingly, throughout the “landscape process”, HEIs were asked to consider cluster arrangements at regional level. The aim was:

to bring together higher education institutions in a region in such a way that the needs of the region can be identified and provided for in a coordinated way, in partnership with other education providers, and with business interest and the wider community (HEA 2013).

Potential clusters, inclusive of named HEIs aligned with specific groupings, were also identified (HEA 2013). Although HEI reaction has been somewhat muted, minds will no doubt be concentrated on the basis that active participation in a regional cluster is a condition of institutional funding into the future.

6.4.6 An Ideal Irish System? An International Perspective

It is a truism that a landscape looks differently depending upon whether it is viewed from the ground level or by taking a “helicopter” perspective. As part of the “landscape process”, the HEA sought the latter, inviting an international panel to:

Review the current configuration of the Irish higher education system and advise on an optimal configuration, having regard to the final output required from the overall Landscape process (HEA 2012a).

Having regard to international trends and competitive pressures, and taking account of the overall national strategy, the international report, “*A Proposed Reconfiguration of the Irish System of Higher Education*” (HEA 2012a), said:

Given the current level of fragmentation, the sub-optimal size of a number of institutions, the aspirations of others and the difficult and uncertain funding environment, with likely further reductions in public funding, the Panel concluded that rationalisation and consolidation strategies were the most likely to meet the multiple national and institutional aspirations, while maintaining quality and competitiveness.

The reconfiguration proposed in the report focused on three components, each radically different from those set out in the Hunt Report, viz:

1. creation of large comprehensive regional universities, including merger across the binary divide;
2. establishment of a National University of Technology with constituent institutes, formed by merger, would better serve the needs of a diversified HE system,

- prevent “mission drift” and ensure the viability and overall direction of geographically spread HEIs; and
3. creation of one research intensive university through the merger of UCD and TCD.

Of all the recommendations, the latter drew the most opposition; parallels were made with the 1967 shock announcement to merge these two institutions (MacHale et al. 1967). Then, there was little political will, in the face of university opposition, to proceed; in 2012, the proposition was again greeted with dismay from the universities but also a terse response from the Minister of Education and Skills, and his Department. There was concern especially about the recommendation for mergers across the binary divide. Moreover, whatever about the merits of the recommendations, it was never intended that the international report would counter national policy, but rather reflect upon it. Ultimately, a less disruptive, modified binary model rather than wholesale reform into a unitary system was as much as could be countenanced at this point in Ireland’s development. Furthermore, up to this point, debate in higher education circles had been on technological universities; the issue of mergers had hardly been aired. It is probably not surprising that when mergers moved centre stage, and began to affect the universities, the report would also become much more contentious.

6.5 Reconfiguring the Irish Higher Education System: A Look to the Future

Until recently, but similar to other countries (Ferlie et al. 2008), higher education policy had developed within an elite sub-system, generally undisturbed by forces from the outside. As an-island-off-an-island-off-a-continent, this isolationist position was relatively easy to maintain. The dramatic decline in the economy, set against the backdrop of mounting global competition affecting nations and HEIs, and interpreted through the vagaries of global rankings (Hazelkorn 2011), brought this cosy arrangement sharply to an end. Moreover, the Hunt Report, delivered at this historic juncture, signalled a move away from laissez-faire, light-touch regulation to a more systematized, directed and regulated approach, focused on measurable outcomes. In tandem with the structural reforms described herein, the HEA also initiated a “strategic dialogue” process with all publicly-funded HEIs; the aim was agreement about 3 year compacts with HEIs, based upon delivery of specific outputs and outcomes, aligned with national objectives. Thus, the broader economic circumstances provided the rationale for profound and speedy restructuring of higher education, set within a wider discourse of public sector reform, accountability and response to the economic imperative.

This policy shift has had a significant impact on the way higher education is viewed in terms of nation-building. During the previous decade, the higher education system had benefitted from relatively generous funding for research, strategic

endeavour and capital development; the rhetoric stressed “world-class” educational provision as core to Ireland’s competitiveness. Since 2008, the hubris on Ireland’s global status has quietly dropped away as Ireland entered an IMF-led bailout, to be replaced by an altogether more national discourse around public sector reform, efficiency and economic recovery. This discourse was most obvious in the manner of its interpretation, focus and implementation of various restructuring initiatives; such re-framing was also evident in Australia during its wave of mergers (Pick 2003). Hence, HEIs were encouraged to share “backroom” services, such as computing services, human resources, procurement, etc., the plethora of HE and further education quality agencies were merged to form Quality and Qualification Ireland (QQI), the two research funding councils merged to become the Irish Research Council (IRC), and the heretofore fragmented further/vocational education sector has been re-organised under a new Further Education and Training Authority, Solas. In this vein, higher education clusters and mergers were seen as addressing regional, disciplinary and sectoral rationalisation. The framing of the merger and clustering policy in response to the changing economic and global environment can be viewed in the light of identifiable and sometimes competing drivers, most notably the creation of a knowledge society, increasing emphasis on the economic imperative of higher education and, the challenge of sparse public funding and the necessity for public sector reform.

Mergers are notoriously difficult and disruptive, no-more-so in higher education. The Irish strategy walks a narrow tightrope between institutional autonomy and system governance (Hinfelaar 2012); likewise, the perceived loss to a region of an HEI, with which it identifies closely, can be a factor underpinning opposition to state-led or state-imposed merger. Nonetheless, the response to proposals for merger, most especially from the IoTs and smaller colleges, has been remarkably low-key. For the former, the ultimate prize of technological university status is critical – but will that strategic objective, which requires focused action over many years to meet the stretch targets, distract them from full participation in regional clusters? Regional clusters pose more far-reaching challenges. Moreover, they are being proposed in the context of a policy vacuum around the conceptualisation and infrastructure for regional economic development. In pushing for their implementation, the HEA is arguably helping to shape national policy beyond its normal bailiwick.

It is clear, then, in looking at the years since the Irish Government first attempted to facilitate and incentivize collaboration in the early 1990s that the higher education landscape has evolved from bottom-up collaboration to a complex tapestry of alliances, clusters and ultimately mergers within the sector. The policy imperative to develop a coherent system of higher education has its proponents and opponents, but it is clear that a more directed policy approach is in place for the next phase of development. As Ireland emerges from recession, having exited the IMF-led bailout in late 2013, and transitions through economic recovery to growth, the emerging system of higher education is being called upon to underpin the delivery of a knowledge economy in ways which challenge many traditional assumptions about higher education, and the autonomy and mission of institutions.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Aarrevaara, T., Dobson, I. R., & Elander, C. (2009). Brave new world: Higher education reform in Finland. *Higher Education Management and Policy*, 21(2), 1–18.
- AIRO. (2012). *All-island research observatory NUI Maynooth*. [Online] Available at: <http://wwwairo.ie/>. Accessed 10 Mar 2014.
- Aula, H. M., & Tienari, J. (2011). Becoming ‘world-class’? Reputation-building in a university merger. *Critical Perspectives on International Business*, 7(1), 7–29.
- Bangemann, M. (1994). *Recommendations to the European Council: Europe and the global information society*. Brussels: European Commission.
- Barry, F. (2005). *Third level education, foreign direct investment and economic boom in Ireland* (Centre For Economic Research Working paper series, Wp05/09), University College Dublin.
- Becker, S. O., Egger, P. H., et al. (2009). Going NUTS: The effect of EU structural funds on regional performance. *Journal of Public Economics*, 94(9), 578–590.
- Beerkens, E. (2002). International inter-organisational arrangements in higher education: Towards a typology. *Tertiary Education and Management*, 8(4), 297–314.
- C&AG. (2010). *Comptroller and auditor general special report. Department of education and skills*. Dublin: Government of Ireland. http://www.hea.ie/sites/default/files/cag_special_report_-_des_sept_2010.pdf
- Callanan, M., & Keogan, J. F. (2003). *Local government in Ireland: Inside out*. Dublin: Institute of Public Administration.
- Charles, D. (2006). Universities as key knowledge infrastructures in regional innovation systems. *Innovation: The European Journal of Social Sciences*, 19(1), 117–130.
- Chen, D. Y. (2002). A study on the amalgamation of Chinese higher education institutions. *Asia Pacific Education Review*, 3(1), 48–55.
- Clancy, P. (2008). The non-university sector in Irish higher education. In J. Taylor, J. B. Ferreia, M. Machado, & R. Santiago (Eds.), *Non-university higher education in Europe* (pp. 123–145). Dordrecht: Springer.
- Coate, K., & Mac Labhrainn, I. (2009). Irish higher education and the knowledge economy. In J. Huisman (Ed.), *International perspectives on the Governance of higher education* (pp. 198–216). London: Routledge.
- Coolahan, J. (1981). *Irish education: Its history and structure*. Dublin: Institute of Public Administration.
- Daly, M. E. (1981). *Social and economic history of Ireland since 1800*. Dublin: Educational Company Ireland.
- Davies, G. K. (2010). *Report of SIF evaluation, higher education authority*. [Online] Available at: http://www.hea.ie/sites/default/files/final_25_jan.pdf. Accessed 10 Mar 2014.
- Davoudi, S., & Wishardt, M. (2005). The polycentric turn in the Irish spatial strategy. *Built Environment*, 31(2), 122–131.
- De Boer, H. F., Enders, J., & Leisyte, L. (2007). Public sector reform in Dutch higher education: The organizational transformation of the University. *Public Administration*, 85(1), 27–46.
- DoES. (2011). *National strategy for higher education to 2030. Report of the strategy group*. Dublin: Department of Education and Skills.
- Eckel, P. D., & Hartley, M. (2008). Developing academic strategic alliances; Reconciling multiple institutional cultures, policies and practices. *Journal of Higher Education*, 79(6), 613–637.

- Eddy, P. L. (2010). Institutional collaborations in Ireland: Leveraging an increased international presence. *New Directions for Higher Education*, 150, 19–29.
- Ferlie, E., Musselin, C., & Andresani, G. (2008). The steering of higher education systems: A public management perspective. *Higher Education*, 56(3), 325–348.
- Fitzgerald, G. (1965). Investment in education. *Studies: An Irish Quarterly Review*, 54(216), 361–374.
- Forfas. (2004). *Building Ireland's knowledge economy. The Irish action plan for promoting investment in R&D to 2010*. Report to the Inter Departmental Committee on Science, Technology and Innovation. Dublin: Forfas. <http://www.djei.ie/publications/enterprise/2004/knowledgeconomy.pdf>
- Forfas. (2009). *Research and development statistics in Ireland 2009 – At a glance*. Dublin: Forfas. http://www.forfas.ie/media/forfas090908_research_development_statistics.pdf
- Gamage, D. T. (1993). The reorganisation of the Australian higher educational institutions towards a unified national system. *Studies in Higher Education*, 18(1), 81–94.
- Goddard, J., & Kempton, L. (2011). *Connecting Universities to regional growth: A practical guide*. [Online] Available at: http://ec.europa.eu/regional_policy/sources/docgener/presenta/universities2011/universities2011_en.pdf. Accessed 10 Mar 2014.
- Goedegebuure, L., Lyons, A., & Meek, L. (1993). Diversity in Australian higher education? *Higher Education*, 25, 395–410.
- Government of Ireland. (1967). *Report to the Minister for education on regional technical colleges: Steering committee on technical education*. Dublin: Government of Ireland. <http://www.education.ie/en/Publications/Policy-Reports/Steering-Committee-on-Technical-Education-Report-to-the-Minister-for-Education-on-Regional-Technical-Colleges.pdf>
- Harman, G. (1986). Restructuring higher education systems through institutional mergers: Australian experience, 1981–1983. *Higher Education*, 15(6), 567–586.
- Harman, G., & Harman, K. (2008). Strategic mergers of strong institutions to enhance competitive advantage. *Higher Education Policy*, 21, 99–121.
- Harpur, J. (2010). *Innovation, profit and the common good in higher education: The new alchemy*. Basingstoke: Palgrave Macmillan.
- Hazelkorn, E. (2009). Rankings and the battle for World-class excellence: Institutional strategies and policy choices. *Higher Education Management and Policy*, 21(1), 55–76.
- Hazelkorn, E. (2010). Community engagement as social innovation. In L. Weber & J. Duderstadt (Eds.), *The role of the research university in an innovation-driven global society*. London/Genève: Economica.
- Hazelkorn, E. (2011). *Rankings and the reshaping of higher education: The battle for world class excellence*. Basingstoke: Palgrave Macmillan.
- Hazelkorn, E. (2014). Rebooting Irish higher education: Policy challenges for challenging times. *Studies in Higher Education*, 39, 1343–1354.
- HEA. (2004). *The programme for research in third level institutes (PRTLI) impact assessment* (Vol. I). Report by the International assessment committee. Dublin: Higher Education Authority. http://www.hea.ie/sites/default/files/prtli_impact_assessment_-_volume_1.pdf
- HEA. (2011). *Regional clusters, consolidation leading to mergers, strategic dialogue*. Dublin: Higher Education Authority.
- HEA. (2012a). *A proposed reconfiguration of the Irish system of higher education*. Report prepared by an International expert panel for the higher education authority of Ireland. http://9thlevel.ie/wp-content/uploads/International_Panel_Report.pdf
- HEA. (2012b). *Report of the international review panel on the structure of initial teacher education provision in Ireland*. Review conducted on behalf of the Department of Education and Skills. Dublin: Higher Education Authority. http://www.hea.ie/sites/default/files/2012_review_of_structure_of_teacher_education.pdf
- HEA. (2012c). *Review of the provision of creative arts programmes in Dublin*. Dublin: Higher Education Authority. <http://www.hea.ie/sites/default/files/dublincreativeartsreviewreport.pdf>

- HEA. (2012d). *Towards a future higher education landscape, including process and criteria for designation as a technological university and guidelines on regional clusters*. Dublin: Higher Education Authority. http://www.hea.ie/sites/default/files/towards_a_future_higher_education_landscape_incl Regional_clusters_and_tu_13th_february_2012.docx
- HEA. (2013). *Report to the minister for education and skills on system re-configuration, inter-institutional collaboration and system governance in Irish higher education*. Dublin: Higher Education Authority. <http://www.education.ie/en/Publications/Policy-Reports/HEA-Report-to-the-Minister-for-Education-and-Skills-on-Irish-higher-education.pdf>
- Hinfelaar, M. (2012). Emerging higher education strategy in Ireland: Amalgamate or perish. *Higher Education Management and Policy*, 24(1), 1–16.
- Hudson, C. (2006). Regional development partnerships in Sweden: A way for higher education institutions to develop their role in the processes of regional governance? *Higher Education*, 51 (3), 387–410.
- Hyland, A. (2012). *A review of the structure of initial teacher education provision in Ireland*. Background report for the International review team. Dublin: Higher Education Authority. <http://www.hea.ie/sites/default/files/ainehylandfinalreport.pdf>
- IUA. (2005). *Reform of 3rd level and creation of 4th level Ireland; securing competitive advantage in the 21st century*. Dublin: Irish Universities Association. <http://www.iua.ie/wp-content/plugins/wp-publication-archive/includes/openfile.php?file=http%7Cwww.iua.ie/wp-content/uploads/2012/09/Reform3rdCreation4thlevelBrochure.pdf>
- Konu, A., & Pekkarinen, E. (2008). Provincial University of Lapland: Collaborating for regional development. *Higher Education Management and Policy*, 20(2), 115–123.
- Lawton, W. et al. (2013). Horizon scanning: What will higher education look like in 2020? *Observatory on borderless higher education for UK higher education international unit*. http://www.obhe.ac.uk/documents/view_details?id=934
- MacHale, J. P., et al. (1967). The university merger [with comments]. *Studies: An Irish Quarterly Review*, 56(222), 122–195.
- Marginson, S. (2011). *Criteria for technological university designation*. Dublin: Unpublished Department of Education and Science. <http://www.cit.ie/contentfiles/Marginson%20report%20criteria+for+technological+university+designation+final.pdf>
- Meek, V. L. (1991). The transformation of Australian higher education from Binary to Unitary system. *Higher Education*, 21(4), 461–494.
- OECD. (2004). *Review of national policies for education: Review of higher education in Ireland*. Paris: Organisation for Economic Co-operation and Development.
- OECD. (2006). *OECD territorial reviews: Competitive cities in the global economy*. Paris: OECD.
- Peters, M. (2001). National education policy constructions of the “knowledge economy”: Towards a critique. *Journal of Educational Enquiry*, 2(1), 1–22.
- Pick, D. (2003). Framing and frame shifting in a higher education merger. *Tertiary Education and Management*, 9(4), 299–316.
- Porter, M. E. (1998, November–December). Clusters and the new economics of competition. *Harvard Business Review*, pp. 77–90. <http://ic.wiki.fgv.br/file/view/Clusters+and+the+New+Economics+of+Competition.pdf>
- Rowley, G. (1997). Mergers in higher education: A strategic analysis. *Higher Education Quarterly*, 51(3), 251–263.
- White, T. (2001). *Investing in people: Higher education in Ireland from 1960 to 2000*. Dublin: Institute of Public Administration.

Chapter 7

Institutional Mergers in Chinese Higher Education

Rui Yang

7.1 Introduction

China is an old civilization with extraordinarily rich traditions in higher learning. Chinese higher education institutions are now trying to assert themselves into the international system just as China is emerging as a major player in world affairs. Well integrated with the international community, the Chinese system has become one of the most influential in the world, in terms of its population size of students and teachers, the ever-growing academic publications it produces annually, and the large numbers of students it sends to and attracts from other countries.

The process of higher education institutional amalgamation in China was launched over a decade ago in 1992 and has been implemented in domestic and international contexts, which have been undergoing fundamental change. The influences of the process are evident at national, local and institutional levels. Overall, the restructuring was aimed at improving the structure, distribution, quality and efficiency of Chinese higher education. Five major restructuring strategies were promoted, namely joint construction, cooperative administration of institutions, institutional amalgamation, transfer of jurisdiction, and participation of other social sectors in institutional operation. The restructuring which was unprecedented in terms of its scale, lasted for roughly a decade, with various features characterising its different stages. The different waves of institutional amalgamation highlight the gradual extension and upgrading of the process from provincial government into a national drive culminating in an effort to produce world-class universities.

Despite the ongoing criticism relating to the effects of implementation and limited adaptation to context, the university merger process in China has produced significant results in transforming the higher education system and benchmarking it at international level. It effectively dismantled the separation by regions, sectors

R. Yang (✉)
Faculty of Education, University of Hong Kong, Hong Kong, China
e-mail: yangrui@hku.hk

and professions, established a more coherent higher education governance system with provincial governments playing an important role.

7.2 The Historical Context of the Chinese Higher Education System

The ancient Chinese education system was established during the Yu period (2257–2208 BC). China's early institutions of higher learning appeared in the Eastern Zhou Dynasty (771–221 BC) (Hayhoe 1989), predating the development of higher learning institutions in the West by centuries. The famous Jixia Academy was established 20 years before the Platonic Academy. The term “university” is used in the Chinese literature to denote an entirely different constellation of scholarly institutions in China. There was no institution in Chinese tradition that could be called a university throughout China's history until the late nineteenth century. The imperial examinations and the academies were key elements of ancient Chinese higher learning (Hayhoe 1996).

With the global diffusion of the European model of the university, a modern higher education system was only established in China in the nineteenth century, with the first modern higher education institution, Peiyang University, set up in 1895. By 1931 a range of institutions had been established, namely 39 universities (13 national, 12 provincial and 14 private), 17 colleges (2 national, 6 provincial and 9 private), 23 professional schools (3 national, 15 provincial and 5 private). By 1947, 207 higher institutions had been established, including 55 comprehensive universities. By 1949 when the communist government came to power, 205 universities had been founded (Hayhoe 1989).

Patterned on the Soviet model, the communist government launched in 1952 a nationwide transformation of colleges and university departments to ensure that they directly served the nation's manpower needs. It involved both a geographical rationalisation of higher education provision and a complete rethinking of curricular patterns and institutional identities. After the reorganisation, all the universities and colleges became state-run and narrowly specialised according to the manpower planning needs deriving from the central planned economy. A hierarchical, centralised system was established, characterised by the direct government leadership in implementing the unitary instructional plans, course syllabi and textbooks in all the colleges and universities throughout the country (Agelasto and Adamson 1998).

From a disciplinary perspective, the number of comprehensive universities was reduced from 49 to 13, and this was accompanied by a severe reduction of university places in the fields of the humanities and social sciences which decreased dramatically from 33.1 to 14.9 % (Ouyang 2004). The adjustment facilitated the construction of industry and the development of science and technology, producing a large amount of specialised talents for the economic development of the 1950s. It

also created problems of various sorts. A fundamental feature of the restructuring was to separate the humanities and social sciences from natural and engineering sciences. The majority of higher institutions were highly specialised, with little room for interdisciplinary research and this resulted in university graduates being narrowly trained.

Post-1952, China experienced severe political turmoil including the Great Leap Forward (1958–1960) and the Cultural Revolution (1966–1976) and higher education development was greatly affected. The Cultural Revolution was a disaster for the Chinese educational system, leading to the eradication of nearly all formal education for a decade. After 1977, higher education order was gradually restored through a series of reforms. Following a policy of economic rationalism, higher education came to be regarded as an important cornerstone in developing China into a global economic power. Higher education has since experienced the strongest development in its history both quantitatively and qualitatively.

By the new millennium, the Chinese higher education system had grown to be the largest higher education system in the world in terms of scale. In 2010, China had 2,358 regular higher education institutions (1,112 offering Bachelor degree programs and above and 1,246 offering 3/2-year associate degree programs),¹ with a total enrolment of 22.32 million and a gross enrolment rate of 26.5 %. Enrolled postgraduate students totalled 1.54 million, with 1.28 and 0.26 million respectively at Masters and Doctoral levels. Regular higher education institutions employed 1.34 million full-time academic staff members, with a teacher-student ratio of 17.33:1. In 2011, China produced 168,100 (11.1 % of the world's total) S&T papers, second only to the United States. According to the Nature Publishing Index 2012 China, authors based in China contributed 8.5 % of all research papers published in Nature branded journals in 2012, up 35 % from 2011 figures.

7.3 The Contemporary Context

China's higher education institutional merger has been implemented within much altered domestic and international contexts, from agenda-setting all the way to post-merger integration. Contextual influences have been evident and profound at national, local and institutional levels.

¹ China's regular higher education institutions refer to those that admit full-time students based on their performances in the national college entrance examination.

7.3.1 *The Global Context*

The 1990s witnessed increasingly intensified globalisation, with a multiplicity of linkages and interconnections transcending the nation-state, and events, decisions and actions in one part of the world affecting actions in other parts of the world. Time and space were reordered so that authority structures were no longer fixed to territory. Institutional arrangements that had been previously considered national became dis-embedded from their national context and re-embedded in sub-national, supranational or a-territorial contexts (Beerkens 2003). International and transnational forces became highly influential on domestic policies and global policy convergence increased with local policy actors becoming more and more exposed to external ideas. This was evident in the area of higher education, with higher education policy achieving prominence on the agendas of national governments and international organisations alike. While the actual dynamics and pace of change had varied across national systems, the direction of change appeared to be similar.

In the 1990s, the neo-liberal image of globalisation had acquired ascendancy in education thinking and became highly normative, propelled and legitimised by such practices of managerialism as downsizing and state deregulation and privatisation, as if they were a natural and inevitable response to the steering logic of globalisation. The restructuring of higher education worldwide informed by neo-liberal market ideologies transformed the framework of the broader changes in policy and governance, with a strong impact on the manner in which universities are financed and managed (Rizvi 2004). These approaches driven by neo-liberal discourses indicated a trend towards uniformity, demanding a convergence in thinking and an acceptance of similar diagnoses of problems confronting educational systems with widely differing social, political and economic traditions, with unprecedented scope, depth and similarity of changes. National higher education systems had been influenced through a number of normative and rule-creating activities such as global benchmarking/competition, in line with the unequal relations in the global system.

Within such a context, modern states, in domains well beyond higher education, were reconfigured and their governance modes restructured. The way in which the public sector was managed, was undergoing reform. There had been a change in the coordination mode of governance from ‘positive’ to ‘negative’ coordination (Scharpf 1994), preventing modern states from being over-burdened by welfare and social/public policy commitments. State governance of higher education was also subject to these trends and changes. In line with marketisation, corporatisation and privatisation, higher education systems also saw a restructuring of institutions. University mergers became a popular measure in response to the demands for greater efficiency and quality education alongside the reality of growing financial stringency. To maximise economies of scale, institutions merged into larger qualitatively stronger academic institutions with better management and use of administrative resources. Such an approach was adopted by a number of countries including the United Kingdom, the United States and Australia (Skodvin 1999).

7.3.2 *The Domestic Context*

As a result of the higher education restructuring in the 1950s, higher education institutions were under the direct jurisdiction of different government agencies in China, namely the Ministry of Education, non-educational central ministries and provincial/municipal authorities. National government assumed responsibility for formulating higher education policies, allocating resources, exercising administrative controls, employing teaching and research staff, developing curricula, choosing textbooks, recruiting students and assigning jobs to university graduates. University operation was tightly controlled by the central government in terms of financing. Centralised provision and management of education led to a shortage of initiatives from local governments and higher education institutions, separating the centre and the locality. This was typical of the so-called *tiao-kuai fenge* administrative system under which an institution is submitted to the administration of both the *tiao* (the Ministry of Education and its provincial and local representatives) and the “*kuai*” (the non-educational ministries, provincial or municipal governments). Such a matrix of fragmentation in higher education governance led to functional duplication, resource wastage, low economy and efficiency in higher education (Mok 2005). Furthermore, as a result of the restructuring in the 1950s, higher education institutions were generally small in scale and covering the same disciplines.²

Since 1978, reforms in higher education have attempted to develop closer links between the higher education sector and the market. With the phasing out of the planned economy and the diminishing role of the state, the government has become increasingly reluctant to continue to subsidise higher education. By the 1980s, calls for regrouping and realigning higher education institutions to resolve problems of fragmentation and duplication were increasingly being heard. Cost recovery measures were thus introduced and higher education became gradually decentralised. Governance reforms were introduced from 1985 when the government issued the *Decision on the Reform of the Educational System* to change the central government’s tight control over institutions so that institutions can build closer links to industry and other sectors and foster their own initiatives and capacity to meet economic and social needs (Guo 1995). As the market gained more prominence in China, especially in the more developed coastal and urban areas, more substantial reform policies were introduced to facilitate structural changes in education. The *Program for Education Reform and Development in China* issued by the central government in 1993 reaffirmed the 1985 Decision’s commitment for the national government to refrain from direct control over education. Instead, government was to act as a facilitator.

Chinese higher education institutions were urged to take the initiative in designing their own teaching plans, selecting textbooks and organising teaching activities, while faculties and/or departments within university also enjoyed greater autonomy

² For instance, disciplinary duplication in the three institutions merged into Guangdong University of Technology was 40, 60 and 40 % (*People’s Daily*, 14 August 2000).

in matters relating to teaching, research, personnel and resource allocation. A move from a state controlled model to a state-supervised model was in the making (Neave and van Vught 1994). Coupled with the strong push towards decentralisation was a strengthened role for provincial governments. The market was also further incorporated into China's higher education system. Against this backdrop, a process of higher education institutional amalgamation was launched in 1992 to make the system more efficient (Yang 2000). Overall, the restructuring was aimed at improving the structure, distribution, quality and efficiency of Chinese higher education. To a certain extent, its origin could be traced back to the restructuring process launched in the 1950s. In 1995, the central government issued *Suggestions on Deepening Higher Education Structural Reform*, recommending the following four major restructuring strategies: joint construction, transfer of jurisdiction, merging, and cooperation to restructure the higher education system. In January 1998, a national forum consolidated reform proposals into five major restructuring strategies: joint construction, cooperative administration of institutions, institutional amalgamation, transfer of jurisdiction, and participation of other social sectors in institutional operation.

7.3.2.1 Joint Construction

Joint construction refers to a merger process where, while financial resources remain basically the same, the central and provincial governments each exercise leadership in administering and developing institutions. Later, this extended to the lower reaches of government and administration, and some new forms of merger emerged, such as those between ministries of the central government, provincial capital and sub-capital cities, or between the provincial and municipal governments, or between ministries and corporations. The primary significance of joint construction is to change, or at least reduce, singular jurisdiction, including the removal of barriers between ministries of the central government and provincial governments. It is also aimed at strengthening the capacity of provincial governments to take a strategic approach (taking the whole situation into account), and enabling institutions to serve local society actively. Secondly, joint construction builds closer relations between institutions and the provinces/cities. Thirdly, joint construction can help raise funds. By so doing, institutions gain more financial support than would have been possible from a single source, improve their institutional running conditions, and optimise their resource allocation. Up to July 1996, 56 higher learning institutions had been constructed jointly in different ways. Of these, 27 institutions fell directly under the State Education Commission, while 29 belonged to various ministries or commissions (Deng 1997).

7.3.2.2 Institutional Amalgamation

Institutional amalgamation refers to the bringing together of previously separate institutions in response to new needs. The process includes: a rapid organisation of centralised leadership, planning, and administration; the readjustment of areas of specialisation, curricula, disciplines and faculty, as well as the teaching administration and the allocation of teaching resources; and corresponding to this a reform of institutional management systems. The purpose is to help make the advantages of merging personnel training yield strong results, improve educational quality, and therefore, enhance institutional strength for further development. After amalgamation, the overall number of China's higher education institutions decreased substantially. By July 1996, 103 institutions had been merged into 42. The total number of institutions was reduced from 1,080 in 1994 to 1,032 in 1996. The amalgamation process helped to address duplication between institutions, overly small scale institutions, and the isolation of single-subject institutions (*China Education Daily*, 26 August 1997).

7.3.2.3 Cooperative Administration of Institutions

Cooperative administration of institutions covers a range of cooperation arrangements between institutions of different types but operating at a similar level. These are entered into on a voluntary basis and allow the institutions' financial resources to remain unchanged. Forms of co-operation may vary from that between two institutions to multi-institution co-operation. These cooperative arrangements are aimed at exploiting resources to the full, supplementing the advantages that each institution offers, providing interdisciplinary programmes, and developing co-ordination, so as to improve educational quality and secure institutional benefits. During the period up to 1997, experiments were carried out to various degrees in Beijing, Shanghai, Guangzhou and Wuhan, whereby institutions broke out of their state of isolation, and made good use of each other's collective resources. By 1997, such co-ordination was extended throughout the country, and 178 institutions became involved in some form of cooperation. Among them, 28 were institutions under the Ministry of Education, 96 belonged to other ministries or commissions, and 54 were linked to provincial governments. Co-operative actions among various institutions had clearly played a positive role in the structural reform of China's higher education system (Deng 1997).

7.3.2.4 Transfer of Jurisdiction

The transfer of jurisdiction over higher learning institutions can take place at various levels: between ministries of the central government, and from higher education bureaux of provincial governments to provincial education commissions.

The transfer process plays an important role in doing away with the overlap of jurisdiction over institutions by central and provincial governments in the same area. It also rationalises institutional distribution geographically, and reduces waste of educational resources caused by barriers between higher and lower levels and different departments or regions. Although only eight institutions under the control of ministries of the central government were transferred to provincial governments (*China Education Daily*, 26 August 1997), the reforms afforded successful experiences, and new opportunities for development.

7.3.2.5 Participation of Other Social Sectors in Institutional Operation

Another type of structural reform is the effort to encourage the participation of enterprises, holding companies and research agencies in the management and administration of institutions in order to promote greater institutional responsiveness to social demands, to link them closely with enterprises and research institutes, and to strengthen the integration between education, research and production. Statistics show that 1,744 large and medium-sized enterprises and research institutes participated in this reform with 170 institutions nationwide (*China Education Daily*, 26 August 1997).

By the end of July 1996, 316 higher education institutions had participated in these five types of structural reform of management. Among those that took part in the reform, 211 were under direct administration of the central ministries or commissions, making up 66.8 %; 105 belonged to provincial governments, making up 33.2 %. They constituted 30 % of the total number of China's institutions of higher learning, and involved 47.3 % of the total number of students of regular higher education institutions in China. The average number of undergraduates and those undertaking 2/3 years training in each institution had increased from 1,901 in 1991 to 2,972 in 1996, and student/teacher ratio rose from 6.63:1 to 9.6:1 (Min et al. 1995).

7.4 Waves of Mergers

The restructuring lasted for roughly a decade, with various features characterising its different stages. As noted above, mergers were introduced to answer calls from the 1985 Decisions policy and were not implemented extensively until the 1990s when the Outline for Reform was announced. This was an unprecedented reform in terms of scale. By 1997, 30 provinces, 48 ministries, and 400 higher education institutions had become involved (Lin 1998). From 1992 to 2003, there was an annual average of 27.5 institutional amalgamations. During 1996–2001, 385 higher education institutions were merged into 164 (Zhang 2004). The reform peaked in 2000 when 203 higher education institutions merged into 79 in 105 amalgamations. Within the process, some mergers took place only once but involved many institutions, such as Guangzhou University which took over nine previous peers. Other

mergers were undertaken in several steps such as the present Tongji University which is the result of three amalgamations (Xu 2003).

7.4.1 Wave I (1992)

University mergers started with regional institutions with the following results from March to May 1992: a number of provincial institutions in Jiangsu (three institutions into one in March and six institutions and one training centre merged into one in May), Jilin (two institutions merged), Chongqing (two institutions merged), Shanxi (two institutions merged), and Guizhou (six institutions merged to form three). Overwhelmingly the institutions involved were small in size, narrow in specialisation and low in terms of their professional level. Institutional amalgamation was thus necessary and beneficial to achieve better resource allocation and economy of scale. In the initial process, governments acted only as a matchmaker, while the institutions maintained the option to go ahead or not. But the push from governments became stronger later on. At the same time, China's higher education governance reforms continued underway. In 1992, the then State Education Commission experimented in Guangdong to jointly build the South China University of Technology and Sun Yat-sen University with Guangdong provincial government. Both institutions had been directly under the jurisdiction of the central government. This marked the first breakthrough in the matrix fragmentation to strengthen the role of provincial government in higher education governance. The choice of Guangdong was based on the relatively better incorporated market forces together with an open mind-set.

7.4.2 Wave II (1993–1997)

University mergers subsequently spread quickly and were upgraded into a national drive, no longer being confined to regional institutions. Within a year, various ministries of the central government and a number of national key universities joined the merger drive process.³ During this period, hundreds of higher education

³ During the earlier years of the newly established People's Republic of China, the central government identified some universities and invested on them fiscally. They were usually under the jurisdiction of either the Ministry of Education or other ministries of the central government. A list of 16 national key universities was first promulgated in 1959. In 1960, another 44 universities were added to this list. By 1978, there were 88 National Key Universities. At the end of the 20th Century, after reforms to the system of higher education in China, the Chinese government instituted a two tier system of universities, respectively under the jurisdictions of the central government and provincial governments. Only a small proportion of higher education belongs to this category.

institutions became involved in amalgamations, especially those under the administration of provincial governments. The usual form of amalgamation was that weaker institutions were taken over by stronger ones. In some cases, weak higher education institutions merged to form a stronger institution. For example, Jiangxi University and Jiangxi University of Technology merged in March 1993 to form Jiangxi University, the first key national university in the province. More typically at provincial level, institutions merged into stronger local peers. For instance, Shenzhen University took over a local teacher training college in March 1995. In February 1997, Guizhou College of Agriculture, Guizhou College of Arts and Guizhou College of Agricultural Management merged into Guizhou University, and Ningxia Institute of Technology, Yinchuan College and Ningxia College of Education became part of Ningxia University. In March 1997, Guangxi College of Agriculture merged into Guangxi University. Five months later, Qinghai College of Animal Husbandry and Veterinary Medicine merged into Qinghai University. At the end of 1997, Yan'an Medical College became the Faculty of Medicine of Yan'an University.

During this period, there was a wave of institutional upgrading throughout China, mainly vertically from senior junior vocational schools to 2/3-years specialised colleges and from 2/3-year specialised colleges to 4-year colleges/universities, and also horizontally from single-disciplinary institutions to multi-disciplinary colleges/universities. At this time, Chinese officials could not estimate the precise numbers of tertiary institutions because every day the number was changing. Meanwhile, the participation by local government intensified efforts to work with central government to redress the matrix fragmentation, with particular focus on issues of overlapping and poor regional allocation. Some mergers during this period appeared to be poorly matched, more than likely due to governmental pressure. It is also highly possible that the mismatch was incentivised by attractive “betrothal money” and/or “dowry” leading to unhappy marriage (Xiao 2006).

7.4.3 Wave III (1998–2000)

Starting from 1998, university mergers began to be linked with China’s bid to achieve world-class status for its universities.⁴ At the celebration of Peking University’s 100th anniversary in May 1998, the then Chinese President and the General Secretary of the Chinese Communist Party elaborated the government’s policy of education and science to revitalise the nation, and called for China to establish world-class universities. Under this guiding idea, more and more national

⁴ Internationally, although the goal of world-class status is clear, the definition of world-class status is often not. In China, the most noted essential attributes focus overwhelmingly on institutional size, multiplicity of disciplines, operating revenues (especially for research), research productivity, and numbers of postgraduate and international students. In contrast, much less emphasis has been placed on more fundamental issues such as academic freedom, institutional autonomy and university governance. For further discussion of this, see Yang and Welch (2012).

key higher education institutions participated in mergers. Many provincial institutions merged into national major institutions under the jurisdiction of ministries of the central government. In September 1997, Shanghai's local college of preschool teacher training was taken over by East China Normal University which is under the Ministry of Education. In November 1999, a local college of economics and technology in Hefei merged into University of Science and Technology of China which is under the Chinese Academy of Sciences.

The year 2000 witnessed more small institutions, both provincial and national, swallowed by flagship universities: Beijing Medical University (under the Ministry of Education) merged into Peking University which is under the Ministry of Education; Xi'an Institute of Finance and Xi'an Medical University into Xi'an Jiao Tong University which is under the Ministry of Education; Shanghai Railway University (under the then Ministry of Railways) into Tongji University which is under the Ministry of Education; Nanjing Railway Medical University (under the then Ministry of Railways) and Nanjing Vocational College of Transport into Southeast University which is under the Ministry of Education; Wuhan Institute of City Construction, Tongji Medical University (under the then Ministry of Health) and Wuhan College of Science and Technology Staff into Central China University of Technology which then changed its name into Central China University of Science and Technology; Shanghai Medical University (under the then Ministry of Health) into Fudan University; Harbin University of Architecture into Harbin University of Technology; Jinlin University of Technology, Norman Bethune University of Medical Science (under the then Ministry of Health), Changchun University of Science and Technology (under the Ministry of Land and Resources), Changchun College of Posts and Telecommunications (under the Ministry of Industry and Information Technology) into Jilin University which is under the Ministry of Education.

During this period, the participation of key institutions pushed the merger drive to peak levels. At the same time, there was much discussion about world-class universities giving a highly coloured account of the size and comprehensiveness of world-class universities. Temporarily, institutional amalgamation was portrayed as a shortcut to world-class status. After 2000, the drive for university mergers abated and only some occasional institutional amalgamations took place, mainly targeting an upgrading of their status.

7.5 Features of the Merger Process

In comparison with China's other higher education reform policies in recent decades, this round of institutional mergers has proven highly challenging to implement. It will have strong impact on the development of the higher education system in the future. The mergers not only involved jurisdictions of the Ministry of Education, other ministries of the central government and provincial/municipal governments, but also touched upon a wide range of academic disciplines and higher education institutions at different levels, as demonstrated by Tables 7.1, 7.2 and 7.3.

Table 7.1 Details of the institutions before merging into Wuhan University

Geographical location	Wuhan University Luo-Jia-Shan, Wuchang	Wuhan Technical University of surveying and Mapping Donghu, Wuchang	Wuhan University of Hydraulic and Electronic Engineering Luo-Jia-Shan, Wuchang	Hubei Medical University Donghu, Wuchang
Year of establishment	1893	1956	1954	1943
Jurisdiction	Ministry of Education	National Bureau of Surveying and Mapping	Ministry of Water Conservancy and Electric Power	Hubei Provincial Government
Personnel training	Undergraduate and post-graduate programs	Undergraduate, postgraduate, with some associate degree programs	Undergraduate and postgraduate programs	Mainly undergraduate, with some postgraduate programs
Featured disciplines	Humanities, social sciences and natural sciences	Surveying and mapping technology	Hydraulic and electronic engineering	Clinical medicine

Table 7.2 Details of the Institutions before Merging into Central China University of Science and Technology

	Central China University of Technology	Tongji Medical University	Wuhan Urban Construction Institute	Wuhan College of Science and Technology Staff
Geographical location	Yu-Jia-Shan, Wuchang	Hankou	Ma-An-Shan, Wuchang	Donghu, Wuchang
Year of establishment	1953	1907	1952	1979
Jurisdiction	Ministry of Education	Ministry of Health	Ministry of Housing and Urban-rural Development	State Science and Technology Commission
Personnel training	Undergraduate and postgraduate programs	Undergraduate and postgraduate programs	Undergraduate	Non-degree training
Featured disciplines	Mechanical and electronic engineering, mechanics, optics and automatic control	Clinical medicine	Civil engineering	

Table 7.3 Details of the institutions before merging into Wuhan University of Technology

Geographical location	Wuhan University of Technology Ma-Fang-Shan, Wuchang	Wuhan Automotive Polytechnic University Ma-Fang-Shan, Wuchang	Wuhan Transportation University Yu-Jia-Tou, Wuchang
Year of establishment	1958	1958	1946
Jurisdiction	Ministry of Construction Materials Industry (Ministry of Education after merger)	China Automobile Industry Corporation	Ministry of Transport
Personnel training	Mainly undergraduate, with some postgraduate programs	Mainly undergraduate, with some postgraduate programs	Mainly undergraduate, with some postgraduate programs
Featured disciplines	Materials science and engineering, civil engineering	Vehicle engineering, business administration	Naval architecture and marine engineering, transport

The merger drive is firstly characterized by its overall approach as a nationwide adjustment or restructuring process. Various departments of the government in different regions were involved. It effectively dismantled the separation by regions, sectors and professions, established a more coherent higher education governance system of the central (Ministry of Education) and provincial governments, with the latter playing an important role. Such a reform was expected to have profound implications for the future development of China's higher education.

The second feature of the merger process is its complexity. Institutional amalgamation necessarily touches on issues relating to many aspects of higher education. Institutionally, they include organisational structure, disciplinary restructuring, campus planning, and even the name to use after the merger. It has impacts on the personal work and living conditions of staff members from their career development, benefits to emotions and identities. From agenda-setting to integration, mergers cannot be implemented effectively simply through the introduction of mandatory plans imposed from above. They demand detailed work at every step of the process, especially at the stage of integration.

Third, mergers involve a process of innovation. Some institutional cases were far more successful than others. While much planning was involved in every case, there was never a shortage of surprises and disappointments. Each institutional case was unique and there was no one-size-fits-all approach. The merger process needed to address a range of aspects from organisational structure to teaching and research administration, and further to disciplinary adjustment. Pre-merger, institutional histories and uniqueness needed to be taken into account, and if possible, carried forward. At the same time, global, national and local contexts had to be considered and incorporated carefully. All these were great challenges, demanding fresh perspectives and new ways of thinking.

7.6 The Effects and Outcomes

The effects and outcomes of the merger process can be measured differently at national, provincial and institutional levels. Overall, China's experience from a national perspective has been perceived positively. It has effectively reduced the notorious fragmentation and duplication of the pre-merger period (Chen 2006). The Chinese experience with mergers differs significantly from the Australian experience in the 1980s which was reported by Curri (2002) to have failed to achieve the intended organisational change. In contrast, it is more similar to the Norwegian case in that the mergers were much more forced by the government and perceived as successful (Kyvik 2002).

7.6.1 Governmental and Institutional Perspectives

From the perspective of central government, the 1990s round of university mergers was unprecedentedly substantial in both scale and length of time. It has built up the framework of China's higher education for future development, and has laid a sound foundation for future enhancement of the quality of education and research. Specifically, achievements of the merger process are particularly evident in the reform of governance and structural layout of higher education in China. First, many higher education institutions originally under the administration of various ministries of the central government have been transferred to be under the Ministry of Education, in cooperation with local governments. This is a major step to tackle the chronic problem of fragmentation in higher education governance between tiao and kuai. By restructuring higher education institutions, the mergers also contributed to involving local governments effectively in administering and financing higher education, linking institutional operations closely to social economic developments nationwide at both local and national levels.

For higher education institutions involved in the reform, the mergers helped to strengthen a number of academic fields where the institutions had clear advantages in comparison with their international peers. A group of highly comprehensive universities have been created paving the way for cross- and multi-disciplinary teaching and research which facilitate students to form more open and informed perspectives. While the effects vary for different institutions, many relatively weak institutions in the pre-merger period were merged into stronger peers. In some cases, a few institutions merged together to form a stronger institution. In both cases, the institutions clearly fared better after the merger in the domestic student market in terms of both the number and quality of the students they attract and the research funding they receive from the society (Xu 2003). Relations between institutions have changed from competition during the pre-merger period to collaboration. This, at least in theory, has created favourable conditions for interdisciplinary collaboration in teaching and research. Meanwhile, it has been possible to achieve cost-reduction through the improved use of human and financial capital (Min 1991).

7.6.2 An Example: Fudan University

Shanghai Medical University was merged into Fudan University in April 2000. While Fudan University is a leading university at national (in some cases international) level in arts, social sciences, natural sciences, engineering and commerce, it did not offer medical studies, an area in which Shanghai Medical University had a prominent advantage. The strong-strong merger provided a solid platform for the new Fudan University to aim realistically at world-class status. After the merger, in comparison with the total enrolment of both institutions before merger, Fudan

University benefited from unprecedently high enrolment numbers, with a 20 % increase at postgraduate level and a 10 % increase at undergraduate level, indicating a better use of resources after the merger.⁵ The proportion of postgraduate to undergraduate students continued to increase, from 46 % in 1998 to 62 % in 2001, a ratio similar to that of world renowned research-intensive universities (Xu 2003).

In line with the quantitative growth of student numbers, the high standard of student quality of the pre-merger Fudan University was reported to be maintained while that of Shanghai Medical University was further enhanced. The gap between the entry scores of local Shanghai students between the two pre-merger institutions was narrowed by 25 %. This was considered minor as Shanghai Medical University had already been nationally famous.⁶ Together with the improvement of student quality, the merger led to a growth of research productivity and funding.⁷ The total numbers of published monographs and journal articles in social sciences and the humanities grew considerably, with an increase of 33.9 and 9.1 %, respectively in the first year after the merger, while publications in science and technology fields were maintained. International publications increased substantially especially in some prestigious journals such as Nature. There are signs of great potential for breakthroughs in the biological studies with the coming together of the Fudan University and Shanghai Medical University research teams.

The reduction of educational costs was a major target of the merger. Post-merger Fudan University experienced a fast increase of students together with a slight decrease of staff members. Its student-teacher ratio changed from 7.85:1 to 11.8:1 within 3 years. Teachers had relatively light teaching-loads pre-merger, with an average of three contact hours per week. It was not unusual for some to have no teaching for an entire semester. This situation changed. However, 261 new non-academic staff members were employed after the merger, the majority of which were hired to provide inter-campus bus services. Due to the long distance between the two campuses, many administrative departments could not be merged and in this respect the merger was thus not highly successful in reducing administrative structures. Such factors added much to management costs, comparing the Fudan University's merger unfavourably with many others in China, including Zhejiang

⁵ Similarly, undergraduate enrolment number at post-Yangzhou University increased consecutively for 6 years with an average increase of 6.13 %, from 12,600 to 18,000.

⁶ The enhancement of student quality was much more substantial in many other provincial institutions such as Guangdong University of Technology.

⁷ In terms of increase of research funding, some universities achieved more substantially through merger relative to Fudan University. Most institutions reported substantial post-merger increase in research funding. Zhejiang University, for example, had 1,743 new research grants in the first year after merger, an increase of 30 % on the previous year, topping the nation in both National Natural Science Foundation of China and National Youth Science Fund grants. Similarly, Yangzhou University increased its research funding from 5 to 20 million RMB 6 years after merger, with an annual increase of 25.99 %.

University and Guangdong University of Technology.⁸ Post-merger Fudan University experienced continuous increase of administrative expenditure. Yet, due to the much greater growth of student enrolments, costs per student dropped.

7.7 Issues of Concern

In looking at the merger process retrospectively, the gap between policy rhetoric and reality is clear and there has been no shortage of criticism from the very beginning of the merger process. Some questioned the guiding ideology of the mergers, and insisted that the reform was patterned too much on foreign experiences, following somewhat blindly the international tide and believing uncritically in the scale of an institution. Many commentators focus on implementation process and the integration following it.

7.7.1 *Integration*

Post-merger integration was much anticipated. However, many pre-merger assumptions have remained open to question. The government based its policies on the assumption that the creation of larger institutions would lead to economies of scale as well as being more conducive to high quality teaching and research. The argument was that changes in organisational structure and physical location of staff and education programmes would have positive effects on collaboration patterns. The reality has been that mergers do not easily lead to integration as integration takes much longer to materialise. While mergers solved some old governance problems, they also created new challenges (Zhang 2004). Large academic units are not necessarily better environments for teaching and research, even though they offer larger breadth. Some observers even criticise the assumption about big-size universities that underpinned the merger process as a misperception of Clark Kerr's multiversity and a mistaken belief in sheer volume of a university (Xiao 2006), arguing that it is inappropriate to take it for granted that large physical size itself necessarily leads to comprehensive and strong academic capacity of a university.

Some institutions were neither truly interested in the merger nor did they understand the merger process. They were motivated simply by the short-term benefits offered by the governments, often in financial terms and/or in the form of land-grant. Such institutions had rarely given the merger much thought, let alone careful, long-term planning. Under such circumstances, post-merger integration

⁸ The situation differed from institution to institution. Within 6 years after merger, Yangzhou University reduced its administrators from 36 to 9 at senior management level and from 444 to 253 at middle management level, and reduced its administrative departments from 99 to 24.

was often like an arranged marriage. Policy rhetoric cannot be translated into practice. In some cases, the larger size even led to weaker overall performance. Many disciplines were influenced in a very limited way by the merger; as merely bringing related fields superficially together generates limited impact. There has however been some improvement in teaching and research performances.

Governments usually played a significant role (some would argue too strongly) in promoting institutional amalgamation without taking fully into consideration institutional histories and conditions. Many institutions have largely continued to operate with their pre-merger organisational structures, failing to respond swiftly to societal and market needs. Some institutions enjoyed a long-fostered national reputation before the merger and resented being dominated/influenced by others. In some cases tensions and even conflicts in educational ideology and approaches emerged between various parts of the newly merged institution.

7.7.2 Costs

Institutional amalgamations led to large size and scale of operation, which did not necessarily lead to improved efficiency. The reform did not come without costs, and cost reduction has proven to be highly difficult to achieve for a number of reasons. Every merger involves a process of long negotiations with government at various levels. All sides involved in the process participate in the merger based on their own calculations of costs and benefits. After amalgamation, new negotiations on integration start, involving seemingly endless negotiations costing human and financial resources. The costs increase drastically when conflicts arise. Inter-campus transportation is another major cost, especially when the distance is significant and there is a considerable movement of people and goods between campuses. Another cost relates to cultural conflicts between pre-merger institutions. It is often invisible yet it can have chronic effects. Unless properly resolved, such conflicts can play a long-term, detrimental role with serious implications for post-merger integration.⁹

7.7.3 *Institutional and Regional Disparities*

China is a country with vast land and striking regional economic, cultural and educational disparities. Regional demands for higher education differ dramatically and a nationally unitary plan is bound not to fit the needs of all regions and therefore to require adaptation. Moreover, China has thousands of higher institutions. While

⁹ Here, a typical example is the pre-merger Tsinghua University and Central Academy of Arts and Design. Their strikingly different cultural ethos has made it very hard to reach an integrated culture of the new Tsinghua University.

in general they all pursue the three functions of modern higher education institutions, namely teaching, research and social service, this does not mean that all institutions should perform all these roles equally comprehensively. Based on their nature, institutions might have their own strengths and weaknesses in various roles. As institutional and regional diversities are vitally important in modern higher education systems, it is significant for institutions to position themselves strategically, without always hitting all fronts. Such an understanding and protection of diversity appears to have been neglected in China's recent university merger process.

7.8 Conclusion

Undertaken as Chinese society was transforming from a centrally managed to a market economy, the university merger process in the 1990s was designed to adapt the higher education system to changes in the social environment, in order that it could serve more directly the needs of socio-economic development via highly-planned, well-organised reforms. It attempted to improve institutional functioning through a restructuring of the higher education system, with a focus on the institutional level, under the direct administration of the central government. It was a process of self-remoulding and self-improvement of the system, an innovation of the existing methodology of higher education management designed to improve operational efficiency and quality of output of the higher education system. The reform was based on the assumption that the existing higher education sector was inadequate and lacked efficiency, a view that was a direct influence of the international context, in which a wind of efficiency was blowing through education. Institutions have since developed greater autonomy from the state, and greater importance has been attached to the interests of specific government departments, regions, and the institutions themselves. Service to the local economy has been emphasised.

However, the merger process has received criticism. During these reforms, institutional amalgamation often became the most important orientation without sufficient consideration being given to the differing traditions and characteristics of the participating institutions, or the variety of existing conditions and factors restricting their development. In some cases, reducing the number of institutions was in itself the prime goal of the reform. A rationale for the reform was to create 'comprehensive universities' to correct China's previous over reliance on the Soviet model, but policy makers did not take into account the fact that a simple institutional amalgamation may not be sufficient to achieve this. While criticising the former "comprehensive universities" for not being comprehensive enough, they were encouraging the amalgamation of several specialised institutes as a response, which however does not automatically lead to the emergence of genuine comprehensive universities. Another driving impetus for the reform was to create a group of world-class universities. While the merger has established a platform for

achieving these high ambitions, the intended post-merger integration has proven difficult to achieve. As a combined result of both domestic and external forces, higher education institutional merger in China clearly reflects an increasingly global agenda. Its actual effects, however, depend mainly on local and national contexts. The Chinese experience offers other countries interesting contrasts as well as implications.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Agelasto, M., & Adamson, B. (1998). *Higher education in post-Mao China*. Hong Kong: Hong Kong University Press.
- Anon. (1997, August 26). *China Education Daily*. (In Chinese)
- Anon. (2000, August 14). Guangdong is becoming strong in education through merger. *People's Daily*. (In Chinese)
- Beerkens, E. (2003). Globalisation and higher education research. *Journal of Studies in International Education*, 7(2), 128–148.
- Chen, R. F. (2006). *Assessing the effect of university merger*. Doctoral thesis, University of Science and Technology of China. (In Chinese)
- Curri, G. (2002). Reality versus perception: Restructuring tertiary education and institutional organizational change – A case study. *Higher Education*, 44(1), 133–151.
- Deng, X. C. (1997). A review of the reform of higher education structure. *Higher Education Research in China*, 1(1), 18–31.
- Guo, Q. J. (Ed.). (1995). *A collection of education laws in the People's Republic of China*. Beijing: Beijing Broadcasting Institute Press. (In Chinese).
- Hayhoe, R. (1989). China's universities and Western academic models. *Higher Education*, 18(1), 49–85.
- Hayhoe, R. (1996). *China's universities 1895–1995: A century of cultural conflict*. New York: Garland.
- Kyvik, S. (2002). The merger of non-university colleges in Norway. *Higher Education*, 44(1), 53–72.
- Lin, H. W. (1998, January 17). Great achievements made in China's reform on higher education administration system. *Guangming Daily*. (In Chinese)
- Min, W. F. (1991). *Improving managerial effectiveness of higher education institutions: A case study of an institutional merger in Hubei Province*. UNESCO: P. R. China.
- Min, W. F., Ding, X. H., & Guo, S. R. (1995). A study on the scale and benefit of developments and specialties in institutions of higher learning. *Educational Research*, 4, 7–12. (In Chinese).
- Mok, K. H. (2005). Globalisation and educational restructuring: University merging and changing governance in China. *Higher Education*, 50(1), 57–88.
- Neave, G., & van Vught, F. (1994). *Government and higher education relationship across three continents: The winds of change*. Exeter: BPC Wheaton Ltd.
- Ouyang, K. (2004). Higher education reform in China today. *Policy Futures in Education*, 2(1), 141–149.
- Rizvi, F. (2004). Theorising the global convergence of educational restructuring. In S. Lindblad & T. S. Popkewitz (Eds.), *Educational restructuring: International perspectives on travelling policies*. Greenwich: Information Age Publishing Inc.

- Scharpf, F. (1994). Games real actors could play: Positive and negative coordination in embedded negotiations. *Journal of Theoretical Politics*, 61, 27–53.
- Skodvin, O. J. (1999). Mergers in higher education – Success or failure? *Tertiary Education and Management*, 5(1), 65–80.
- Xiao, H. T. (2006). Reflections of university merger. *Jiangxi Educational Research*, 9, 40–42. (In Chinese).
- Xu, L. (2003). University merger in China: An economic analysis. *Theory Monthly* 9, pp. 143–151.
- Yang, R. (2000). Tensions between the global and the local: A comparative illustration of the reorganisation of China's higher education in the 1950s and 1990s. *Higher Education*, 39(3), 319–337.
- Yang, R., & Welch, A. R. (2012). A world-class university in China? The case of Tsinghua. *Higher Education*, 63(5), 645–666.
- Zhang, A. F. (2004). *A study of the management of a university with multiple campuses: The case of Wuhan University of Technology*. Doctoral thesis, Central China University of Science and Technology.

Chapter 8

Institutional Culture of Mergers and Alliances in South Africa

Martin Hall

8.1 Introduction

South Africa's extensive set of higher education mergers were implemented between 2002 and 2005. While there has not been a systematic evaluation of this merger process, that created 11 new institutions from 26 merger partners and affected 62 % of the South African higher education system (in terms of current student registrations), a full set of independent and rigorous quality assurance reports provide the basis for evaluating the consequences of the policy. These institutional audits suggest three broad types of outcome: mergers that have resulted in well functioning new institutions, failed mergers, and a set of new universities that are still responding to the consequences of merger. Finally, the publication of South Africa's new National Development Plan in 2012 and a new analysis of student access and success across the country's public higher education system as a whole, completed in 2013, allow an assessment of the degree to which the objectives of the 2002 merger plan have been achieved.

South African society is shaped by three centuries of racial segregation. This was formalized as apartheid in 1948 when the National Party assumed power. The first democratic elections were held in 1994, and 2 years later a new constitution embedded a Bill of Rights that included the principle of equal access to education, and the imperative of redress for the consequence of previous unfair discrimination. Translating these formal rights into substantive opportunities has required the comprehensive reconstruction of a wide range of organizations, including the country's Higher Education institutions. The newly-elected government had inherited an education system shaped by segregation in terms of race, ethnicity

M. Hall (✉)

Vice-Chancellor, University of Salford, Lancashire, UK

Graduate School of Business, University of Cape Town, Cape Town, South Africa
e-mail: martin.hall@salford.ac.uk

and language; a bewildering array that ranged from the conventional to the barely functional. Following an extensive series of commissions, reports and inquiries, the Minister for Education announced in 2002 an extensive and mandatory process of mergers (Hall et al. 2004a).

As part of this merger process, the Council on Higher Education (a statutory body charged with advising the Minister) commissioned a study on the governance of mergers. This work, which was later published, provided a window on the merger process at a key stage of planning and implementation (see Hall et al. 2004a; also Hall et al. 2002, 2004b; Hall and Symes 2003, 2005).

The chapter that follows here provides an overview of the discourse of the merger process in late 2002 and early 2003, and perceptions of these mergers over the decade that has followed. This is neither a comprehensive report on South Africa's Higher Education reconstruction or a systematic analysis of the consequences. It does, however, point to some key outcomes of this unique experiment in restructuring a university system at the national level by means of a mandated set of processes, rather than through voluntary arrangements.

The extent to which South Africa's 2002 merger plan has succeeded after the first decade can be assessed by asking three sets of questions. Firstly, and at the systemic level, has the reorganization of the national higher education system broken the "structural embrace" of apartheid architecture? Has the merger process contributed to addressing South Africa's overall labour force requirements? Second, at the level of the individual institution, which sets of conditions that were discernable at the beginning of the merger process in 2002 appear to have driven degrees of success over the following decade? How have the new types of institution envisaged in 2002 fared over the following decade? Third, from the perspective of students and their interests, to what extent has the merger process contributed to addressing access to Higher Education and subsequent levels of graduations? To what extent are South African universities open on merit, irrespective of race or socioeconomic class?

As Njabulo Ndebele, previously Vice-Chancellor of two very different South African universities, put it in the introduction to the key review of South African Higher Education that was released in 2013:

In moments of great historic transitions the world over, extremes of action are normal. Corrective in their intent, they are part of the logic of change. The ascendant power requires 'its own people' in large numbers to replace those that had kept going the passing old order. Statistics and quantification of the progress of change carry political import. They can validate or invalidate the new political order. Because they become part of the definition of success or failure, they bear consequences. Woe unto the new order that does not pay attention to them (Council on Higher Education 2013a).

8.2 Context

The merger plan that was approved by the South African government in 2002 has to be understood in the context of both the long years of formal segregation and of the broader policy imperatives that faced the newly-elected administration from 1994 onwards.

Apartheid legislation and practice had resulted in a unique combination of Higher Education governance arrangements, ranging from institutional autonomy in the British tradition for universities intended as reserved for white students (for example, the University of Cape Town, the University of the Witwatersrand), to direct government control in what were in effect extensions of a segregated civil service (for example, the University of Bophuthatswana, later renamed the University of the North-West, and the University of Transkei). Complicating things further was a binary division between vocational provision (technikons) and a bilateral distinction between Afrikaans medium institutions (such as the University of Pretoria and Technikon Port Elizabeth) and English medium provision (for example, Rhodes University and Cape Technikon).

Spatial segregation had been a formative aspect of South Africa's history for well over a century, enforced through legislation such as the Natives Land Act of 1913 and the Group Areas Act of 1950. Not surprisingly, spatial segregation had left a definitive imprint on the higher education system. By the end of the apartheid era there were three, racially-defined education administrations (for Whites, Coloureds and Indians) and multiple, ethnically-defined "homeland" administrations for Africans, the origins of universities such as Bophuthatswana, Venda and Zululand.

Whether institutions had a history of legal autonomy or of direct control, the State carried a substantial burden through funding a significant proportion of teaching and research costs and, increasingly after 1994, of providing student funding support through the National Student Financial Aid Scheme (NSFAS). Not surprisingly, there was a prevalent assumption that the country's entire Higher Education system was unfit for purpose for a post-apartheid South Africa (National Commission on Higher Education 1996).

There had been a long tradition of critique and active opposition to this segregated and discriminatory system. The eventual shape of a normalized Higher Education policy began to take form through the National Education Policy Investigation and its wide-ranging sets of reports (NEPI 1993) and the work of the National Commission on Higher Education between 1995 and 1996 (National Commission on Higher Education 1996). This led in turn to the key 1997 White Paper, which set out the principles for an open, non-discriminatory Higher Education system and which remains a key benchmark today (South African Government 1997a).

Following reports by the Council on Higher Education (a statutory body) and a National Commission on Higher Education, the government announced in 2002 a comprehensive set of compulsory mergers that would restructure South Africa's Higher Education system and reduce the apartheid legacy of 36 universities, technikons and institutes to 23 universities within the following 3 years (Council on Higher Education 2000, 2002; Hall et al. 2002; South African Government 2001, 2002a). This is summarized in Table 8.1.

The outcome of the merger process was three types of institutions: "traditional" universities, universities of technology (previously technikons, offering vocationally-oriented qualifications) and "comprehensive" universities (intended

Table 8.1 The restructuring of South African higher education

	Traditional universities		
24,772	University of Cape Town	Unchanged	
10741	University of Fort Hare	Amalgamated with part of Rhodes University	
29,901	University of the Free State	Unchanged	
41,224	University of KwaZulu-Natal	University of Natal University of Durban-Westville	January 2004
18,205	University of Limpopo	University of the North Medical University of South Africa	January 2005
55,732	North-West University	Potchefstroom University for Christian Higher Education University of the North-West	January 2004
57,114	University of Pretoria	Unchanged	
7,169	Rhodes University	Campus surrendered to Fort Hare	
27,344	University of Stellenbosch	Unchanged	
18,059	University of the Western Cape	Unchanged	
29,498	University of the Witwatersrand	Unchanged	
	Comprehensive Universities		
48,315	University of Johannesburg	Rand Afrikaans University Vista University Distance Education campus Technikon Witwatersrand	January 2005
26,119	Nelson Mandela Metropolitan University	University of Port Elizabeth Technikon Port Elizabeth	January 2005
293,437	University of South Africa	University of South Africa Technikon SA Vista University Distance Education campus	January 2004
10,679	University of Venda	Unchanged	
26,734	Walter Sisulu University of Technology and Science	University of Transkei Border Technikon Eastern Cape Technikon	January 2005
14,725	University of Zululand	Unchanged	
	Universities of Technology		
32,167	Cape Peninsula University of Technology	Peninsula Technikon Cape Technikon	January 2005
12,583	Central University of Technology	Unchanged	
25,184	Durban University of Technology	ML Sultan Technikon Natal Technikon	2002
10,003	Mangosuthu University of Technology	Unchanged	

(continued)

Table 8.1 (continued)

	Traditional universities		
51,785	Tshwane University of Technology	Pretoria Technikon	January 2004
		Technikon Northern Gauteng	
		North-West Technikon	
21,416	Vaal University of Technology	Unchanged	
982,936	Total undergraduate student headcount enrolment, 2011		

to offer a combination of academic and vocational qualifications). Twelve institutions would emerge largely untouched by the merger process, despite the earlier conclusion of the National Commission on Higher Education that no existing institution was fit for purpose. One merger had almost been completed voluntarily at the time that the government approved the overall policy, and the remaining ten would originate in a merger process in two phases, to be completed by January 2004 and January 2005 (South African Government 2002b).

It was in this context that the Council on Higher Education decided to commission additional research into the governance implications of institutional mergers and incorporations – the basis for the perspective presented here. In late 2002 and through the first half of 2003, nine institutions were visited, documentation collected and interviews with leadership and senior management conducted. The sample covered the full range of existing institutions, both by type and geographical location. The report was completed in June 2003 and published in August 2004 (Hall et al. 2004b).

At the time of this research, only one merger had been completed (between the M. L. Sultan and Natal Technikons, combined as the Durban Institute of Technology in April 2002, later renamed the Durban University of Technology). Those at the institutions visited who had been in intense discussions about mergers and merger processes for more than a year, knew their own broad trajectories, with projected mergers either the following year or 18 months into the future. But many aspects of process, resourcing and other details were unclear or unknown. Given this, a primary value of this work was as a record of the uncertainties and ambiguities that are inevitable in the gap between the development and implementation of system-level policies, and the pragmatics and consequences of implementation at the institutional level. The decisions and accommodations made in this “gap” have had a significant influence on the institutional forms that were to emerge, and which shape South Africa’s Higher Education today.

8.3 Responses from the Front Line

A merger process can usefully be understood as having three phases: a pre-merger phase, a transitional or interim phase, and a post-merger integration phase (following Goedegebure 1992; Eastman and Lang 2001). In the requirements set out in

South Africa's Higher Education Act, the pre-merger phase begins when the Minister gives written notice of the intention to merge two or more institutions, and opens a 90-day period for representations to be made. Following this, the Minister gives official notice that the merger will proceed, initiating the transitional phase of the process (South African Government 1997b). Institutional visits and interviews all took place in this transitional phase. During this time, which lasts between 6 months and a year, the Minister appoints an Interim Council which, in turn, appoints interim management. The post-merger phase begins when the Interim Council surrenders authority to the incoming Council of the newly formed university.

Despite the specifications of the Higher Education Act, there were ambiguities in interpretation and omissions of detail (Hall et al. 2004a). The voluntary merger of M. L. Sultan and Natal Technikons had proved difficult, with legal challenges, industrial disputes and considerable negative publicity (Chetty 2010). In the long period of uncertainty prior to the conclusion of the formal period of pre-merger representations in December 2002, there had been a considerable degree of political positioning by the affected institutions. For example, the geographically adjacent University of the Western Cape and the Peninsula Technikon had objected to the suggestion that they should merge to form a "comprehensive university"; the University of the Western Cape was exempted from merger while the Peninsula Technikon was merged with the Cape Technikon despite objections, forming a new "university of technology" with widely separate campuses. There had also been an abrasive, public, dispute between the Minister and the leadership of the University of South Africa, a distance education provider that objected to being merged with other elements of South Africa's distance provision (Hall et al. 2004a).

By early 2003, when the interviews were conducted, there was a general acceptance that mergers would go ahead, considerable confusion about what to expect, and realism about the need to take advantage of any opportunity to achieve the best possible outcome. At the beginning of the year, the Ministry of Education had written to all institutions affected by the merger process requiring, by June 2003, notification of the name, physical location and proposed start date for the newly-formed university, details of the process that would be followed to comply with labour legislation, and nominations for membership of the Interim Council (Hall et al. 2004a).

Given that there were no precedents, and scant guidelines, as to how these key decisions were to be made ahead of the installations of the new Interim Councils, pragmatism was the order of the day. Most institutions had set up internal merger processes and joint merger committees with their mandated partners. Merger committees were usually supported by task teams and merger managers, looking ahead to the requirements that would be faced by joint merger committees and Interim Councils as the transitional phase gathered momentum. Task teams were charged with specific areas such as academic administration, human resources, student services, information technology and buildings and infrastructure. Merger managers, often senior administrators or senior academics on secondment, always

worked closely with the Vice-Chancellor or Rector. Their primary responsibilities were coordination, change management and communication (Hall et al. 2004a).

Not surprisingly, there was at this time an overwhelming concern with practicalities, both because of the enormity of the merger challenge and because, throughout the merger processes, institutions were expected to continue to offer their full suites of academic programmes to their currently registered students, and to recruit new cohorts of students for the academic year that would begin in early 2004. In particular, there were significant anxieties about the financing of the merger process and the extent of the capacity for change. National budget provision was seen as too little and too late. Independent estimates had put the sectoral costs of the merger exercise at between ZAR4.8bn and ZAR5.7bn (\$600 m to \$710 m at the prevailing rate of exchange). In December 2002, the government was reported to have set aside ZAR3.1bn (\$380 m), and the national budget for 2003 allocated only ZAR800m (\$100 m) for each of the following 3 years (Hall et al. 2004a).

A further concern was compliance with labour legislation. Despite the fact that COSATU, South Africa's federation of trade unions, was formally part of the ANC government and committed to the restructuring of apartheid-era institutions, there had been significant challenges to the voluntary merger between M. L. Sultan and Natal Technikons by trade unions, resulting in court action. In many cases, university and technikon campuses were among the largest local employers and any efficiency process that removed jobs would have a significant impact on local economies and livelihoods. In a reflection of the government's political sensitivity to labour-related issues, the Higher Education Act had been amended in 2002 to require that all contracts of employment be transferred automatically to the merged institution, while at the same time allowing that pre-merger rationalization could take place in the terms of the existing Labour Relations Act (South African Government 2002b). Merging institutions were left to navigate the evident complexity of this legal framework.

Taken together, Councils, institutional leaders, merger committees and merger managers were faced with the formidable task of completing a broad set of due diligence requirements ahead of passing the baton to incoming Interim Councils and interim managers for the newly formed universities. They were expected to identify, audit, verify and disclose the assets, liabilities and obligations, systems and controls of the merging institutions, as well as deal with political complexities that ranged from labour relations to the often deeply-felt question of the name by which the new university would be known. In some cases – and as a consequence of the geographical segregation that had been a distinctive feature of apartheid – these processes had to be managed across campuses that were widely distributed. Some were spread across metropolitan regions (Johannesburg, Durban and Cape Town) or, in some cases, were hundreds of kilometres apart (for example, the merging University of the North-West and Potchefstroom University for Christian Higher Education).

Looming behind these immediate concerns – and the Minister's requirements for a set of specific outcomes by mid-2003 – was substantial unease about the educational mission (and therefore the academic viability) of the 11 new universities that

would emerge from the merger process. All who were interviewed believed that due diligence should extend to key issues in academic and institutional planning, including academic programme and course structures (and duplication of courses across institutions), qualification levels of staff, equity profiles of staff and students, student throughput rates and student fee levels. But the practical ability to do this varied greatly according to the magnitude of specific circumstances and resource capacity.

In addition, in restructuring the Higher Education system as a whole, the state had created a new type of institution, the “comprehensive university”. While this was evidently intended to serve where a former technikon was to merge with a previous university (four of the new comprehensive universities would have this heritage), two unchanged institutions were also now designated as comprehensive universities (the Universities of Venda and of Zululand). At the headline level it was apparent that comprehensive universities were to offer both vocational and academic qualifications, seeking to achieve appropriate overall balance in the range of qualifications attained and avoiding “mission drift”, whereby higher-status degree programmes were favoured at the expense of the mix of vocational qualifications required for overall economic development. However, there were no established principles or guidelines for how curricula should be structured or qualification frameworks implemented. Given that the state had the direct authority to steer the higher education system as a whole, in authorizing or withholding the recognition of qualifications and institutional funding through teaching grants, there were evident implications for the future viability of universities in this new category. However, given contingent demands, short time scales and resource constraints, there was often little that institutional leaders could do to address these issues (Hall et al. 2004a).

All those interviewed believed that integrating the academic functions of the newly-formed universities – whatever their type – would be a long and difficult process. Firstly, it would not be possible to introduce a new set of academic programmes for the launch date of the new university (at the beginning of either the 2004 or 2005 academic years). In addition, “pipeline” students already enrolled would have to be taught through to the completion of their curricula; given the low throughput levels for South African Higher Education, this could only be completed 4 years after merger, at the earliest (in 2008 or 2009). During this period of transition, it would in some cases be necessary to offer two sets of academic programmes at the same time, but without additional resources. Further, and as in all universities, changes to the profiles of academic programmes on offer would require extensive changes in administrative and professional staffing, in the composition and qualification levels of academic staff and in physical resources (Hall et al. 2004a).

Despite these concerns, in all cases the transitional phase of the merger process was completed and the newly-merged universities were launched, as planned, at the beginning of either the 2004 or the 2005 academic years.

8.4 Post-merger: A Decade of Integration

Despite the evident complexity of South Africa's project for Higher Education restructuring – and its high political, social and economic stakes – there has been no formal, comprehensive review of its outcomes. However, the audit reports carried out under the auspices of the Higher Education Quality Committee provide a considered set of perspectives on the outcomes of the merger process (Council on Higher Education 2013b). These have been completed for all but one of the new universities created by mergers, and have been conducted to a rigorous and comprehensive standard by panels of independent reviewers. While the HEQC's primary remit is the quality of teaching and research, all the audit reports also provide the viewpoint of the panel on the outcomes of merger. These reports are complemented by the narrower remit of the Higher Education Merger Study Group, which has been independently funded to provide continuity between the 2001 National Working Group and the outcomes of its recommendations (Gillard et al. 2012). Taken together, these reports provide the basis for a rough, threefold typology of institutional circumstances over the years, that followed the implementation of mergers.

Firstly, HEQC audit reports see four mergers as broadly successful: Nelson Mandela Metropolitan University, the University of Johannesburg, North-West University and the University of KwaZulu-Natal.

The HEQC's audit of Nelson Mandela Metropolitan University was carried out in 2008 and commended "the speed and effectiveness" of implementing operational measures, management structures and stable governance, while also noting some degree of staff demoralization that had damaged the quality of teaching (Council on Higher Education 2009a). The Higher Education Merger Study Group agreed with this assessment, noting that the new university "moved quickly to draw large numbers of people into developing policies and structures" and that "when staff of merged academic departments worked together, the department often benefited". Nevertheless, "different academic requirements and cultures [...] were often intensified when they remained on separate sites [...]" Incomplete issues included remuneration anomalies and the "academic shape" of the new university, particularly the future of vocational and diploma programmes (Gillard et al. 2012. See also Van Straaten Theron and Dodd 2011).

The HEQC visited the University of Johannesburg in the following year, where a different audit panel found that there had been "a radical organizational redesign and renewal process" that had included "considerable financial and human resources investment directed at amplifying (the university's) teaching and learning capacity" as well as "movement towards equalising infrastructure across campuses". As a result, "the institution appears considerably settled in relation to the operational aspects of the merger and is now in a position to embark on the task of giving expression to its mission and vision". Most staff members interviewed told the HEQC panel that the merger had been successful in producing a new institutional identity, although "in general, academic staff members still think in terms of

the old technikon and university divide, especially with regard to programme offerings” (Council on Higher Education 2010a).

The Higher Education Merger Study Group’s report for the University of Johannesburg adds more detail to the HEQC panel’s comments. “Perhaps the biggest challenge”, the Study Group concluded, was “the coexistence of degrees and ex-technikon diplomas in the same institution” (Gillard et al. 2012; see also Goldman 2012).

North-West University was also audited by the HEQC in 2009. Here, the panel made particular note of the challenge in bringing together three campuses across two provinces, separated from one another by a distance of at least 200 km. Given this, the audit panel commended the notable progress made across a wide range of merger requirements, but also noted “issues of student and staff profile, institutional culture and programme alignment” and that “the vast disparities between the campuses, for instance in infrastructure, resources and staffing, continue to exist”. The merger could not be regarded as complete until “students receive comparable levels and quality of programmes on all three campuses” (Council on Higher Education 2010b).

Evaluating progress at the new University of KwaZulu-Natal is complicated by the Council on Higher Education’s decision not to publish the HEQC’s report from the 2008 audit.¹ This deficit is, in part, mediated by the work of the Higher Education Merger Study Group. This report notes that there had been “daunting challenges” facing the merging institutions, and that the new university had over 40,000 students and over 4,000 staff, with several large campuses. A four-College model had been adopted to give the 56 academic schools coherence, but “disadvantages also surfaced”: “decision-making was often duplicated, because of the additional layer between faculties and Senate. The spread of activities over so many campuses inevitably prevented easy contact between people”. At the Study Group’s last visit to the university, in 2007, a range of staffing issues was unresolved, and consolidation of academic programmes was incomplete: “some academic areas had taken the opportunity to revamp curricula. Others, whether because of various complications or active or covert resistance, had been less successful” (Gillard et al. 2012).

While the unpublished HEQC audit report cannot be cited, long-standing tensions, that have characterized the new university since its inception, are a matter of public record and have centred on disciplinary action taken against two members of the University Senate after they tabled a critical report (McKune 2009). Nevertheless, it is apparent that the new University of KwaZulu-Natal has been successful in

¹ I was the Chair of the HEQC audit panel for the University of KwaZulu-Natal in 2008, and endorsed the report that the HEQC submitted to the Council on Higher Education. The audit was abandoned by the Council when confidential correspondence concerning the conduct of the University’s leadership was made public, and following the intervention in the audit process by the Vice-Chancellor. The audit report, while completed and endorsed by the audit panel, has yet to be released by the CHE. See Brooks (2011) for an account of this affair.

implementing its formative merger and through the following phase of consolidation.

These four, favourably reviewed, institutions have a number of features in common. Each has included a “historically advantaged” institution previously of university status (the University of Port Elizabeth, Rand Afrikaans University, Potchefstroom University for Christian Higher Education and the University of Natal). Each was able to move quickly and effectively to integrate, as far as was possible, a new organizational and operational structure. All, though, still faced considerable challenges in bringing the full range of their newly-combined staff with them in identifying with the new institution and its mission and purpose, and in integrating and aligning academic programmes across the new institution.

Secondly, and in striking contrast, are HEQC reports on two problematic merger outcomes: the University of Limpopo and the Walter Sisulu University of Technology and Science.

The HEQC audit of the Walter Sisulu University of Technology and Science was delayed by problems at the institution, finally taking place in 2011. The panel found that there were widely divergent views on the mission and purpose of the university. Their report described the merger as “a difficult and painful process, with significant resistance to the merger by staff, significant under-resourcing, weak financial management, and on-going fragmentation and lack of institutional coherence across campuses”. Poor management of the merger process had adversely affected staff morale. There were “many outstanding matters which must be resolved urgently, including the finalisation of the organisational structure, harmonisation of processes and systems, development of plans for financial sustainability, regularisation of staff contracts and job descriptions to ensure equitable service conditions, and implementation of a performance management system”. Unless these issues were addressed immediately, the panel reported, “the success of WSU, including educational quality and its sustainability as a higher education institution will be put at high risk” (Council on Higher Education 2011b).

Indeed, the Minister immediately appointed an Independent Assessor who reported in graphic detail: “an institution in crisis, riddled with conflict, mistrust and disaffection among its stakeholders. There is complete loss of confidence in university leadership [...] There are constant conflicts and battles between employees and management, as well as between students and management, incurring frequent strikes by workers and class boycotts by students. Labour unrest has included ‘Staff hostage taking, victimization of students, eviction of staff from offices and lecture rooms, locking out of staff, seizing of university keys and locking up of university buildings, abandoning of work stations by staff, closing and barricading of access entrances to the institution’ [...] Student uprisings have included arson (the torching of university buses) and other acts of violence. There is a pervasive disregard for rules and authority, and an air of anarchy rules within the institution” (South African Government 2011c). Following this report, the Council and Vice-Chancellor were suspended by the Minister, who in October 2011 used his authority in terms of the Higher Education Act to place the university under the control of an Administrator, reporting directly to him.

The HEQC audit of the University of Limpopo had been completed in 2010, and also described comprehensive failures of the new university's merger mandate. The university had been formed through the merger of the University of the North and the Medical University of South Africa (Medunsa) in 2005. Despite the fact that the campuses of the two institutions are some 300 km apart, a key objective had been to provide the rural Limpopo province with facilities for training in the health sciences: "not only was this aspect of the merger strongly resisted by Medunsa, it also led to a large number of resignations among its highly qualified academic staff". Further complications had stemmed from the joint funding of medical schools by the Department of Higher Education and Training and the provincial departments of health in two different provinces. The overall consequence was the lack of any appropriate institutional mission or shared purpose in the core functions of teaching and learning, research and community engagement (Council on Higher Education 2011a).

Following the HEQC audit, the Minister appointed a task team to investigate and this team reported in July 2011 (South African Government 2011b; Sidimba 2011). The conclusion was that "the merger [...] has not been successful and should be undone. The continuation of the merger will not benefit the current programmes of either campus". In June 2013, the Department of Higher Education and Training reported that the two institutions would be unbundled and Medunsa re-established as an independent university in January 2014 (Phakathi 2013).

In both cases, the unsuccessful mergers lacked a "strong partner", and the merging institutions had been facing considerable challenges prior to the merger process beginning. Neither was able to develop a clear sense of mission or purpose. Campuses of the new institutions are widely dispersed, in some cases hundreds of kilometres apart, with no easy transport networks. Both were designed to cater for students from economically marginalized and low income communities, including a substantial proportion from rural locations, and were expected to engage with these communities in addressing severe and extensive challenges of economic development and the provision of basic facilities.

The third type of outcome of the merger process is where the new universities are seen in their audit reports as still on track to achieving consolidation and integration, but where the process was still incomplete when last reviewed. They do not appear to be facing catastrophic scenarios (such as Walter Sisulu University) or the reversal of the merger (such as the University of Limpopo). However, they did not have the evident advantages of universities such as KwaZulu-Natal and North-West, which entered the merger with the significant assets of a previously advantaged institution. This group comprises the Durban University of Technology, Tshwane University of Technology, the University of South Africa, Cape Peninsula University of Technology and the University of Fort Hare.

When the HEQC audit panel assessed the Durban University of Technology in 2007, it noted that, although established in 2002, it had only been designated as a University of Technology in 2005. At the point of the audit visit, the university had just emerged from a period under the direct control of an Administrator, and the new Vice-Chancellor had only been in office for a few weeks (Council on Higher

Education 2008b). Chetty has commented that the audit process was itself a significant contributor to advancing a unity of purpose: “when it became known that DUT was going to be audited [...] staff largely set aside their differences, which up until then could be associated with the merger. As expressed by several staff members, the audit had galvanized people into action to portray a united front and not to let the institution down” (Chetty 2010). In one sense, then, while this had been an early, voluntary, merger, the process of establishing the identity and mission of the new university has started later than at other newly-formed institutions.

The HEQC audit report provided guidelines as to how this integration and alignment could be achieved. The university should create “the necessary mechanisms and processes for different layers of the institution to engage with its conceptualisation of ‘university of technology’, identify a developmental trajectory in relation to the three core functions and draw an implementation plan which establishes clear milestones, time-frames, responsibilities and performance indicators for the achievement of the goal of becoming a university of technology and its implications for the definition of quality”. Given its difficult history and conflictual experiences over the preceding 5 years, the university needed “to develop a shared institutional culture which is inclusive, transparent and community-oriented [...] a process of organisation building, led by the new Vice Chancellor, needs to take place in order for staff and students to develop a sense of belonging rooted in the new identity of DUT” (Council on Higher Education 2008b).

The HEQC Audit of the Tshwane University of Technology was also conducted in 2007. This new university had been launched through the merger of three previous technikons: Pretoria Technikon, Technikon Northern Gauteng and North-West Technikon. The audit report expressed concerns “that issues of ideology, race, language and work ethic generally constitute a source of tension among and between staff”, and that these issues were not being adequately addressed. There was no apparent sense of a common institutional purpose or new institutional identity (Council on Higher Education 2008a). In 2009, the Minister appointed a commission of inquiry into these ongoing problems (the Sithole Commission). The inquiry concluded that “there is a serious void between Council, the Senate and the executive management on the one hand, and the employees and students on the other. This has resulted in constant accusations and counter-accusations, ultimatums, demands and resulting strife within the University. The structures which were created to serve the interest of the employees and students and to assist governance and management to create an operational environment have become dysfunctional” (South African Government 2010). Following a further report by an Independent Assessor, the university was placed under formal administration until 2012, when a new Council and Vice-Chancellor were appointed.

The post-merger history of the Tshwane University of Technology, then, is similar to that of the Durban University of Technology: a difficult initial period, culminating in government intervention and the appointment of an Administrator, followed by the re-establishment of normal governance and the appointment of a new leadership team. The challenge facing the new leadership is substantial; more

than 50,000 student registrations and dispersed campuses in four different provinces, including both urban and rural areas.

The University of South Africa (Unisa) was, and is, different from all the other new and already established, universities in South Africa. Traditionally a large and long-established distance provider, it had been adapting to changing circumstances caused by the availability of new technologies and the emerging needs of its students. The merger, which had been hotly contested in a public dispute and court action, was intended to consolidate the existing institution with other elements of distance provision to create a new form of comprehensive university. This posed particular challenges. As the HEQC noted in the report on its 2008 audit, “Unisa’s student throughput does not compare well with other open distance learning institutions. This is a source of great concern for the Panel and an area for improvement of which the institution is aware. The Panel is concerned that the powerful social justice drive which defines Unisa’s access mandate might not be realised if students cannot progress through their studies, and the institution cannot produce a significant number of graduates to alleviate the country’s skills shortage and contribute to social development” (Council on Higher Education 2010c).

The audit panel noted that “the organisational, financial and human resource demands confronting Unisa from 2004 have been daunting”. While “the institution has risen to all these challenges with energy and focus”, key aspects of the transition process were incomplete: “the tensions of the merger resulted in a deterioration of the relationship between management and academics. While to a large extent, relations between management and academics have been restored, the Panel found significant expressions of dissatisfaction among academic staff”. In particular, workloads were too high: “most academic staff members have too many students to support and staff: student ratios in certain courses are far higher than the college average. [...] the very ambitious nature of Unisa’s strategic objectives, particularly in the area of research, might be putting an extraordinary load on staff” (Council on Higher Education 2010c).

As with the University of South Africa, the announcement of the initial merger that would establish the Cape Peninsula University of Technology had resulted in a public political dispute. Although this had been long resolved by the time that the HEQC audit was conducted in 2010, the new university had faced considerable challenges, as the audit panel noted: “the multi-campus and demographically diverse nature of the University pose challenges in the areas of student accommodation, suitable educational facilities, and teaching and learning approaches to support student success. The provision of an encompassing student experience that involves residential and day students, and that extends from the lecture halls and laboratories to other social spaces at each campus, is a fundamental challenge for the University”. Given this, the panel believed that the “development of a new academic identity and its concomitant institutional culture requires further reflection on issues such as student access and success and the necessary elements of an appropriate student experience” (Council on Higher Education 2011c).

The fifth university in this category is the University of Fort Hare. Here, the university’s identity had long been established with a proud reputation for

educating future leaders; this had been the first university that Nelson Mandela had attended. The merger had sought to widen Fort Hare's scope through the incorporation of an urban campus in the coastal town of East London, which had previously been part of Rhodes University. In comparison with the requirements of other merging institutions, Fort Hare's was a small merger mandate. However, and as the HEQC noted in its report of its 2008 audit, merger had been required in addition to ongoing recovery from near-catastrophe: "Fort Hare's evolution in the last 10 years was marked by an institutional crisis which took the University to the brink of collapse. Since 2000 UFH has been involved in a 'turnaround' strategy as a result of which the institution has managed to re-establish governance structures, achieved administrative stability, cleared its massive debt, and galvanised different internal stakeholders into action around a common academic project" (Council on Higher Education 2009b).

The Higher Education Merger Study Group has added a further perspective on the completion of their monitoring of the Fort Hare merger, also in 2008. In the merger, they reported, "even though programmes were complementary, two different cultures were brought together. UFH Alice offered a full spectrum of programmes to mostly residential students; students were often under-prepared and from rural areas. The East London campus had a more diverse student body of mostly non-residential, part-time, mature and working students, studying a smaller range of programmes mostly at evening classes" (Gillard et al. 2012). In the Study Group's view, the full potential of the merger had yet to be realized. For its part, the HEQC audit team saw the key requirement as finding "ways in which it can conceptually and operationally reconcile its rural and urban orientations without undermining the sustainability and development of the Alice campus" (Council on Higher Education 2009b).

The five universities in this third category of new universities have key aspects of their post-merger histories in common. All experienced a complex and ambivalent start to their emergence as a new university, either because of significant prior issues with which they had to contend (Durban University of Technology, University of Fort Hare), or because of high profile political disputes (Cape Peninsula University of Technology, Unisa), or because of internal gridlock during the key, initial years (Tshwane University of Technology). All of them carry major and extensive responsibility for economically marginalized students and their communities, often with a broad geographical spread. In their new form, they depend on breaking down the long established traditions of racial segregation and on building new commitments and identities. While they may have faced imminent institutional collapse (Tshwane University of Technology, Durban University of Technology, University of Fort Hare), they have survived, and recovered from these crisis interludes. All, though, will require more time before they can be said to have achieved full realignment and integration as new universities.

Taken as a whole, then, the HEQC audit reports for nine of the 11 new universities that were created through the implementation of South Africa's National Plan for Higher Education in 2002 have, with varied degrees of success, established

distinctive identities. In all cases, the post-merger phase of integration and consolidation remains incomplete. In some cases, it is clear that significantly more than a decade will be needed before all the requirements of the merger are fully met.

8.5 Progress in Post-apartheid Reconstruction

Some patterns clearly emerge from the HEQC audit reports and the outcomes of institution-specific studies. It is instructive to set these against the perceptions and concerns that were recorded in interviews with managers and university leaders in the first part of 2002 (Hall et al. 2004a).

Firstly, and most obviously, it is clear that the strength and extent of the assets of the partners in the merger have had a significant influence on the outcome. Notably, each in the set of more successful mergers included a “historically advantaged” institution previously of university status. None of the remaining seven new universities had this advantage. This meant that the distribution of assets across the range of mergers varied enormously, from new buildings and facilities and cash reserves to the consequences of sustained under-investment and already-existing deficits. The risks that these circumstances presented had been very evident to those interviewed in 2003, when there had been deep anxiety about the levels of funding provided by government. The consequences of under-funding have been to perpetuate some of the discriminatory differentiation that had been the signature of apartheid; those new universities, whose mission was primarily to provide opportunities for economically marginalized black students, continued to have the least resourcing in capital investment and facilities.

This pattern of asset differentiation across the range of new universities appears to have been a primary condition, which moderated the effects of other outcomes from the merger process. Where a new university such as KwaZulu-Natal or the North-West started off with a comparatively strong asset base it was more able to mitigate other stresses, as the outcomes of the merger unfolded. The circumstances faced by the new Walter Sisulu University, for example, were in stark contrast; given the sustained marginalization of the University of Transkei and the rural teknikons that were brought together in the merger, and the extremes of poverty across the Eastern Cape province, the new university did not have any buffer against other issues that emerged.

Secondly, multi-campus mergers were particularly complicated – a distinctive legacy from the apartheid years. Not surprisingly, the decision to reconstruct Higher Education as a unitary system necessitated the rationalization of a complex and dysfunctional dispersal of facilities. Again, this challenge had been fully anticipated by university managers and leaders in 2003, who understood only too well how difficult it would be to integrate campuses that could be more than 3 h drive apart.

In some cases, this was less of an issue. The Nelson Mandela Metropolitan University, for example, was forged for the most part out of two immediately

adjacent campuses (while also incorporating a campus of the previous Vista University). In contrast, the new North-West University had a particular challenge, with each of three campuses more than 200 km from the other. The large new Tshwane University of Technology was expected to unite six campuses spread across four of the country's nine provinces. And the University of Limpopo's mission was to bring together Medunsa's urban campus in Pretoria with the former University of the North's campus at Turfloop, some 300 km away (South African Government 2011a). Situations such as these presented significant difficulties in terms of organizational systems, administrative structures, departmental, Faculty and College structures and governance arrangements, particularly at Senate level.

Thirdly, it is clear in retrospect that strong and decisive initial responses to the announcement of merger details tended to have a sustained influence on the post-merger phase of integration. In 2003, some institutions were moving rapidly to set up Merger Committees and appoint Merger Managers, and were using these as a basis to begin practical collaboration with their merger partners. While there had been persistent calls for guidance and resourcing from the Ministry and its embryonic Merger Unit, these institutions had not waited for these calls to be answered. These strong responses appear to have brought sustained benefits, as the HEQC was to note in several of its audit reports; for example, at the new universities of Fort Hare, North-West and Johannesburg.

Conversely, political deadlock at the leadership level tended to be associated with a slow and prolonged start to the merger process, and coincided with a longer than anticipated process of post-merger integration (as reported for example, in the HEQC audits of Unisa and the Cape Peninsula University of Technology). In general terms, a sufficient minimum level of consensus appears necessary to avoid disaster scenarios, presaged in South Africa's regulatory system by Ministerial intervention, the appointment of an Independent Assessor, the suspension of normal governance and the appointment of an Administrator (all in terms of the Higher Education Act). Both the Durban University of Technology and the Tshwane University of Technology went to the brink of collapse but were able to recover. In the case of the University of Limpopo, no consensus was achieved between the merger partners and their leadership, and this merger has consequently failed.

Fourthly, compliance with labour legislation has often been particularly difficult. Again, this was widely anticipated in 2002/2003, both by government (in its amendment of the Higher Education Act) and by merging institutions. Apartheid segregation had created widely differing conditions of employment and consequent expectations. Technikons and universities had differing professional requirements of their staff and qualification structures. Behavioural differences tended to become attenuated, from language choice (South Africa has 11 official languages) and dress code, to parking arrangements. Both the HEQC audit reports and the Higher Education Mergers Study Group overview stress the ongoing need to achieve the harmonization of conditions of employment in the new universities. Where circumstances had deteriorated to the point where the Minister was obliged to appoint

an Administrator, crippling industrial disputes were invariably a significant factor in institutional breakdown.

Fifthly, educational mission and the alignment of academic programmes and qualifications remains, in all cases, a substantial issue. There are two, interlocked, issues here: the interpretation of the threefold differentiation between traditional, comprehensive and technical universities introduced as part of the merger policy, and the challenge of realigning all the academic programmes and qualifications offered across a single new university. These challenges were fully anticipated in 2002/2003. Those who were interviewed were concerned about the capacity to meet merger requirements at the same time that the Ministry was requiring academic programme and qualification alignment and regional collaboration outside, and in parallel with, the merger processes.

Neither of the more successful of the new “traditional universities” (KwaZulu-Natal and North-West) had achieved sufficient programme integration at the point at which they were reviewed by either the Higher Education Mergers Study Unit or the HEQC (in 2007 and 2009 respectively). For the “comprehensive universities” the problem was compounded by the need to define this new category. Professor Angina Parekh, a deputy vice-chancellor at the University of Johannesburg and previously Head of the Department of Education’s Merger Unit, expressed this problem candidly: “having done mergers, there now isn’t a very clear idea of what the institutions are and how they should deliver on their mandate. It has been left to universities to decide [...]” ([Mgqibela 2008](#)).

In addition to these five sets of issues that had been presaged in 2002 and 2003, as preparations for the mergers were in full swing, there were additional dimensions that may not have been sufficiently appreciated at the planning stage but which, in retrospect, have been significant: institutional culture, the socio-economic context in which specific universities must operate, and the challenge of bringing students along with the objectives of the merger process.

Institutional culture can be understood as the combination of traditions, organizational structures and group and individual behaviour that, together, come to define a university’s identity. All the new universities were still facing substantial challenges in this area, when visited by HEQC audit teams or by the Higher Education Mergers Study Group, and this was often expressed by staff referring back to institutional identities prior to the merger process. Where institutions got into particular difficulties, requiring the appointment of an Independent Assessor and Administrator, reports invariably point to a failure to establish a distinctive sense of identity or purpose (see Arnolds et al. [2013](#)).

As has been noted, South Africa is characterized by extreme income inequality. Since the first universal elections of 1994, this income inequality has persisted, and has been complicated by increased unemployment. At the same time, though, the system-wide merger proposal adopted by government was cast as a national project of reconstruction, seeking a unitary system of higher education comparable with contemporary international standards. As the Higher Education Mergers Study Group noted, this has encouraged “mission drift” in which prestige is granted to research leadership and academic qualifications rather than in terms of responding

to the needs of specific student populations. This policy framework may have resulted in insufficient recognition (and therefore inappropriate resourcing and expectations) of those new universities that would carry the primary burdens of sustained and extensive inequality: universities serving large rural areas, sometimes with urban campuses as well (Tshwane University of Technology, University of Fort Hare, University of Limpopo, Walter Sisulu University of Science and Technology), and universities serving low income communities in South Africa's three sprawling urban metropolitan areas (Durban University of Technology, Cape Peninsula University of Technology, University of Johannesburg).

Given the burden that all new universities have faced over the decade since mergers were announced, those that were exempted from merger have had a corresponding advantage. Some of these "old" universities were already facing significant challenges in serving marginalized students and communities (University of the Western Cape, University of Zululand, University of Venda). Others were already an elite group, and were the preference of the new black middle class (University of Cape Town, University of Pretoria, Rhodes University, University of Stellenbosch, University of the Witwatersrand). Given this, one consequence of the merger process, at the system level, may have been to further exacerbate inequality by increasing the premium value of admission to a local "Ivy League".

Not surprisingly, students have strong views on this issue, given their primary interest in educational outcomes. Those who are educationally qualified have demanded – and received – admission to the small set of elite universities, irrespective of their race. Those who have not had adequate qualifications for admissions to highly selective institutions – overwhelmingly those from low income families whose immediate forbearers had been the primary victims of apartheid – readily appreciated that the universities that they could attend had far fewer facilities, and that the educational qualifications that they would receive would have significantly less value in the labour market. In consequence, it is not surprising that they have tended to be angry and militant, and have often formed alliances with disaffected employees. At both the Tshwane University of Technology and the Walter Sisulu University of Science and Technology, student alliances with trade unions directly led to the suspension of autonomous governance and the appointment of an Administrator.

In general terms, student distance from the merger process was captured in debates at the South African Students Congress (SASCO) conference in 2009. The new universities created by the mergers were seen as having failed the requirements of the labour market. Patterns of graduate unemployment showed that previous patterns of discrimination and disadvantage had continued despite the merger process, and employers remained prejudiced against black graduates from disadvantaged backgrounds. Overall, SASCO saw the impact and outcomes of the mergers as unclear and called for a Commission of Inquiry to review the process and its consequences (SASCO 2009).

8.6 Conclusions

How successful, then, have Higher Education mergers been in South Africa? In drawing some conclusions from both the perspective of systemic national-level and institutional structure and of students, the pervasive effects of inequality permeate all aspects of both the mergers and the subsequent fortunes of both the new universities and those that were exempt from merger (Hall 2012a, b).

South Africa has long had, and continues to have, one of the highest levels of income inequality in the world (Seekings and Nattrass 2005; Statistics South Africa 2008). As in other countries, variations in household income have a direct affect on educational attainment. In 2007, just under one million young South Africans were eligible to enter the final examinations for compulsory education (the Matriculation Examination), 83 % of whom were African and 7 % were White. 35 % of the African candidates and 64 % of the White candidates wrote the examinations and passed. Of these, 34 % of the White candidates achieved an endorsement: the minimum grades in specified combinations of subjects to be eligible to apply for higher education. Only 6 % of African candidates achieved an endorsement. In South Africa, an A-aggregate is required for the most selective university programmes. One in 11 White candidates achieved an A-aggregate. This was matched by just one in 640 African candidates. As many commentators have noted, despite government focus on resourcing, South Africa's schools chronically underperform compared to similar emerging economies (Hall 2012a, b).

This pattern of inequality results in a distinctive “articulation gap” – the signature of South African schooling, and of subsequent opportunities after compulsory education (Council on Higher Education 2013a). In consequence, universities face widely different challenges. The level of educational attainment, material resources and expectations of a student enrolling at the University of Cape Town are very different from those of a student entering the Tshwane University of Technology. Any evaluation of the comparative success of universities in South Africa has to take account of the continuing, material effects of pronounced inequality.

But, significant as it is, continuing inequality does not fully account for graduate outcomes across South Africa's Higher Education system. This has been confirmed by the first system-wide study of student access to all South Africa's public universities and students' subsequent fortunes and levels of success. The core of this analysis is the student cohort that entered Higher Education in 2006, the first academic year following the completion of the merger process. This has shown that, while the effects of inequality are evident, underperformance by students from privileged backgrounds entering the most selective universities is also prevalent: “It is clear that systemic problems affect the whole school system, the functional and well-resourced schools, as well as the dysfunctional and poorly-resourced ones”. No socioeconomic or racially-defined group is performing well, and more than a third of the best performing group – white students mainly studying at well-resourced, traditional universities – fail to graduate within 5 years (Council on Higher Education 2013a).

Given these continuing challenges, then, has the reorganization of South Africa's higher education system broken the "structural embrace" of apartheid architecture, rooted in colonial education systems and formalized under the National Party governments of 1948–1990?

In one sense, this has evidently been the case, as the universities that the newly elected government inherited in 1994 were impossibly compromised. This was apparent through successive studies by the Council on Higher Education and in the recommendations brought together in the National Plan for Higher Education. Although there had been both the relaxation of regulations, and reforms, in the 1980s, it must be recalled that everything about South Africa's universities had been shaped by the practices and objectives of racial segregation. As Hendrik Verwoerd – then Minister of Native Affairs, later Prime Minister – had put it in 1953: "there is no place for [the Bantu] in the European community above the level of certain forms of labour [...] What is the use of teaching the Bantu child mathematics when it cannot use it in practice?" (Clark and Worger 2011).

Indeed, one criticism could be that the merger project did not go far enough. The National Commission on Higher Education, which had reported in 1996, had seen the whole system as dysfunctional; however, the proposals adopted by the government in 2002 left eight existing universities unchanged. The overview of the HEQC audit reports in this chapter suggests that a successful merger outcome has, a decade later, been associated with there being a strong partner in the process; in other words, a university that had been differentially favoured through the apartheid years. What would have happened if each of the Universities of Cape Town, Free State, Pretoria, Stellenbosch and Witwatersrand had been required to merge with a partner that had been reserved for black South Africans in the apartheid schema?

The decision to exclude a significant number of existing institutions has clearly diminished the overall effect of the merger process. This can be expressed through the proxy of undergraduate headcount enrolments in 2011 – the fifth year following the admission of the 2006 cohort, which has been analysed by the Council on Higher Education (Council on Higher Education 2013a). Headcount enrolments for all universities are given in Table 8.1. Excluding Unisa's distance education enrolments, only 51 % of these students were registered in merged institutions. Within this group of new universities, 25 % of total headcount enrolments were registered in the four "strong" mergers. A further 19 % were enrolled in the four "unresolved" mergers and 7 % were in the two failed mergers. In practice, this means that only a quarter of all 2011 undergraduate students were in truly "new" universities. This is not the extensive restructuring that had been recommended by the National Commission on Higher Education in 2001.

A second way of evaluating the overall merger process at the system level is in terms of national workforce planning; the provision of sufficient, and appropriately qualified, graduates for South Africa's present and future needs.

On the one hand, the overall size of the Higher Education system has continued to grow. Overall enrolment has increased by over 80 % since 1994, to a total enrolment of over 900,000. This expansion has contributed to redressing racial inequities, with African enrolments reaching 79 % of total enrolments by 2010, and

the number of African first-degree graduates growing by 50 % between 1995 and 2010 (Council on Higher Education 2013a). Whether or not this gross expansion would have happened without mergers is of course unknowable; clearly, though, mergers have not impeded overall expansion. In 2012, the government published a new National Development Plan. This has called for this expansion to continue, and to result in ten million graduates in 2030 (one in every six people), in contrast with 2001, when there were 2.6 graduates in the South African populations as a whole, one in every 17 people (Government of South Africa 2012).

Despite this overall growth, the National Development Plan is explicit in its criticisms of the suitability of the country's graduates for national workforce requirements: "the data on the quality of university education is disturbing. South African universities are mid-level performers in terms of knowledge production, with low participation, high attrition rates and insufficient capacity to produce the required levels of skills. They are still characterised by historical inequities and distortions. The university sector is under considerable strain. Enrolments have almost doubled in 18 years, yet the funding has not kept up, resulting in slow growth in the number of university lecturers, inadequate student accommodation, creaking university infrastructure and equipment shortages. The number of institutions that have recently been put under administration is an indication of the leadership and governance challenges" (South African Government 2012).

These deficits have been examined in detail by the Council on Higher Education's Task Team on undergraduate curricula structure (Council on Higher Education 2013a). When considered in terms of participation rates (using the standard Gross Enrolment Ratio), the targets set in the 2001 National Plan for Higher Education have been met, increasing from 15 % in 2000 to 18 % in 2010. However, pronounced racial inequalities persist. While white participation is comparable with developed country levels, the participation rate for black students is persistently low. The task team concluded: "the output of higher education is not meeting the country's needs [...] the system has low internal efficiency in utilising human and material resources (and consequently does not provide a sound basis for growth), and [...] the scale of the failure and dropout occurring within a small and selected student body points to substantial systemic problems that require systemic responses. It can be said that, in relation to its educational role, higher education in South Africa is a 'low-participation, high-attrition system' [...] that has not yet come to terms with its developing-country environment" (Council on Higher Education 2013a).

At the overall system level, then, outcomes of mergers have been mixed. What is still unclear is what will emerge from the five remaining, new universities that have certainly not failed, but which were still implementing key aspects of their mergers at the time of their HEQC audit reports. Leaving aside the special case of the Unisa, these are the Durban University of Technology, the Tshwane University of Technology, the Cape Peninsula University of Technology and the University of Fort Hare. Two are metropolitan, and two span the complex spread of urban and rural catchments. Three are universities of technology. Given their particular missions,

they can be seen as bellwethers for the future success of the education objectives set out in the 2012 National Development Plan.

The comparative success of individual institutions, as suggested in their HEQC audit reports, has already been described in terms of the availability of assets and financing, the challenges of multi-campus mergers, the alignment of academic programmes and qualifications, and institutional culture. These factors have evidently shaped patterns of success over the years following merger. In addition, a key aspect of the 2002 merger plan was a national mix of three kinds of institution: traditional universities, comprehensive universities, and universities of technology. To what extent has this trio of institutional types been consolidated as definitive of South African Higher Education? Again, the 2011 headcount enrolments shown in Table 8.1 can be as a proxy for the mix of post-merger institutional types. Turning now to this institutional level, which sets of conditions that were discernable at the beginning of the merger process in 2002 appear to have driven degrees of success over the following decade?

Firstly, and significantly, a third of all registered undergraduate students are with Unisa. For South Africa's very large distance provider, the breaking revolution in digitally-enabled, blended and on-line learning will have more significance than the new institutional models created by the 2002 merger plan. This will be a significant challenge, as is evident from the Council on Higher Education's analysis of the fortunes of the 2006 student cohort. For Unisa, the rates of attrition within 4 years of the expected completion time were 67 % for 3-year degrees (in other words, allowing 7 years for completion), 67 % for 4-year degrees (allowing 8 years for completion), and 86 % for 3-year diplomas (allowing 7 years for completion) (Council on Higher Education 2013a). Given this, there is an evident category error in regarding Unisa as a comprehensive university of similar type to, for example, the University of Johannesburg or the University of Venda. Distance provision in South Africa needs to be considered as a category of its own. This has been recognized in the 2012 National Development Plan. As a priority for investment through to 2030, the NPD notes the need to expand, and invest in distance education: "the advances in ICT can help overcome the infrastructure limits to further expansion of higher education. Upfront investment is needed in technology, curriculum design, quality assurance and monitoring" (South African Government 2012).

Secondly, when Unisa registrations were excluded, the distribution of 2011 headcount enrolments were 53 % in traditional universities, 21 % in comprehensive universities and 26 % in universities of technology. When the pre-reform distribution of assets and institutional capabilities is also taken into account, it is clear that the traditional university remains the overwhelmingly dominant form of higher education in South Africa. This is mirrored in patterns of state expenditure. Government accounts confirm that ZAR2.8bn (\$346 m) was spent on mergers over five successive funding years, beginning in 2004. This money was retained in the overall Higher Education budget, while being reallocated to fund infrastructure and efficiency grants from 2008 onwards (with an allocation of ZAR1.1bn in

2008/9, growing to ZAR1.6bn in 2011/12 – an increase from \$134 m to \$186 m).² Since this funding was available to all universities, this allocation policy has had the effect of further diminishing financial support available for the experiment with comprehensive universities and universities of technology, and of buttressing the comparative strength of traditional universities. Indeed, the primary importance of traditional universities is endorsed and emphasized by the National Planning Commission in its proposals that look forward to 2030 (Government of South Africa 2013a).

Thirdly, as the National Development Plan makes clear, the present and future needs of universities require far greater attention to the articulation between the school system, further education and vocational provision. In considering the success of the 2002 merger plan, this puts a spotlight on universities of technology and comprehensive universities as institutional types. How effective have they been in ensuring an effective spectrum of provision across all aspects of post-compulsory provision?

In total, the 2002 policy established six technical universities, three through mergers, and from a set of ten preceding technikons. Excluding Unisa, five comprehensive universities were established at the same time, three from mergers between previous technikons and traditional universities, and two by re-designating earlier, traditional universities that had, during the apartheid years, been set up for ethnically defined black “homelands” (Table 8.1). The mission intended for these 11 institutions was to span the distinction between vocational and academic qualifications, by means of a range of diplomas and degrees. It had been clear from the interviews carried out in early 2003 that there was little clarity as to how these broad intentions should, or could, be implemented at the level of the individual institution. The subsequent HEQC audit reports show that this lack of clarity often persisted after the mergers had been completed.

The mix of qualifications attained across the Higher Education system as a whole is reflected in the relative proportions of 3 year degrees and vocational diplomas. In 2001, when the merger process was launched, the ratio of degrees to diplomas was 55:45. By 2011 the overall number of graduates with these two types of qualification had increased by 71 %. However the ratio of degrees to diplomas was still 55:45.³ This suggests that, contrary to intention, the merger process has had at best no effect on rebalancing the overall proportions of vocational and academic qualifications that have been attained.

Overall, there is no evidence that the comprehensive university, as a new institutional type, has emerged as a strong identity. Given this, it is telling that the 2012 National Development Plan all but ignores the merger process of a decade earlier and, in addressing the challenge of articulation between vocational and academic provision, simply restates the problem that the National Commission on

² Higher Education and Training, University State Budgets. Jane Hendry, personal communication, 17 October 2013.

³ National HEMIS data base; Jane Hendry, personal communication, 17 October 2013.

Higher Education had addressed in 2001: “building an expanded, differentiated university system requires that other post-school institutions function optimally. If the college sector functions optimally, the pressure on universities to offer lower level diplomas and certificates will be reduced. This will allow universities to focus on their niche” (South African Government 2012).

Fourthly, this highlights the particular consequences of the failure to focus on curriculum reform as a central pillar of the 2002 merger plan. Interviews in 2003 showed a near-universal concern about academic programme reform, and articulation and subsequent HEQC audit reports have, in several cases, highlighted the problems that have followed as a consequence. At one extreme is the University of Limpopo, where the failure to align the educational missions of the two institutions entering the merger has been formally credited as the reason for the failure of the merger process. More prevalently, universities of technology and comprehensive universities have found it difficult to integrate very different kinds of curriculum structure.

The most recent Council on Higher Education’s investigation hints that the considerable institutional effort that has been put into tackling this problem may have yielded some positive results. The Council’s report notes that, contrary to a general trend of deteriorating quality of student results, there have been improvements in achievement by students studying for diplomas: “in some cases, the institutional mergers coming into effect at that time may have focused attention on educational management, but it is not clear what short-term improvements they may have brought about in teaching and learning” (Council on Higher Education 2013a). However, the overwhelming conclusion of the task team is that South Africa’s undergraduate curriculum structure is beyond repair, and needs comprehensive revision. As with the work of the National Planning Commission, the task team barely mentions the 2002 merger plan, and rather refers back to the 1997 White Paper as its reference point for essential changes to the higher education system.

Overall then, it seems that the implementation of the 2002 merger plan has had little sustained effect on institutional forms and structures. While, within institutions, considerable work has been put into interpreting what technical and comprehensive universities should be in distinction to traditional universities, institution structures long-established before the adoption of the merger plan have remained dominant. The most recent policy documents, including the country’s formally adopted National Development Plan that is intended to shape government policy over the next two decades, all but ignore the merger process and revert to the earlier challenges of recovery from the apartheid years.

From the student perspective, to what extent has the merger process contributed to addressing access and subsequent levels of success – who gets in, and how do they get on? More specifically is there any evidence, from the experience of the first post-merger student cohort that enrolled in 2006, that the mergers have made a difference?

The cohort analysis commissioned by the Council on Higher Education shows a pattern of high overall undergraduate attrition. Five years after entering, only 35 %

of the 2006 cohort had graduated (45 % when UNISA students are set to one side). For traditional 3 and 4 year undergraduate degree programmes only 52 % of the 2006 entering cohort had graduated after 5 years; the completion rate for diplomas after 5 years was only 42 %; particularly significant for the missions of the new comprehensive universities and universities of technology.

Equity, the representivity of the population as a whole in the profile of graduates, is also an important indicator of the extent to which universities are meeting the legitimate expectations of their students. While remaining low, 5-year completion rates for African students increased significantly when the fortunes of the 2000 and 2006 cohorts are compared (to the extent that data are available). In addition, the average gap between the African and white 5-year completion rates narrowed appreciably from the 2000 to the 2006 cohort, although this was in part due to a deterioration in the white completion rate. However, these changes pre-date the implementation of mergers and the overall situation is still that only 5 % of young black South Africans are succeeding in higher education (Council on Higher Education 2013a).

As far as students are concerned, then, the effects of the merger process seem to be at best neutral. Have mergers damaged student prospects? Has the amount of scarce institutional resources diverted to merger processes, the problems of “pipeline” students identified back in 2002 and the lack of a focus on curriculum reform detracted from improving teaching and providing student support? Here, a rough proxy is the proportion of students enrolled in universities where difficulties have been sufficient to require direct ministerial interventions in terms of the Higher Education Act. This has happened in four cases, with headcount enrolments in 2011 of just under 122,000 students, or 20 % of the country’s total undergraduate student enrolment, excluding Unisa students. Disruptions of this magnitude would have a considerable impact on any country’s Higher Education system, and all the more so through a period of national reconstruction following sustained and institutionalized discrimination.

Overall – and bringing together effects at the levels of the national system, individual universities and student expectations – South Africa’s Higher Education mergers have probably been irrelevant to the long-term process of recovery from the apartheid years. Trends evident prior to the implementation of the 2002 merger plan have continued despite the merger process. While it has been important to dismantle visible manifestations of apartheid, such as segregated campuses, the correlation between wide differences in access to educational facilities and race and economic circumstances are still only too evident.

In January 2005, both the Walter Sisulu University of Technology and Science and the Nelson Mandela Metropolitan University were inaugurated, named for the two iconic leaders of opposition to apartheid. In January 2013, students enrolling at these universities had very different backgrounds and experiences, and will have widely divergent prospects. In this, the core objective of reform of Higher Education in South Africa, as expressed in the 1997 White Paper, remains unrealized:

the higher education system must be planned, governed and funded as a single national coordinated system. This will enable us to overcome the fragmentation, inequality and inefficiency which are the legacy of the past, and create a learning society which releases the creative and intellectual energies of all our people towards meeting the goals of reconstruction and development (South African Government 1997a).

Acknowledgments I am grateful to Ashley Symes and Thierry Luescher for making this study possible through our baseline research during the early stages of the merger process. Brenda Cooper, Jane Hendry, Erica Gillard, Ian Scott and the editors of this volume have commented on earlier drafts of this chapter, for which I am also most grateful.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Arnolds, C., Stofile, R., & Lillah, R. (2013). Assessing the outcomes of the higher education mergers in South Africa: Implications for strategic management. *Acta Commercii*, 13(1), 1–11. <http://dx.doi.org/10.4102/ac.v13i1.175>
- Brooks, S. (2011, January 24). A crisis of credibility. *Natal Witness*. [http://www.witness.co.za/index.php?showcontent&global%5b_id%5d=54345\[25/01/2011](http://www.witness.co.za/index.php?showcontent&global%5b_id%5d=54345[25/01/2011)
- Chetty, G. (2010). *The transformation of the South African higher education sector through mergers – The case study of the Durban University of Technology*. Doctor of technology, Durban University of Technology: Faculty of Management Sciences Human Resources Management.
- Clark, N., & Worger, W. (2011). *South Africa – The rise and fall of apartheid* (Seminar studies in history). London: Longman.
- Council on Higher Education. (2000). *Towards a new higher education landscape: Meeting the equity, quality and social development imperatives of South Africa in the 21st Century*. Pretoria: Council on Higher Education.
- Council on Higher Education. (2002). *Policy report: Promoting good governance in South African higher education*. Pretoria: Council on Higher Education.
- Council on Higher Education. (2008a). *Audit report on the Tshwane University of Technology: Executive summary*. Audit Report 18. Pretoria: Council on Higher Education. http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2007_tut_executive_summary.pdf
- Council on Higher Education. (2008b). *Audit report on the Durban University of Technology: Executive summary*. [Online] Audit Report 21.
- Council on Higher Education. (2009a). *Audit report on the Nelson Mandela Metropolitan University: Executive summary*. [Online] Audit Report 25. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2008_nmmu_executive_summary.pdf
- Council on Higher Education. (2009b). *Audit report on University of Fort Hare: Executive summary*. [Online] Audit Report 23. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2008_ufh_executive_summary.pdf
- Council on Higher Education. (2010a). *Audit report on the University of Johannesburg: Executive summary*. [Online] Audit Report 28. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2009_uj_executive_summary.pdf

- Council on Higher Education. (2010b). *Audit report on North-West University: Executive summary*. [Online] Audit Report 27. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2009_north_west_university_executive_summary.pdf
- Council on Higher Education. (2010c). *Audit report on the University of South Africa: Executive summary*. [Online] Audit Report 24.. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2008_unisa_executive_summary.pdf
- Council on Higher Education. (2011a). *Audit report on the University of Limpopo: Executive summary*. [Online] Audit Report 31. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2010_lp_executive_summary.pdf
- Council on Higher Education. (2011b). *Audit report on Walter Sisulu University: Executive summary*. [Online] Audit Report 33. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2011_wsu_executive_summary.pdf
- Council on Higher Education. (2011c). *Audit report on the Cape Peninsula University of Technology: Executive summary*. [Online] Audit Report 32. Available at: http://www.che.ac.za/sites/default/files/institutional_audits/institutional_audits_2010_cput_executive_summary.pdf
- Council on Higher Education. (2013a). *A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure*. Report of the task team on undergraduate curriculum structure. Pretoria. http://www.che.ac.za/sites/default/files/publications/Full_Report.pdf
- Council on Higher Education. (2013b). *Summary of audit reports*. [Online] Available at: http://www.che.ac.za/focus_areas/auditing_of_institutions/summary_of_audit_reports. Accessed 25 Aug 2013.
- Eastman, J., & Lang, D. (2001). *Mergers in higher education: Lessons from theory and experience*. Toronto: University of Toronto Press.
- Gillard, E., Saunders, S., Terblanche, J., & Sukel, M. (2012). *A review of four case studies in restructuring the South African higher education system*. [Online] Available at: http://ahero.uwc.ac.za/index.php?module=cshe&action=viewtitle&id=cshe_842
- Goedegebuure, L. (1992). *Mergers in higher education*. Utrecht: Centre for Higher Education Policy Studies.
- Goldman, G. (2012). Exploring academics' experiences of a merger in higher education: The reflective experience of mergers (REM)-framework. *African Journal of Business Management*, 6(14), 4862–4879.
- Government of South Africa. (2013a). *Publication of lists of species that are threatened or protected, activities that are prohibited and exemption from restriction*. Notice 389 of 2013. Government Gazette, 16 April 2013, No. 36375. (10505), pp. 104–219.
- Hall, M. (2012a). *Inequality and higher education: Marketplace or social justice?* London: Leadership Foundation for Higher Education.
- Hall, M. (2012b). Inequality, and the public good and private benefits of higher education. In B. Leibowitz (Ed.), *Higher education for the public good; Views from the south*. Stoke-on-Trent: Trentham Books.
- Hall, M., & Symes, A. (2003). *Co-operative governance or conditional autonomy? Principles for governance of South African higher education*, 2, 5–29.
- Hall, M., & Symes, A. (2005). South African higher education in the first decade of democracy: From co-operative governance to conditional autonomy. *Studies in Higher Education*, 30(2), 199–212.
- Hall, M., Symes, A., & Luescher, T. (2002). *Governance in South African higher education. Research report prepared for the Council on Higher Education*. Pretoria: Council on Higher Education.
- Hall, M., Symes, A., & Luescher, T. (2004a). *The governance of merger in South African higher education*. Pretoria: Council on Higher Education.
- Hall, M., Symes, A., & Luescher, T. (2004b). The culture of governance in South African public higher education. *Journal of Higher Education Policy and Management*, 26(1), 91–107.

- McKune, C. (2009). Management shows contempt for academic freedom at UKZN. *South African Journal of Science*, 105, 5–6.
- Mgqibela, L. (2008). Comprehensive university reality “fraught and complicated”. *University World News*, (1). <http://www.universityworldnews.com/article.php?story=20080129095708408>
- National Commission on Higher Education. (1996). *A framework for transformation*. Pretoria: HSRC Publications.
- National Working Group. (2001). 23549 *The restructuring of the higher education system in South Africa: Report of the national working group to the Minister of Education*. Pretoria: Government Gazette Government Printers.
- NEPI. (1993). *National education policy investigation: The framework report and final report summaries*. Cape Town: Oxford University Press.
- Phakathi, B. (2013, June 19). Unbundling of University of Limpopo nearly finalized. *Business Day*. <http://www.bdlive.co.za/national/education/2013/06/19/unbundling-of-university-of-limpopo-nearly-finalised>
- SASCO. (2009). *Beyond the big bang mergers: A critical review of the higher education mergers in South Africa*. SASCO 16th National Congress discussion document: Education transformation. http://www.sasco.org.za/docs/congress/16_congress/he_mergers.pdf
- Seekings, J., & Natrass, N. (2005). *Class, race and inequality in South Africa*. New Haven: Yale University Press.
- Sidimba, L. (2011, July 24). Don't close under-fire Medunsa – report. *News24*. <http://www.news24.com/printArticle.aspx?iframe&aid=9f4dbda3-c871-433e-ae30-61123a7f81d5&cid=1057>
- South African Government. (1997a, August 15). A programme for the transformation of higher education. Education White Paper 3. *Government Gazette*.
- South African Government. (1997b, December 19). Higher Education Act No. 101 of 1997. *Government Gazette*. Amended in 1999, 2000, 2001 and 2002.
- South African Government. (2001). *National plan for higher education*. Pretoria: Ministry of Education.
- South African Government. (2002a, December 19). Higher Education Amendment Act No. 63 of 2002. *Government Gazette*.
- South African Government. (2002b, June 21). Transformation and restructuring: A new institutional landscape for higher education. *Government Gazette*.
- South African Government. (2010, November 22). Investigation into the Tshwane University of Technology. *Government Gazette*.
- South African Government. (2011a, July 8). Report of the task team into the impact of the merger between Medunsa and the University of the North to form the University of Limpopo and training of the education and health professionals, appointed by the Minister of Higher Education and Training. *Government Gazette*.
- South African Government. (2011b). *Statement by higher education and training minister Dr Blade Nzimande on the appointment of an administrator for Tshwane University of Technology*. [Online] Available at: <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=20757&tid=39623>
- South African Government. (2011c, September 28). Report of the independent assessor into the affairs of the Walter Sisulu University, appointed by the Minister of Higher Education and Training. *Government Gazette*.
- South African Government. (2012). *National development plan: Our future. Make it work*. Pretoria: National Planning Commission. <http://www.info.gov.za/view/DownloadFileAction?id=172306>
- Statistics South Africa. (2008). *Income and expenditure of households 2005/2006: Analysis of results*. Pretoria: Statistics South Africa.
- Van Straaten Theron, A., & Dodd, N. (2011). Organisational commitment in a post-merger situation. *South African Journal of Economic and Management Studies*, 14(3), 333–345.

Chapter 9

Institutional Combinations and the Creation of a New Higher Education Institutional Landscape in Post-1994 South Africa

Saleem Badat

9.1 Introduction

The institutional change agenda for higher education in South Africa post-1994 was extensive in its foci, ambitious in goals, and far-reaching in nature. There was a wide array of transformation-oriented initiatives aimed at institutional change. These included the definition of the purposes and goals of higher education; extensive policy research, policy formulation, adoption, and implementation in the areas of governance, funding, academic structure and programmes and quality assurance, and the enactment of new laws and regulations. There was also a major restructuring and reconfiguration of the higher education institutional landscape and of institutions that included the mergers of institutions and the incorporation of some institutions into others. These initiatives tested the capacities and capabilities of the state and higher education institutions and affected the pace, nature and outcomes of change. In this paper we examine one aspect of institutional change: mergers, addressing the context, determinants, dynamics and outcomes of mergers, or more generally institutional combinations, and the overall restructuring of the higher education institutional landscape post-1994.

Any adequate theorisation of institutional change in South African higher education must analyse such change within an overall analysis of the character of social-structural and conjunctural conditions (political, economic, social and ideological) post-1994. The distinction between structural and conjunctural conditions “refers to the division between elements of a (relatively) permanent and synchronic logic of a given social structure, and elements which emerge as temporary variations of its functioning in a diachronic perspective” (Melucci 1989). The distinction alerts us to both continuities and discontinuities in historical conditions and to

S. Badat (✉)

International Higher Education & Strategic Projects, The Andrew W Mellon Foundation,

New York, NY, USA

e-mail: sb@mellon.org

analyse institutional change in higher education within an awareness of changing historical conditions (structures and conjunctures). Higher education systems and institutions operate “within the framework of possibilities and constraints presented by the institutions of our complex societies” (Keane and Mier 1989). The analysis of change in higher education “must take into account the contradictions, possibilities and constraints of the conjunctural and structural conditions” (Wolpe and Unterhalter 1991).

Institutional change in higher education, however, cannot be explained only in terms of conditions in the wider society. Change in higher education is also shaped by conditions internal to higher education, including the nature of the inherited structure and the changing higher education terrain. Furthermore, change is “the product of purposeful orientations developed within a field of opportunities and constraints”, and of “cognitive and political praxis” (Melucci 1989; Eyerman and Jamison 1991). The goals and policies that are adopted, the choices, decisions and trade-offs made, and the strategies and instruments chosen and implemented by different social agents and actors acting in co-operation and/or conflict within the higher education system and its institutions – human agency as opposed to social structure – necessarily affects the pace, nature and outcomes of change.

9.2 The Context of Change

Colonialism and apartheid, social, political and economic discrimination, and inequalities of a class, “race”, gender, institutional and spatial nature all profoundly shaped South African higher education, establishing patterns of systemic inclusion, exclusion and marginalisation of particular social classes and groups. Apartheid ideology and planning resulted in higher education institutions that were reserved for different “race”, ethnic and language groups and allocated different ideological, economic and social functions in relation to the reproduction of the apartheid and capitalist social order. In terms of the apartheid policy of “separate development”, 87 % of the land surface of South Africa was reserved for the minority white population and 13 % for Africans, who constituted the vast majority (the bantustans – areas deemed to be the “homelands” of African South Africans). In the “white” areas of South Africa, 19 higher education institutions were reserved for the use of whites, two were designated for Coloureds, two were for the exclusive use of Indians and six were reserved for the use of Africans. There were seven institutions in the bantustans which were essentially for Africans. The structure of administrative regulation of higher education was extremely complex and fragmented, with numerous political structures and eight different state departments spanning “white” South Africa and the bantustans controlling the 36 institutions (Bunting 2002). Relative to white institutions, many black institutions were characterised by greater constraints on or denial of academic freedom, and extremely repressive conditions with respect to student governance and rights. Differences in allocated academic roles constituted the key axis of institutional differentiation and the principal basis of inequalities

between the historically white and historically black institutions prior to 1994. The institutions that were reserved for different racial, ethnic and language groups differed widely in terms of the breadth and nature of academic programmes, the quality of provision, the level of state investments and funding, and the adequacy of infrastructure and facilities and equipment. The location of the black institutions in mainly rural areas, as opposed to the urban locations of most white institutions, led to them being referred to as “bush colleges”. At the dawn of democracy in 1994, the higher education “system” comprised 21 public universities, 15 technikons, 120 colleges of education, 24 nursing and 11 agricultural colleges.

It has been contended that “white” higher education emerged at the behest of the social, economic and political demands of an enfranchised section of the community and [...] therefore tended to follow the ‘natural’ contours of economy and society. Black tertiary education, by contrast, (was) the historic by-product of racially motivated planning inflicted on a disenfranchised section of the community, and, as such, (was) not [...] primarily designed to accommodate the profile or patterns of civil society or – until recently – the economy (Van Onselen 1991).

This notion of a “complex dual legacy”, which treats historically white institutions as being the “organic outgrowth of an undemocratic political system” and the historically black institutions as the “artificial outgrowth of racially motivated planning” is highly flawed. As Ridge has commented, in van Onselen’s argument “an opposition is set up between “natural” factors and “planning” factors, with the effect of leaving only the black institutions scarred by apartheid” (Van Onselen 1991).

Ridge argues in contrast that “the conscious policies” of the historically white institutions “were also deeply influenced by central planning” and provides examples, such as “the phenomenal growth in Afrikaans university graduate programmes [...] and the growth of the white universities to accommodate the burgeoning numbers of white” secondary school graduates (Ridge 1991). He argues that there was also “a profound unconscious influence of central planning priorities on the white universities” (*ibid*, 1991). He notes that “in one sense white universities (were) better positioned to respond to the demands of the economy; in another they [...] “naturally” served the interests of the apartheid planners, strengthening the white hold on privilege” (Ridge 1991). The thrust of Ridge’s argument, correctly, is that both historically white and historically black institutions were profoundly shaped by apartheid planning and by the respective functions assigned to them in relation to the reproduction of the apartheid social order. It was the fundamental differences in allocated roles, whatever the differences among the historically white institutions and however diverse the origins and development of the historically black institutions, that distinguished these two sets of institutions and constituted the key differentiation and the principal basis of inequalities between them.

The USAID Tertiary Education Sector Assessment observed that “the requirements of apartheid and the historical competition between white English and Afrikaans speakers have led to distortions in planning for the higher education needs of the country and to considerable duplication of institutions and programs, particularly in the urban areas”, as well, in certain respects, between historically

white institutions and historically black institutions (USAID 1992: 6–21). It was further observed that the historically white institutions were not necessarily appropriately geared in all respects to the “modern core” of the economy, noting that “even at the leading institutions, research (was) unevenly concentrated in certain faculties and disciplines” (USAID 1992: 6.5). It was also noted that notwithstanding that the historically white South African universities were the major research institutions in Africa, with international reputations in fields such as engineering, medicine and the sciences, there were significant areas of weakness even in the fields of science and technology [...] On the whole [...] South African manufacturing depends heavily on imported technology, and has demonstrated little commitment to local innovation. In an increasingly competitive international environment, South Africa’s external technological dependence will make it increasingly difficult to maintain and develop its industrial base. More generally, analysts have noted “the lack of co-ordination between the objectives of research and socio-economic goals,” pointing to the low proportion of academic research funding expended on engineering, technology, math, and computer science [...] (USAID 1992: Appendix J, 51–2).

These comments underlie the inadequacy of the notion of the “organic” development of the historically white institutions as opposed to the racially planned development of the historically black institutions.

In summary, despite opposition at various times and in different forms from some historically white institutions and the historically black institutions to apartheid, both were products of apartheid planning and were functionally differentiated to serve the development and reproduction of the apartheid order. This racially structured differentiation was accompanied by a set of conditions, pertaining to funding, geographical location, staff qualifications, student access, opportunities and quality and so forth, which further disadvantaged the historically black institutions with respect even to the narrow range of teaching and research functions they were designed to carry out. Thus, post-1994, all higher education institutions needed to be liberated from this past to enable them to serve new societal goals. Planning had to take cognisance of and address the institutional and social inequalities and the distortions of the past, but had to also look to the future. A key challenge was for the inherited higher education institutions to be recognised as *South African* institutions, embraced as such, transformed where necessary, and put to work for and on behalf of all South Africans.

The post-1994 higher education terrain comprised a rich diversity of social actors. Higher education provision was regulated by a national ministry and department, which attempted to steer higher education to contribute to national policy goals through the instruments of planning and funding. A new body created by the 1997 Higher Education Act, (South African Government 1997) the Council on Higher Education (CHE), served as the statutory independent advisory body to the Minister of Education with responsibilities also for monitoring the achievement of policy goals and quality assurance through the Higher Education Quality Committee. Umbrella interest groups such as the South African University Vice-Chancellors Association, the Committee of Technikon Principals (later merged as

Higher Education South Africa) and the Alliance of Private Providers of Education, Training and Development existed, as did numerous national student organisations, academic and support staff labour unions and research and development agencies. The plethora of organisations representing diverse constituencies and social groups meant that policy formation was often strongly contested and mediated in different ways, with differing outcomes.

It should also be observed that there was an intractable tension between a number of the values and goals defined for post-1994 higher education. To take one example pertinent to institutional restructuring and combinations: in the light of the apartheid past, policy formation had to take into account numerous and diverse needs – social equity and institutional equity; equity and economic development, local and global issues and challenges, and global competitiveness and redistributive national reconstruction and development. A crucial question was how could South African higher education be oriented simultaneously towards all these needs and poles? How were the differing needs of equity *and* economic development, or global competitiveness *and* redistributive national reconstruction and development to be satisfied simultaneously? More specifically, what did this mean for the *system* of higher education and individual higher education institutions or for groupings of higher education institutions – such as the historically advantaged white and disadvantaged black universities and technikons (later universities of technology)? Were all higher education institutions to be oriented towards both poles, or was there to be some kind of differentiation and diversity with respect to the differing requirements of the two poles? Were these to be choices that are to be left to the higher education institutions themselves or was the state to actively steer in this regard? The transformation agenda in higher education was suffused with paradoxes, in so far as the new government and progressive social forces sought to pursue *simultaneously* a number of values and goals that were in tension with one another. The paradoxes necessarily raised the question of trade-offs between values, goals and strategies.

9.3 The Determinants and Trajectories of Change

Transforming the higher education system and creating a new institutional landscape that was better placed to meet the development goals of a democratic South Africa was part of higher education policy discourse since the report of the National Commission on Higher Education (NCHE) in 1996. In 1995 the NCHE was established by President Nelson Mandela to, among other things, advise the Minister of Education “on what constitutes Higher Education”, “the institutional types required for the system, their particular functions and missions”, (and) “their respective inter-relationships” (Moja and Cloete 1996). The NCHE reported in 1996, and buffeted by strong differences among key stakeholders advocated acceptance “in name, and in broad function and mission, the existence of universities, technikons and colleges as types of institutions” (cited in (Kraak 2001)). It also

proposed allowing a new system to “evolve through a planned process which recognises current institutional missions and capacities, addresses the distortions created by apartheid, and responds to emerging regional and national needs” (Kraak 2001). Kraak termed the NCHE view as a “middle-ground position” that “fudged” the differences between what he described as “functional and flexible differentiation” – the latter being institutional mission and programme-based differentiation (Kraak 2001).

The foundation policy document on post-1994 South African higher education was White Paper 3 of 1997, entitled *A Programme for the Transformation of Higher Education*. This committed the state to the restructuring of “the higher education system and its institutions to meet the needs of an increasingly technologically-oriented economy”, and to “deliver the requisite research, the highly trained people and the knowledge to equip a developing society with the capacity to address national needs and to participate in a rapidly changing and competitive global context” (Department of Education 1997). “White Paper 3”, noting the shortcomings of the structure of the inherited system, was emphatic that “the system has no alternative but to re-make itself in order to realise the vision and achieve the goals set out” for higher education (Department of Education 1997). It stated that:

A vital task [...] is to assess the optimal number and type of institutions needed to meet the goals of a transformed higher education system. Many institutions either require consolidation or retooling for new missions and goals. Narrow self-interest cannot be allowed to preclude planning which may lead to institutional mergers and closures, and the development of new institutional forms where these are necessary. (Department of Education 1997)

White Paper 3 emphasised the need “to conceptualise (and) plan [...] higher education in South Africa” as an integrated “single, national co-ordinated system”, “ensure diversity in its organisational form and in the institutional landscape”, and “diversify the system in terms of the mix of institutional missions and programmes that will be required to meet national and regional needs in social, cultural and economic development” (Department of Education 1997). However, a “uniform system” was not favoured and it was recognised that there would be a need to “offset pressures for homogenisation” (Department of Education 1997). A diversity of student bodies, academic programmes and institutional missions were considered to be “essential features of a thriving, integrated system” and it stated that the funding framework (would) support purposeful and equitable variety in the system (Department of Education 1997). A co-ordinated system was also desired for another reason: the inherited “size and shape of the higher education system (was) determined by uncoordinated institutional decisions on student enrolments and programme distribution”, which was “untenable in the context of fiscal constraints and the need for greater responsiveness of the higher education system to the national development agenda” (Department of Education 1997).

White Paper 3 was the outcome of a largely participatory process and represented a national democratic consensus on the principles and goals of higher education. State steering, using the three instruments of negotiated institutional and national planning, funding and quality assurance – was to be the means for creating

a new higher education landscape. In 1997, however, the state structure responsible for higher education was still in its infancy and its institutional capacity was yet to be fully developed. Between 1997 and 2001 there was strong contestation between the state, the national interest groups representing universities and technikons, and individual higher education institutions around institutional restructuring and the creation of a new higher education landscape. The struggles were manifested in the documents and utterances of different actors, and during meetings between the minister and his officials and individual institutions and the representative bodies of institutions, and also found expression in the public media. This revealed the fragility of the White Paper 3 consensus in so far as specific goals were concerned and the principal and particular criteria, processes and strategies that were to be deployed to achieve policy goals. Some actors, like the South African University Vice-Chancellors Association, wanted institutional restructuring to be left to voluntary actions on the part of higher education institutions themselves. Some historically advantaged white universities wanted a new landscape to emerge as an outcome of market forces; indeed, after 1994 some of their actions led to the higher education terrain taking on a “Darwinian” character, with a reinforcing of historical and racialised patterns of institutional advantage and disadvantage. Certain initiatives of historically white contact institutions, such as the offering of academic programmes through distance learning, while professed to be in support of expanding provision gave the impression of seeking to maintain largely white student bodies and white privilege. Some black institutions were focused solely on institutional redress and silent on the critical question of redress to create what kind of institution. Some technikons claimed to be disadvantaged because they had been confined to diploma and certificate programmes as opposed to degree programmes and clamoured for a different development trajectory. Left unchecked, these developments had the danger of solidifying a “free for all” higher education “system” characterised by the supremacy of unacceptable vested institutional interests and even greater fragmentation and incoherence, institutional inequalities and inefficient and ineffective utilisation of resources.

The Ministry was well aware of this danger. It had noted that it wanted to “avoid [...] a laissez-faire proliferation of higher education programmes by an increasing range of providers, without benefit of a planning framework and without adequate safeguards to ensure the quality of provision” (Department of Education 1997). It understood that “this would almost certainly result in the unplanned blurring of institutional roles and functions, and, given resource constraints, a strong tendency to over-provide low-cost programmes in low-priority curriculum areas” (Department of Education 1997). To the extent that significant and diverse social and institutional interests were not effectively mediated, there was the danger of policy paralysis and reproduction of the status quo. In the face of the strength of particular institutional interests, which made substantive consensus difficult, the role of the state began to predominate and there was acceleration towards substantive policy development of a distributive, redistributive and material nature. Concomitantly, and unfortunately, self-imposed austerity measures introduced by the new government to manage state debt and spending and the concomitant inadequacy of public

funding of higher education served as a brake on institutional change in various areas.

The process of deciding on “the optimal number and type of institutions needed to meet the goals of a transformed higher education system”, if much contested with respect to issues such as the appropriate strategies for restructuring, the form, pace and timeframes of restructuring and which institutions should be merged, was extensive. The strong policy signals from government did not yield significant and substantive results. Competing institutional interests and divisions along various lines meant that there was a dearth of proactive and coherent proposals on the part of key stakeholders, institutions and their constituency organisations to move the issue of restructuring forward on a creative and imaginative path. As noted, there was also a lack of deliberate and concerted steering on the part of the state, as the new state department for higher education was still in the process of being fully established. In the face of the inherited institutional inequalities, leaving the issue of a new higher education landscape to market forces would have resulted in a higher education system in sharp incongruence with what was sought by “White Paper 3”.

In 1999, a new Minister of Education emphasised his determination to critically examine and reshape the institutional landscape of higher education. He stated that:

The shape and size of the higher education system cannot be left to chance if we are to realise the vision of a rational, seamless higher education system, responsive to the needs of students of all ages and the intellectual challenges of the twenty-first century. The institutional landscape of higher education will be reviewed as a matter of urgency in collaboration with the Council on Higher Education. This landscape was largely dictated by the geo-political imagination of apartheid planners [...] It is vital that the mission and location of higher education institutions be re-examined [...]. (Council on Higher Education 2000)

In 2000, the Minister requested the CHE to conduct “an overarching exercise designed to put strategies into place to ensure that our higher education system is indeed on the road to the 21st century” (Council on Higher Education 2000). The Minister called for a set of concrete proposals on the shape and size of the higher education system and not a set of general principles which serve as guidelines for restructuring. I cannot over-emphasise the importance of the point. Until and unless we reach finality on institutional restructuring, we cannot take action and put in place the steps necessary to ensure the long-term affordability and sustainability of the higher education system (Council on Higher Education 2000).

The CHE report, *Towards a New Higher Education Landscape: Meeting the Equity, Quality and Social Development Imperatives of South Africa in the Twenty-First Century*, stated that “the problems and weaknesses of the higher education system will not disappear on their own or be overcome by institutions on their own. They must be confronted and overcome in a systemic way” (Council on Higher Education 2000). This would require the reconfiguration of the present system and the creation of a new higher education landscape; [...] extensive, integrated, iterative national planning as well as multiple co-ordinated interventions and initiatives. It will also require political will, sustained commitment and the courage to change at system and institutional level (Council on Higher Education 2000).

The CHE indicated that it sought “the development of a higher education system that delivers effectively and efficiently and is based on equity, quality and excellence; responsiveness; and good governance and management” (Council on Higher Education 2000). It argued that there was “a historic opportunity to reconfigure the higher education system in a principled and imaginative way, more suited to the needs of a democracy and all its citizens in contrast to the irrational and exclusionary imperatives that shaped large parts of the current system” (Council on Higher Education 2000). In its view its proposals provided “a framework and foundation for making the present incoherent, wasteful and un-coordinated higher education system rational, enabling significant improvements in quality and equity and ensuring that the knowledge and human resource needs of a developing democracy are effectively realized” (Council on Higher Education 2000). It recommended that the higher education system “should be reconfigured as a differentiated and diverse system so that there can be effective responses from institutions to the varied social needs of the country” (Council on Higher Education 2000). In such a new reconfigured system, institutions should have a range of mandates (principal orientations and core foci) and pursue coherent and more explicitly defined educational and social purposes with respect to the production of knowledge and successful graduates (*ibid*, 2000: 8–9).

The CHE endorsed institutional “differentiation and diversity” (Council on Higher Education 2000). “Differentiation” was used to refer to the social and educational mandates of institutions, which were to “orient institutions to meet economic and social goals by focusing on programmes at particular levels of the qualifications structure¹ and on particular kinds of research and community service” (Council on Higher Education 2000). “Diversity” referred to “the specific missions of individual institutions” (Council on Higher Education 2000). Three types of institutions were defined, that were to be differentiated in terms of their mandated “orientation and focus”:

1. Institutions which constitute the bedrock of the higher education system. The orientation and focus of these institutions would be quality undergraduate programmes; limited postgraduate programmes up to a taught master’s level; research related to curriculum, learning and teaching with a view to application.
2. Institutions whose orientation and focus is: quality undergraduate programmes; comprehensive postgraduate taught and research programmes up to the doctoral level; extensive research capabilities (basic, applied, strategic and developmental) across a broad range of areas.
3. Institutions whose orientation and focus is: quality undergraduate programmes; extensive postgraduate taught and research programmes up to the masters level; selective postgraduate taught and research programmes up to the doctoral level; select areas of research (basic, applied, strategic and development).

¹ South Africa has a National Qualifications Framework in terms of which higher education programmes range from levels 5 to 10. Level 5 is a programme that leads to a Certificate in higher education. Level 10 is a doctoral programme resulting in a doctoral qualification.

4. An institution whose orientation and focus is dedicated distance education.
5. Private higher education institutions (Council on Higher Education 2000).

The CHE report indicated “that there should be no closure of institutions but that the absolute number of institutions should be reduced through combination” (Council on Higher Education 2000). Here, however, it was constrained by the Minister’s injunction that there should be no closures of any universities or technikons, even though White Paper 3 had left this open as a possibility. The CHE provided “examples of possible combinations for illustrative purposes”, but urged that the Ministry should “investigate the full range of possibilities for combinations, and should also be open to compelling combination possibilities that may emerge from the iterative national planning process” (Council on Higher Education 2000). It also proposed “that as part of national planning and the development of a national plan, there should be an iterative process between the Minister and institutions around the reconfiguration of the system, combination and the mandates of institutions” (Council on Higher Education 2000). The CHE stressed these critical points. First, the Ministry had to “be mindful that under apartheid, institutions designated for black South Africans and the technikons were disadvantaged in different ways”; the CHE’s “reconfiguration proposals makes possible developmental trajectories for institutions to enable them to undertake specified mandates within a new national framework”. Second, the “success of reconfiguration will require the setting of nationally negotiated priorities and targets, as well as monitoring and evaluation mechanisms to track progress in their achievement”. Third, a new institutional landscape would not be possible “without the mobilisation of public, international donor and private sector funds for key strategic interventions” (Council on Higher Education 2000).

The Ministry responded to the CHE through its 2001 *National Plan for Higher Education*. The *National Plan* reaffirmed its commitment to the White Paper 3 goals (Ministry of Education 2001). It also signalled the Ministry of Education’s impatience with the pace and nature of change and its determination to act. The Minister of Education noted: “After apartheid, privilege and disadvantage is no longer kept in place by violence but by the workings of inertia and of continuing privilege – the higher education system, in large measure, continues to reproduce the inequities of the past. This must end”. The Minister added that the “time is long overdue. The reform of higher education cannot be further delayed. Nor can it be left to chance. The Plan is [...] not up for further consultation and certainly not for negotiation” (5 March 2001). The *Plan* elaborated seven specific objectives and 21 priorities that would be pursued in relation to five identified *White Paper* goals, the 16 outcomes that would be sought and the strategies and mechanisms that would be utilised to realize the outcomes. The goals related to the production of graduates (participation rate, student recruitment, distribution of students by fields and the quality of graduates); student and staff equity; the maintenance and enhancement of research outputs; differentiation and diversity in the higher education system, and restructuring of the higher education landscape (Ministry of Education 2001).

The “National Plan” initiated the merger of two geographically adjacent technikons in KwaZulu-Natal that were historically reserved for white and Indian students, by calling on their governing councils “to complete plans for the merger of the two institutions” (Ministry of Education 2001). The councils of the two institutions had already agreed to merge in principle. It is important to note that this was the only instance of a proactive, rational and bottom-up initiative on the part of any institutions. It set into motion the incorporation of a branch campus of one historically black university into that of another geographically closer historically white university. A Working Group was created to “facilitate the development of an implementation plan for establishing a single dedicated distance education institution” from a previous distance education university, a distance education technikon and the incorporation of the distance education unit of a university which was primarily a teacher education institution. The Working Group was also requested to “advise on the role of a dedicated distance education institution and to investigate the broader role of distance education in higher education in the light of current and future international trends and the changes in information and communication technology” (Ministry of Education 2001). One institution that was created under apartheid in “white” South Africa for urban African students and had satellite campuses in various regions was to “be unbundled and its constituent parts incorporated into the appropriate institutions within each region” (Ministry of Education 2001). In order to “facilitate mergers and the development of new institutional and organisation forms”, the *National Plan* also established a National Working Group (NWG) to “undertake regional feasibility studies to advise the Minister on the appropriate institutional structures to meet regional and national needs for higher education, including mergers and/or other forms of combination” (Ministry of Education 2001).

In 2001, the *Higher Education Act* was amended to give the Minister power to set scope of provision by public and private institutions. The NWG released its report, *The Restructuring of the Higher Education System in South Africa*, in 2002 (RSA 2002). It proposed to reduce the then 36 institutions to 21 through mergers and incorporations, though with no loss of sites of provision. Following the consideration of public submissions and the advice of the CHE, the Ministry submitted its own proposals on institutional restructuring for Cabinet approval. The government approved in late 2002 the Ministry proposals for a new landscape of 23 institutions. The emergent new institutional landscape was to comprise of the old traditional universities, six universities of technology (old technikons) and six new “comprehensive” institutions, which were created through the merger of a university and a technikon. A Merger Unit was created within the state department responsible for higher education, which in 2003 released “Guidelines” for merging institutions. Subsequently, the Ministry requested institutions to submit their proposed programme and qualification mixes and niche areas. After reviewing the submissions, it released for comment its proposed qualification and programme mixes and niche areas for institutions.

9.4 The Dynamics of Change

In 1994 the higher education “system” consisted of 21 public universities, 15 technikons, 120 colleges of education and 24 nursing and 11 agricultural colleges. By 2001 all the colleges of education were either closed or incorporated into the universities and technikons. Thereafter some of the 36 universities and technikons were either merged, unbundled or incorporated to give rise to the present landscape of 11 universities, 6 comprehensive universities (one distance) and 6 universities of technology. Two institutes of higher education were created as facilities through which particular academic programmes of the existing universities could be provided in provinces that did not have universities. After 1994, alongside the dominant public higher education a small but growing private higher education sector began to take root. The 1996 *Constitution* provided for such institutions on condition that they did not discriminate on the grounds of race, registered with the state, and maintained standards that are not inferior to those at comparable public educational institutions. The 1997 *Higher Education Act* stipulated the legal conditions for the registration of private higher education institutions and imposed various obligations. A regulatory framework was created to ensure that only those private institutions with the necessary infrastructure and resources to provide and sustain quality higher education would be registered. By 2010, there were 115 private institutions, largely small colleges that enrolled 96,000 students, as opposed to the public sector with over 900,000 students (Council on Higher Education 2000).

It was hoped that the institutional restructuring after 2001 would reconfigure the higher education system so that it was more suited to the needs of a developing democracy. In essence there were two elements in the creation of a new differentiated institutional landscape. One was institutional restructuring, which eventually reduced the previous 36 higher education institutions to 23 through mergers and incorporations based on various criteria. The other was that institutions were restricted to providing specific undergraduate and postgraduate qualifications and programmes, through mechanisms of state approval and accreditation by the CHE related to the quality of programmes. Diversity was to be ensured through the universities, the universities of technology and the comprehensive university institutions having specific institutional missions, which would be the consequence of institutional planning. Despite the instruments of planning (including enrolment planning), funding and quality assurance at the disposal of the state, there has been no concerted action to clarify and settle the specific missions of individual universities.

Differentiation was and has remained a difficult and contentious policy issue for a number of reasons. First, there have been sharply contested and differing views on the kinds of differentiation appropriate for South African higher education, with support expressed for differentiation on the basis of clear institutional types, functional differentiation and differentiation based on institutional missions and programmes. Second, the creation of a new differentiated institutional landscape

has had to address the issue of institutional identities, including the institutional missions, social and educational roles, academic qualification and programme mixes, institutional cultures and organisational forms and structures and practices of all institutions. Graham has argued that universities should avoid aspiring to “ideal(s) which they cannot attain”. Otherwise, “no sense of worth will be forthcoming” and they can have no “proper self-confidence” (Graham 2005). It must also be recognised that there are many conceptions and models of the “university” and that these have changed over time. It must be accepted that the “name “university” now applies to institutions with widely different functions and characters” (Graham 2005), and that this means that the “ideals each can aspire to” will be different (Graham 2005).

In as much as it may be acknowledged that the new socio-economic and educational goals and development challenges of democratic South Africa require a differentiated and diverse higher education system, in practice the trend has been towards institutional isomorphism, with “many institutions (aspiring) to a common “gold” standard as represented by the major research institutions, both nationally and internationally” (Ministry of Education 2001). This has been so, irrespective of the current capacities and capabilities of institutions with respect to the kinds, levels and breadth of academic qualifications and programmes that can be provided, and the kinds of scholarship and research that can be undertaken. There could be many drivers of institutional isomorphism: the influence of the Humboldtian model of the university; the assumption that status and prestige are associated solely with being a “research” university, and institutional redress conceived as an obligation on the state to facilitate historically black universities becoming “research” universities. Moreover, a new funding framework introduced in 2004 could also have inadvertently encouraged institutional isomorphism. The framework in seeking to promote research and the production of larger numbers of postgraduates rewards research outputs and funds postgraduate student outputs at significantly higher levels than undergraduate student outputs. Of course, there are often considerable upfront investments required to promote research and postgraduate education. Be that as it may, Graham is correct that “no sense of worth will be forthcoming” if South African universities aspire to “ideal(s) which they cannot attain”. Instead, the “ideals each can aspire to” and institutional mission and goals must be shaped by educational purposes, economic and social needs and available capacities and capabilities even if these capacities and capabilities may need to be enhanced in order to facilitate the effective undertaking of the institutional mission and goals.

Third, the creation of a new differentiated institutional landscape has needed to confront the historical burden of South African higher education: namely apartheid planning which differentiated institutions along lines of “race” and ethnicity, and institutionalised inequities that resulted in universities characterised by educational, financial, material and geographical (white) advantage and (black) disadvantage. There were understandable concerns among historically black institutions that a policy of differentiation and diversity could continue to disadvantage them, especially in the absence of development strategies and institutional redress to enable them to build the capacities and capabilities to address social and educational needs.

The key question has been “redress for what”; as the *National Plan* stated “notions of redress” had to shift from being “narrowly focused on the levelling of the playing fields between the historically black and historically white institutions” to one of capacitating historically black institutions “to discharge their institutional mission within an agreed national framework” (Ministry of Education 2001).

It is clear that the achievement of a differentiated and diverse institutional landscape has been bedevilled by a number of issues. Newby argues that “today’s universities are expected to engage in lifelong learning (not just “teaching”), research, knowledge transfer, social inclusion [...], local and regional economic development, citizenship training and much more. No university is resourced sufficiently to perform all these functions simultaneously and in equal measure at ever-increasing levels of quality” (Newby 2008). Institutions, therefore, have to identify niche areas of strength and increase the diversity of their missions. He also suggests that “different activities in universities have different geographical frames of reference” (Newby 2008). That is to say, research tends to be more globally oriented, undergraduate teaching and learning more nationally focused and knowledge transfer and community engagement more regionally and locally focused. This, of course, has implications for different kinds of universities. To the extent that differentiation is less the product of teaching excellence as much as of research performance, and if research of international quality is to be reserved for some institutions, what is the role of other institutions beyond being considered as simply teaching institutions? This is a vital issue that Newby notes has received little attention in the processes of state planning and steering. However, it is incorrect to assume that differentiation is entirely a matter of research performance rather than teaching: the teaching function in essentially undergraduate universities and research intensive universities is different in nature.

A second issue has been that while the “name “university” now applies to institutions with widely different functions and characters” (Graham 2005), and there are today “universities”, “universities of technology” and “comprehensive universities”, this has not fully settled the issue of diversity or institutional missions. Kraak, as an advocate of what he terms “flexible differentiation” (based on institutional missions and programmes) contends that the NCHE “fudged” the issue. His own preference and that of the *White Paper 3* and *National Plan*, however, could also be said to be a fudging of the issue. What is required, as Kraak himself has argued elsewhere, is “simultaneous consideration of both the intrinsic and institutional logics of a policy” (Young and Kraak 2001). Can flexible differentiation be entirely unhinged from the questions of the historical character of institutions, their historical and current academic capabilities and capacities and academic culture and organisation? Is it not the case that despite notions of flexible differentiation, the *de facto* situation in South Africa is one characterised by functional differentiation, even if some flexibility is accommodated and rigidity that may constrain institutional responsiveness to economic and social needs is mitigated through mechanisms such as planning? The real issue in South Africa, in a context of a higher education system that is functionally differentiated, is encouraging and ensuring a diversity of institutional missions among the traditional

universities, universities of technology and comprehensive universities and restricting unnecessary homogeneity, while ensuring that all institutions are adequately supported and developed to undertake their agreed specific roles and missions.

The issue of institutional aspirations, notwithstanding the current academic capabilities and capacities of an institution, has also bedevilled differentiation and diversity. Certainly, academic capabilities and capacities are not fixed and can be developed through considered institutional leadership, strategic planning, change management and investment of resources. However, where aspirant and envisaged institutional missions are currently greatly at odds with existing capabilities and capacities this can only relate to long-range projects. It may also not necessarily resolve the questions of differentiation and diversity, and institutional missions appropriate to context.

A fourth issue has been the efficacy of the instruments of planning, funding and quality assurance in shaping and settling institutional missions. Actually, it is not possible to pronounce unequivocally on this matter, as the state has not fully or effectively made recourse to the integrated use of planning, funding and quality assurance. Despite an ostensible commitment to flexible differentiation (institutional missions and programmes), the state in practice has, through creating three categories of universities (traditional, technology and comprehensive) and determining the qualifications and programme configurations of institutions institutionalised functional differentiation. This could account for the ongoing contestation between the state and some universities of technology which appear to have aspirations to offer programmes that have been generally reserved for universities.

Fifth, the creation of a new institutional landscape had to proceed at two levels simultaneously. On the one hand, new institutional identities and cultures had to be forged through the development of new institutional missions, social and educational roles, academic qualification and programme mixes for institutions and through the new organisational forms, structures and practices that are appropriate for different institutions. On the other hand, the complexity of the restructuring could not end with the issue of the identity and culture of the new institutions. It also needed to take into account the historical inequalities among higher education institutions that resulted in a system divided along the lines of advantage and disadvantage. No restructuring of the higher education system would succeed unless these issues were taken on seriously. In this regard it was fundamental to create the conditions, opportunities and provide the necessary resources for developmental trajectories for all higher education institutions, and especially the historically disadvantaged, taking into account their history as well as their envisaged new social and educational roles.

Sixth, whether mergers in general and specific mergers in particular would create equitable, productive and sustainable institutions and contribute to the effective and efficient achievement of wider national goals and institutionally specific goals could not be answered *a priori*. Only the passage of time and the initiative of key actors can provide an answer to the success or otherwise of

institutional restructuring and mergers. Strong and effective national shaping and steering of the system and appropriate and timely interventions are required, as well as creative thinking and change management at national and institutional levels. The dynamics of change in South African higher education shows that it is short-sighted to pursue policy goals without strong attention to the requisite human and financial resources for their achievement. From this perspective, a critical issue is the extent to which the relevant state department is able to mobilise the necessary human and financial resources to put into place the institutional arrangements, policies and practices that are essential to steer the process of restructuring, while also lending effective support to that process at the level of each individual institution and region.

Ultimately, successful restructuring had to respond to and promote the principal goals and key objectives of higher education transformation such as providing a full spectrum of advanced educational opportunities for an expanding range and number of people; ensuring greater student equity through providing opportunities for access and success; promoting staff equity to redress the historical predominance of white and male academics and senior support staff; creating an institutionally differentiated and diverse system and promoting high level research and research capacity for intellectual enquiry, application, and social development. Ultimately, the institutional restructuring of higher education and a new landscape had to “lay the foundation for an equitable, sustainable and productive higher education system that will be of high quality and contribute effectively and efficiently to the human resource, skills, knowledge and research needs of South Africa” and ensure that higher education makes an effective contribution to democracy, social justice and the economic and social development of South Africa (Republic of South Africa 2002).

The reconfiguration of the higher education system and institutions was seen as a necessary condition of a transformed higher education system that could lead to a more rational landscape for the investment of resources to pursue excellence and equity. This included a much more clearly specified range of institutional missions that encouraged universities to have coherent and more defined purposes with respect to the production of knowledge and graduates. A more rational landscape for higher education could also provide a more focused framework for innovation. Innovation in teaching and learning, in research and in community service was seen as more likely through a concentration of resources and attention on niche areas – centres of excellence grounded in real intellectual and physical capabilities – rather than across all areas within the system. Institutional restructuring and a new higher education landscape cannot, however, of themselves solve all the problems associated with the inherited higher education system. In other words, while institutional restructuring was a *necessary* condition of the transformation of South African higher education it was not a *sufficient* condition. Other strategies were also required to give effect to the comprehensive transformation of higher education and to realise its contribution to social equity and the economic, social, cultural and intellectual development needs and goals of South Africa. The Ministry itself was well aware “of the dangers inherent in focusing on structural changes, which

become an end in themselves rather than a means to achieve the broader goals and objectives of restructuring, that is, to create a high quality higher education system that contributes to the development of the high-level skills and knowledge and research needs of South Africa” ([Republic of South Africa 2002](#)).

9.5 The Outcomes of Change

In the light of it being understood that restructuring and the creation of a new higher education institutional landscape were not ends in themselves but means to the ends of creating a more rational, vibrant and effective system for pursuing equity, excellence and various economic and social goals, what have been the outcomes? The results a decade later are, as to be expected, mixed.

There has continued to be a very limited spectrum of post-school education opportunities, which have been essentially restricted to universities and further education and training colleges, many of poor quality. There are, however, at least 2.8 million people between the ages of 18–24 that are neither employed, nor at educational or vocational training institutions – the so-called NEETs ([Cloete 2009](#)). The vast majority (1.0 million) have less than a secondary school grade 10 qualification, some 990,000 have a grade 10–11 qualification and almost 600,000 have a grade 12 without exemption. There has been a critical need to reconceptualise and clarify the scope, structure, and landscape of the post-school system and institutions to give attention to the spectrum of post-school institutions that are required in relation to economic and social development needs, as well as to expand opportunities for high quality post-school education and training. Only in 2014, through a new “White Paper” has the intention been proclaimed of widening the range of post-school opportunities ([Department of Higher Education and Training 2013](#)).

The Department of Higher Education and Training’s (DHET) 2012 Green Paper for *Post-School Education and Training* acknowledges that “despite the many advances and gains made since 1994”, higher education is “inadequate in quantity [...] and, in many but not all instances, quality”, and that it continues “to produce and reproduce gender, class, racial and other inequalities with regard to access to educational opportunities and success” ([Department of Higher Education and Training 2012](#)). It notes that “universities are in general characterised by low success rates” ([Department of Higher Education and Training 2012](#)). It accepts that “university funding has not kept pace with enrolment growth”, and that despite “attempts to bring about greater equity between historically black universities and those which were more advantaged in the past” a shortage of resource shortages affected the ability of the historically black universities from “properly fulfilling their prime function – providing good undergraduate degrees to poor, rural students” ([Department of Higher Education and Training 2012](#)). The National Planning Commission (NPC) notes that “despite the significant increases in enrolment a number of challenges remain” ([National Planning Commission 2011a](#)). For one,

“throughput rates have not improved as fast as enrolment rates”; for another, under-prepared students have meant universities needing to establish academic development programmes and being sometimes “ill-equipped” to do so” (National Planning Commission 2011a). As a consequence, universities have not been “able to produce the number and quality of graduates demanded by the country” (National Planning Commission 2011a). Since “race remains a major determinant of graduation rates”, this has “major implications for social mobility and...for overcoming the inequalities of apartheid” (National Planning Commission 2011a). The NPC recognizes that “the university sector is under considerable strain. Enrolments have almost doubled in 18 years yet the funding has not kept up, resulting in slow growth in the number of university lecturers, inadequate student accommodation, creaking university infrastructure and equipment shortages” (National Planning Commission 2011a). The NPC states that it is critical for universities to “develop capacity to provide quality undergraduate teaching” (National Planning Commission 2012). It emphasizes the need for “uniform standards for infrastructure and equipment to support learning, promote equity and ensure that learners doing similar programmes in different institutions receive a comparable education”, special programmes for “underprepared learners to help them cope with the demands of higher education”, and for these programmes to be offered and funded at all institutions (National Planning Commission 2012).

Looking ahead, the recently released *White Paper* proposes to increase participation rates from 17.3 to 25 % and university headcount enrolments from about 950,000 in 2012 to 1,600,000 by 2030 (Department of Higher Education and Training 2013). It states that “as participation increases, universities must simultaneously focus their attention on improving student performance. Improving student access, success and throughput rates is a very serious challenge...and must become a priority focus for national policy and for the institutions themselves” (Department of Higher Education and Training 2013). More specifically, “the relationship between equity of access and equity of outcomes must [...] be a substantive area of focus” (Department of Higher Education and Training 2013). The key to improving “success rates significantly”, it is suggested, lies in “strengthening learning and teaching across the system” (Department of Higher Education and Training 2013). The NPC argues that “for the increase in the number of graduates to be meaningful, the quality of education needs to improve” (NDP 2012). It also calls for improving both “the quality of teaching and learning”, as well as “the qualifications of higher education academic staff” – from “the current 34 %” with doctorates “to over 75 % by 2030” (National Planning Commission 2012). Adequate student funding is a major constraint in effecting greater equity of access, opportunity and outcomes. In this regard, the *White Paper* commits government to “progressively introducing free education for the poor...as resources become available” (DHET 2013). The NPC proposes providing “all students who qualify for the National Student Financial Aid Scheme (NSFAS) with access to full funding through loans and bursaries to cover the costs of tuition, books, accommodation and other living expenses. Students who do not qualify should have access to bank loans, backed by state sureties” (National Planning Commission 2012).

With respect to enhancing research capacity, following the institutional restructuring the enrolments of postgraduate students and the numbers graduated have all been generally on the ascendancy. In 1995 there were 70,964 postgraduate students, comprising 13.7 % of the total student enrolments (Council on Higher Education 2004). By 2010, there was a virtual doubling of the number of postgraduate (postgraduate diploma/honours, master's and doctoral) students, the 138,608 students making up 15.5 % of the total student body (Council on Higher Education 2010). During the same year, there were some 40,124 graduates: 30,083 postgraduate diploma/honours graduates; 8,618 masters and 1,423 doctoral graduates. However, there are also shortcomings and constraints. Postgraduate student enrolments and outputs remain low in relation to economic and social development needs, and between 1995 and 2010 there was a marginal increase of 1.8 % in the size of the postgraduate student body. There are relatively poor graduation rates for masters (19 % against a benchmark graduation rate target of 33 % established by the 2001 National Plan for Higher Education) and doctorates (13 % against a target of 20 %) (National Planning Commission 2011b).

Only 34 % of academics have doctoral degrees, which is generally a prerequisite for undertaking high quality research and supervising doctoral students. The research performance of universities is highly uneven, with 10 universities producing 86 % of all research and 89 % of all doctoral graduates. It has been suggested that “there is every indication that knowledge output (as measured in terms of article production) may have reached a plateau at around 7,500 article equivalents per year (which constitutes about 0.4 % of total world science production)”; that it is doubtful that doctoral graduations can be increased unless “a number of systemic constraints such as the size of the pipeline from Honours onwards and the limited supervisory capacity in the system” can be addressed, and that “both the volume of output and overall productivity of institutions will decline” unless the academic work force is broadened considerably to include “many more black (and to a lesser extent female) academics who publish and regenerate the workforce” (Mouton 2010).

The 2012 *Green Paper* acknowledges that “the number of overall postgraduate qualifications obtained, particularly PhD graduates, is too low.” (DHET 2012). One “significant constraint on the ability of many students to obtain masters and PhDs” was poverty, “as poor students are under enormous pressure to leave university and get a job as soon as possible” (DHET 2012). It is recognised that “overall postgraduate provision deserves attention and that we need to drastically increase the number and quality of both the masters and the PhD degrees obtained” (DHET 2012). It is suggested that “improvement of undergraduate throughput rates must be a key strategy for increasing graduate outputs, for increasing the skills available to the economy, and providing larger numbers of students available for postgraduate study” (DHET 2012). The NPC proposes that “by 2030 over 25 % of university enrolments should be at postgraduate level” (15.5 % in 2010) and emphasizes “the number of science, technology, engineering and mathematics graduates should increase significantly” (National Planning Commission 2012). More specifically, by 2030 there should be “more than 5,000 doctoral graduates per year” (1,423 in 2010) and “most of these doctorates should be in science, engineering, technology and mathematics” (National Planning Commission 2012).

With respect to improvement in academic staff equity, racism and patriarchy as key features of colonialism and apartheid profoundly shaped the social composition of academic staff. In 1994, academics at South African universities were overwhelmingly white (83 %) and male (68 %). The sheer inequality of representation is highlighted by the fact that although black South Africans constituted 89 % of the population they comprised 17 % of academics. The under-representation of Africans was especially severe: making up almost 80 % of the population, they constituted 10 % of the academic workforce. Over the past two decades the academic workforce has become more equitable, although in 2012 the full-time permanent academic staff of 17,451 academics remained largely white (53 %) and male (55 %). The distribution of academics across universities has continued to be characterised by the contours of "race" and ethnicity; in 2009, the proportions of black academic staff at universities ranged from 17 to 91 % and the representation of women varied between 29 and 51 % ([Department of Education 2010](#)).

In so far as differentiation and diversity in higher education is concerned, the results have been equally mixed. Some of the institutional mergers have been generally successful and have given rise to new institutional missions, identities and integrated academic, governance, management and administrative structures. The incorporations of some institutions into other institutions, though not without various challenges, have been completed and also relatively successful. An envisaged single comprehensive university that was to be created out of a university and two technikons that were large distances apart has been largely a failure. The institution has been characterised by ongoing problems of academic quality, governance, management and administration and financing. It has been under administration for the past few years. In the case of two universities that were merged (one a specialist health sciences university), a decision has since been taken to demerge the universities and for them to once again be separate, independent universities with different developmental trajectories. In 2013, two institutes of higher education created as facilities through which existing universities could provide particular academic programmes in two provinces that did not have universities were established as independent new universities.

There has continued to be a combination of a lack of policy clarification and skirmishes between universities and some universities and the state around the issue of differentiation. In 2007, recognising a range of problems related to equity of opportunities and outcomes for students, Higher Education South Africa (HESA), the representative body for South African universities, proposed in a document tabled at a meeting with the President of the country, "that aspects of the CHE's Size and Shape Report (2000) be revisited" ([2007](#): 30). It suggested in particular, that consideration could be given to the notion of "bedrock universities" in which the focus is on offering high quality undergraduate programmes, limited taught Masters programmes, with research activities confined to issues related to the curriculum (*ibid*, 30). Despite this, the proposal gained little traction and thereafter at HESA level there was a stalemate on the discussion of differentiation. Indeed, strongly held and divergent views made impossible even intellectual discussion on the matter. In 2011, there was a renewal of discussions on differentiation, and

following a workshop on this matter a Differentiation Task Team was established “to develop a framework document on a proposed HESA approach to differentiation and to develop an instrument for surveying individual universities on their views on differentiation” (Higher Education South Africa 2012).

The Task Team produced a document, which was “offered as a contribution to exploring a differentiated and diverse higher education landscape in which there is an opportunity for institutions to contribute to the many purposes and roles of universities and higher education in differing ways, to re-vision their roles in relation to the varied social and economic imperatives, priorities, challenges and needs and of our society and, if necessary to re-craft institutional missions, development trajectories and identities” (Higher Education South Africa 2012). The document stated that HESA was “convinced that for the South African higher education system to effectively meet the varied social, economic, cultural developments needs of South Africa and the African continent, which range on a continuum from the global to the local, it must evince “diversity” “in the institutional landscape” and “its organisational form””; that there was “no virtue in entirely homogenous universities, or the pursuit of absolute homogeneity, where every university seeks to be the same and to undertake exactly the same purposes and functions. Nor is there any value in universities all aspiring to become “traditional universities” or towards the supposed “gold standards” of the “world class” or “research university””; and that “a differentiated system is better positioned to address national development and social imperatives, priorities, challenges and issues than an undifferentiated system” (Higher Education South Africa 2012). The HESA process remains to be finalised.

The government’s 2012 *Green Paper* noted that a diverse university system steeped in inequality is the product of apartheid education policies, and that reality still confronts us today. While our leading universities are internationally respected, our historically black universities continue to face severe financial, human, infrastructure and other resource constraints. Universities of Technology are in some instances experiencing mission drift, losing focus on their mission of producing technicians, technologists and other mid-level skills at undergraduate level. This problem is also evident in the comprehensive universities (Department of Higher Education and Training 2012).

It stated that the “key to strengthening the system is the principle of institutional differentiation, which has long been recognised in policy but has not always been supported through funding” (Department of Higher Education and Training 2012); and that “the need for a differentiated system of university education has long been recognised. Not all institutions can or should fulfil the same role” (Department of Higher Education and Training 2012).

Subsequently, the *White Paper* released in 2014 stated that it views “differentiation in a positive light” and sees it as “a way of ensuring a diverse system that will improve access for all South Africans to various forms of educational opportunities, improve participation and success rates...and enable all institutions to find niche areas that respond to various national development needs” (DHET 2013: 29). It proposes the following principles to “guide the focused differentiation of

universities and the formulation of institutional missions": no "further categorisation of institutions"; a "continuum of institutions" that range from "largely undergraduate institutions to specialized, research intensive universities which offer teaching programmes from undergraduate to doctoral level"; each institution will have "a clearly defined mandate"; the "mix and level of programmes offered at any institution should not be fixed, but should be capable of being developed over time, depending on its capacity", and "the need for developmental funding in poorly resourced institutions" (DHET 2013: 29–30). If the thinking exemplified in the DHET's 2014 "White Paper" wins support and there is determination on the part of the state to steer effectively using the instruments of planning, funding and quality assurance, there is a new opportunity to make progress on the differentiation issue.

A major problem has been that because of financial constraints the creation of a new differentiated institutional landscape has not adequately and fully resolved the historical burden of South African higher education: namely, educational, material, financial and geographical (white) advantage and (black) disadvantage. The continued under-developed institutional capacities of historically black institutions must be emphasised; providing access to rural poor and working class black students, inadequate state support for the historically black institutions to equalise the quality of undergraduate provision compromises their ability to facilitate equity of opportunity and outcomes. The absence until 2007 of significant new funds for higher education has necessarily caused anxieties and fuelled contestation. Following the mergers and incorporations in 2001, there was inadequate financial support from government for the creation of effective developmental trajectories for all higher education institutions. "Fiscal restraint and a shift towards conservative macro-economic policy" especially affected the historically black institutions, despite the provision of merger and recapitalisation funding and a new funding formula that introduced aspects of institutional redress funding (Kraak 2001). In such a context, differentiation and diversity become a financially a zero-sum situation, with certain clear winners and losers.

Since 2007, a new DHET's Infrastructure and Efficiency fund has allocated over \$1 billion (\$0.3 billion during 2007–2009, \$0.5 billion in 2010–2012, and \$0.4 billion for 2013–2015) to finance the backlogs and new infrastructure needs of all universities as well as address the historical backlogs of specifically historically black institutions. This is a continuing budget commitment and provides an invaluable opportunity to ensure that differentiation can be pursued more purposefully and need not be a zero-sum situation.

It can be argued that while South Africa has evinced considerable strengths at the level of higher education policy analysis, formulation and adoption, it has simultaneously displayed significant weaknesses in the equally critical domains of the planning of policy implementation and actual policy implementation. Creative change management is critical to successful transformation. Yet, the remarkable intellectual ingenuity, creativity, and inventiveness, the strategic and tactical acumen, and the stolid purpose that was prevalent in ridding South Africa of tyranny and fashioning its democracy has been sometimes lacking, both at the

level of the state and individual universities, in the innovation of the instruments, mechanisms, processes and technologies of institutional transformation. On the one hand the weakness around strategies of change could be a symptom of the under-theorisation of change or the difficulty in theorising change under new conditions. The key issues here include the respective roles of the state, universities and other higher education organisations; the possibly differing conceptions of co-operative governance, and varying notions of autonomy and accountability in a post-apartheid democracy; the appropriate balance in specific areas between institutional self-regulation and central prescription, the differing preoccupations, exigencies and capacities of key actors, and the extent to which there have been adequate institutional mechanisms for ongoing consensus-building and policy engagement within stipulated timeframes. On the other hand, the weaknesses and shortcomings could be related to the dearth of person-power with the requisite specialist expertise and experience of initiating and managing complex and participatory system and institutional change. At the same time that institutional restructuring and transformation is undertaken, various other aspects of the higher education system and universities have to continue to be steered, supported and maintained. System and university level maintenance, restructuring and change have to be addressed simultaneously (not consecutively). If not managed effectively and efficiently, parts and aspects of the higher education system and universities that are functioning relatively well can become dysfunctional, creating new problems for an already comprehensive and demanding transformation agenda.

9.6 Conclusion

Cloete and his collaborators² have posited “an analytic triangle called a network of co-ordination” which “locates change within a complex interaction between the state, society and institutions, within the context of globalisation”, in order to develop a “structural understanding of how systems change” (Cloete et al. 2002). They, argue that in South African higher education “most changes occurred not as a result of centrally driven government policies, but through complex interactions among policy, societal and market forces and, above all, through a wide range of unexpected institutional responses” (Cloete and Maassen 2002). Another scholar argues that change has arisen from the interplay of “institutional micropolitics” and “state macro-politics expressed through a range of agencies, including the government bureaucracy responsible for education”; that is to say, from “the complex of political interactions – conflicts, contestations and compromises” (Jansen 2002a). He adds, that “it is impossible to account for these changes outside the global context of higher education developments” – “much of what is happening locally

² Subsequent references to the ideas of Cloete and his collaborators for ease of reading refer to Cloete alone.

has its roots in what is taking place globally" (Jansen 2004). I have argued that the explanation of institutional change (and, for that matter, non-change) in post-1994 higher education must be related to social-structural and conjunctural conditions (political, economic, social and ideological), inherited and changing conditions within higher education itself, and the "purposeful orientations" and "cognitive and political praxis" of a range of social agents and actors acting in co-operation and/or conflict "within a field of opportunities and constraints" (Melucci 1989; Eyerman and Jamison 1991; Keane and Mier 1989). I have also emphasised the need to be alert to changing conjunctural conditions and their implications for continuities and discontinuities in higher education.

There is much to commend in the theorisations of both Cloete and Jansen. There is no disagreement that globalisation is a key social-structural condition that has in different ways shaped state policies and higher education. However, Jansen's notion that local developments in South Africa have their *origins* "in what is taking place globally" is debatable, if this suggests that countries have absolutely no room to shape their own policies and practices. There is agreement that change has occurred as a consequence of "complex interactions" or "the complex of political interactions – conflicts, contestations and compromises"; or the "purposeful orientations" and praxis of a range of social agents and actors in co-operation and/or conflict. There is also agreement that "institutions" (universities in the case of Cloete), "institutional micropolitics" (played out in universities and colleges) and social agents (which includes, but are not exclusively, universities) have for various reasons been significant in the process of institutional change. Indeed, change and outcomes such as a new and differentiated higher education and universities with new missions, identities and academic orientations and structures have been the result of multiple factors and actions. This has included state-led institutional restructuring; state-university negotiations around the qualifications and programme mixes of institutions; the ways in which, the extent to which and the efficacy with which the instruments of planning, funding and quality assurance have been utilised by both the state and universities; the ways in which universities have engaged with market forces, political institutions and organisations, state policies and civil society; the particular values, calculations, strategies and tactics that have informed such engagements, and the institutional capabilities and capacities, including knowledge, expertise, resources and leadership and management abilities, that have been deployed in such engagements.

Scott makes the important point that "organisations are creatures of their institutional environments, but most modern organisations are constituted as active players, not passive pawns" (cited in Cloete and Maassen 2002: 476). Similarly, Weiler notes that "universities are [...] not uncritical respondents to global authority" (cited in Jansen et al. 2007: 180). Further, although "it was initially assumed that the main driver of change would be government policy, informed by a participatory policy formulation process, and implemented by a new progressive bureaucracy [...] change in higher education institutions followed a variety of routes" (Cloete and Maassen 2002). This makes it clear that state-led policy formulation and adoption are just two specific aspects or phases of policy making,

and that the making of policy and policy outcomes are not reducible to policy formulation and adoption. Policies that are implemented or come to exist in practice are not infrequently different from those which exist in texts. Legally authorised formulators and adopters of policy are not the key actors in policy making in all circumstances, and to view them as such is to grossly overstate their importance. How key and influential they are in the making of policy and in policy outcomes is dependent on structural and conjunctural conditions. To put it differently, in practice other social agents and actors can be the key policy making actors.

Drawing on Carnoy and Samoff,³ Jansen argues that “in developing countries, radical changes in [...] higher education are often invoked by changes in political regime” (2002a, b: 157). This is true of South Africa: it was the transition to democracy under a progressive Constitution and substantive Bill of Rights, and the ascendance to power of the African National Congress with a commitment to transforming higher education and institutionalising a new social order that in the first instance created the conditions for institutional change in higher education. This is especially clear with respect to advances in social equity and redress for students of working class and rural poor social origins, which has been as much the effect of the prohibition of discrimination as of state policies of equity and redress. It is also reflected by the emergence of new private providers, which the Constitution made possible, even if this has been a widespread phenomenon of globalisation, and by the considerable internationalisation in the student body that has occurred after 1994.

In summary, institutional change in post-1994 South African higher education has been characterised by ruptures and discontinuities with the past, resulting in the emergence of a new institutional landscape and new configuration of public universities; by the conservation of institutional types and institutions as well as their dissolution, restructuring and reconstruction, and by successes in the achievements of goals, policy, planning, strategy and implementation as well as failures and shortcomings in these regards.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Anon. (2012). *National Development Plan 2030 – Chapter 9: Improving education, training and innovation*. Pretoria: The Presidency.
- Bunting, I. (2002). The higher education landscape under apartheid. In N. Cloete et al. (Eds.), *Transformation in higher education: Global pressures and local realities in South Africa*. Lansdowne: Juta & Co Pty Ltd.

³ Carnoy and Samoff (1990) *Education and Social Transition in the Third World*. New Jersey: Princeton University Press.

- Cloete, N. (Ed.). (2009). *Responding to the educational needs of post-school youth: Determining the scope of the problem and developing a capacity-building model*. Cape Town: Centre for Higher Education Transformation.
- Cloete, N., & Maassen, P. (2002). The limits of policy in Cloete. In N. Fehnel (Ed.), *Transformation in higher education: Global pressures and local realities in South Africa*. Lansdowne: Juta & Co Pty Ltd.
- Cloete, N., et al. (Eds.). (2002). "Introduction" in *transformation in higher education: Global pressures and local realities in South Africa*. Lansdowne: Juta & Co Pty Ltd.
- Council on Higher Education. (2000). *Towards a new higher education landscape: Meeting the equity, quality and social development imperatives of South Africa in the 21st century*. Pretoria: Council on Higher Education.
- Council on Higher Education. (2004). *Higher education in the first decade of democracy*. Pretoria: Council on Higher Education.
- Council on Higher Education. (2010). *Higher education in South Africa Data 2010*. Pretoria: Council on Higher Education.
- Department of Education. (1997). *Education White paper 3: A programme for the transformation of higher education*. Pretoria: DoE.
- Department of Education. (2010). *Education statistics in South Africa 2009*. Pretoria: Department of Basic Education.
- Department of Higher Education and Training. (2012). *Green paper for post-school education and training*. Pretoria: DHET.
- Department of Higher Education and Training. (2013). *White paper for post-school education and training: Building an expanded, effective and integrated post-school system*. Pretoria: DHET.
- Eyerman, R., & Jamison, A. (1991). *Social movements: A cognitive approach*. University Park: The Pennsylvania State University Press.
- Graham, G. (2005). *The institution of intellectual values: Realism and idealism in higher education*. Exeter: Imprint Academic.
- Higher Education South Africa. (2007). *The challenge of renewal and engagement: Public higher education in South Africa. Report submitted to the presidential working group on higher education*. Pretoria: HESA.
- Higher Education South Africa. (2012). *Differentiation in higher education*. Pretoria: HESA.
- Jansen, J. (Ed.). (2002a). *Mergers in higher education: Lessons learned in transitional contexts*. Pretoria: Unisa Press.
- Jansen, J. (2002b). Mergers in higher education: Theorising change in transitional contexts. In J. Jansen (Ed.), *Mergers in higher education: Lessons learned in transitional contexts*. Pretoria: Unisa Press.
- Jansen, J. (2004). Changes and continuities in South Africa's higher education system, 1994 to 2004. In L. Chisholm (Ed.), *Changing class: Education and social change in post-apartheid South Africa*. Pretoria: Human Science Research Council Press.
- Jansen, J., et al. (2007). Tracing and explaining change in higher education: The South African case. In *Review of higher education in South Africa: Selected themes*. Pretoria: Council on Higher Education.
- Keane, J., & Mier, P. (1989). Preface. In A. Melucci (Ed.), *Nomads of the present: Social movements and individual needs in contemporary society*. Philadelphia: Temple University Press.
- Kraak, A. (2001). Policy ambiguity and slippage: Higher education under the new state, 1994–2001. In A. Kraak & M. Young (Eds.), *Education in retrospect: Policy and implementation since 1990*. Pretoria: Human Sciences Research Council.
- Melucci, A. (1989). *Nomads of the present: Social movements and individual needs in contemporary society*. Philadelphia: Temple University Press.
- Ministry of Education. (2001). *National plan for higher education*. Pretoria: Ministry of Education.

- Moja, T., & Cloete, N. (1996). Transforming higher education in South Africa: A new approach to governance. *A Journal of Opinion*, 24(1), 10–16.
- Mouton, J. (2010). *Knowledge production at SA universities: Issues of size, shape and stratification*. Franschhoek: Centre for Higher Education Transformation Workshop.
- National Planning Commission. (2011a). *Diagnostic overview*. Pretoria: The Presidency.
- National Planning Commission. (2011b). *National Development Plan 2030 – “Human conditions diagnostic”*. Pretoria: The Presidency.
- National Planning Commission. (2012). Chapter 9: Improving education, training and innovation. *National development plan 2030*. Pretoria: The Presidency.
- Newby, H. (2008). The challenge to European universities in the emerging global marketplace. In L. E. Weber & J. J. Duderstadt (Eds.), *The globalization of higher education*. London: Economica Ltd.
- Professor Kader Asmal, MP at the Media Launch of the National Plan for Higher Education Sol Plaatje House. (2001, March 5). Address by the Minister of Education.
- Republic of South Africa. (2002). *Ministry of Education – Transformation and restructuring: A new institutional landscape for higher education*. Government Gazette, 444(23549).
- Ridge, S. (1991, September 3). ‘Standards and university education’. Draft discussion paper, University of Western Cape, Cape Town, South Africa, Education Seminar.
- South African Government. (1997). *Higher Education Act No. 101 of 1997*. Government Gazette, 19 December. Amended in 1999, 2000, 2001 and 2002.
- United States Agency for International Development. (1992, April). *South Africa: Tertiary Education Sector Assessment*.
- Van Onselen, C. (1991). *Tertiary education in a democratic South Africa*. Unpublished mimeo.
- Wolpe, H., & Unterhalter, E. (1991). Introduction: Reproduction, reform and transformation: Approaches to the analysis of education in South Africa. In E. Unterhalter et al. (Eds.), *Apartheid education and popular struggles*. Johannesburg: Ravan Press.
- Young, M., & Kraak, A. (2001). Introduction. In A. Kraak & M. Young (Eds.), *Education in retrospect: Policy and implementation since 1990*. Pretoria: Human Sciences Research Council.

Part II

Mergers and Alliances at the Institutional Level – Experiences and Lessons

Chapter 10

Strategy to Join the Elite: Merger and the 2015 Agenda at the University of Manchester – An Update

Luke Georghiou

10.1 Introduction

The logo of the University of Manchester incorporates a date of establishment of 1824 but this display of pedigree disguises the much more recent foundation of a new university by Royal Charter¹ on 1st October 2004. This new university, immediately the United Kingdom's largest, was formed through an effective merger of two institutions, the Victoria University of Manchester² (VUM) and the University of Manchester Institute of Science and Technology (UMIST). At the time the use of the term 'merger' was discouraged as the project was not principally driven by the typical merger objectives of rationalisation and achieving scale. Rather the aim was to create a new institution that would drive towards a much higher position in the pantheon of world elite institutions than either of its predecessors had achieved in modern times but with a distinctive identity that did not

This is an updated version of a chapter first published as Georghiou, L. (2009) *Strategy to Join the Elite: Merger and the 2015 Agenda at the University of Manchester*, in McKelvey, M. and Holmen, M., *Learning to Compete in European Universities – from Social Institution to Knowledge Business*, Edward Elgar: Cheltenham. It is reproduced with the kind permission of Edward Elgar.

¹ A Royal Charter is a means of incorporation granted by the Sovereign of the United Kingdom on the advice of the Privy Council. The UK's older Universities derive their legal identity by this means, and though largely dependent upon government funding, are independent not-for-profit bodies with their own governing bodies with responsibilities similar to those of a company board.

² This was the formal name of the predecessor institution, reflecting its Victorian foundation, but it was almost universally known by the same name as its successor, the new University of Manchester. Prior to the merger UMIST staff and students almost universally referred to it as "Owens" after its historic college origins.

L. Georghiou (✉)

Manchester Business School MBS Harold Hankins Bldg.,
The University of Manchester, Oxford Road, M13 9PL Manchester, UK
e-mail: luke.georghiou@manchester.ac.uk

emulate the UK's so-called Golden Triangle of Cambridge, Oxford and the leading two London Universities, nor the highly-endowed US Ivy League.

This chapter will examine the rationale and expectations for the most ambitious project in British higher education and track the process of change. A particular focus will be the blueprint for this transformation, known as the 2015 Agenda – a set of evolving goals and performance indicators (subsequently relaunched and updated as a strategic plan called Manchester 2020). Progress to date and the challenges, expected and unexpected, that have surfaced will be discussed. In an ongoing project and with an insider's viewpoint there is no possibility of arriving at an objective assessment but some conclusions about the experience will nonetheless be drawn.

10.2 Rationale for a Merger and New University

The history of the two universities had been one of an unusually close relationship. UMIST, which as its name implies was principally a technical university but with a large management school, had its origins in 1824 (the aforementioned establishment date) when a group of prominent local citizens established a Mechanics Institute for the education of the workforce. By 1883 it had become a Technical School but from the point of view of the relationship, a key stage came in 1905 when it acquired the status of the Faculty of Technology of the Victoria University of Manchester and hence was able to award degrees. Formal University status came in 1955 when the institution received its own charter and funding stream from the University Grants Committee (an agency which distributed core funding to universities at arm's length from the government). Nonetheless the close relationship with VUM and the joint Manchester degree persisted until 1993 when the then Vice-Chancellor Professor Bob Boucher led a move to complete independence with any cooperation to be on the basis of equal but separate institutions.

The Victoria University of Manchester was a much larger comprehensive university which had begun with a bequest from the Victorian merchant and philanthropist John Owens in 1851 and gained a Royal Charter in 1880. An illustrious history with pioneering Nobel Prize winners such as the physicist Ernest Rutherford and the economist Arthur Lewis had flattened out to a position of being a large civic university of good standing but falling behind the UK's first rank institutions.

The explanation of the merger that was to come involves both an internal and an external rationale. Exploring first the internal logic, conditions in 2001 were favourable for change. Bob Boucher, who had strongly pursued the separation agenda had unexpectedly moved back to Sheffield University from where he had come and had been replaced by a new Vice-Chancellor Professor John Garside, an internal appointee with a different outlook. VUM's Vice-Chancellor, Sir Martin Harris, was approaching a decade in office and did not have long-term ambitions to

remain in post. Significantly, the term of John Garside's office was set to end on the same date as that of his counterpart.

Perhaps more relevantly, after the results of the 2001 Research Assessment Exercise both Universities were in a mood to contemplate their futures. For UMIST it was apparent that its small size and narrow focus made it vulnerable to potential shocks, for example in the supply of science and engineering students or in the overseas student market on which it was heavily dependent. This was not a strategy of desperation; the institution was on an upward trajectory with new buildings, increased student numbers and entry into biological sciences from its traditional base in physical sciences and particularly engineering.

At VUM, while some areas such as life science were thriving, there were concerns about the long-term viability of investment-hungry physical sciences and engineering for similar reasons to those for UMIST, and a more general realisation that the current model probably offered no better future than maintaining the present position. On the positive side finances were in better shape than for most universities and the University was the most popular in the UK in terms of numbers of undergraduate applications.

The campuses were contiguous, a unique situation in the UK for two research-led universities. Despite the recent withdrawal of UMIST from a number of shared services, social connections were strong and two major joint ventures, in business and management and in materials science, showed that joint working was possible. The first of these was a federal arrangement, The Manchester Federal School of Business and Management was an umbrella that linked UMIST's Manchester School of Management (MSM) with VUM's Manchester Business School and two more specialised management-related subjects, VUM's School of Accounting and Finance and the research institute PREST. The arrangement involved a series of committees which aimed to avoid duplication and promote new teaching and research ventures. The material science departments of the two institutions were joint, sharing a building and facilities such that even in a single corridor academics of both affiliations could be found.

However favourable the internal circumstances, the impetus came primarily from a perception of growing external pressures and challenges.³

Explicit attention was subsequently given to six of these³:

- Increasing complexity of research problems demanding broader interdisciplinary solutions and teams of critical mass with access to modern infrastructure;
- Increasing importance of the knowledge economy and the recognition of the role of universities in contributing to business and the community;
- Changing nature of course provision, with rising student fees being accompanied by greater emphasis on quality, relevance to employment and student choice;
- Globalisation of higher education increasing competition for students, top quality academic staff and research funding;

³ List based on table in business plan for the merger.

- The need to modernise governance and management structures to make decision-making more streamlined and agile; and
- A recognition of limited resources for both teaching and research and increased selectivity in funding mechanisms.

A more specific external logic lay in the shape of the UK economy. Despite several years of relative prosperity, the UK is essentially a uni-nodal economy with a very strong concentration of activity in London and the South East. This is also reflected in scientific investment – the Golden Triangle mentioned above and most public and privatised government laboratories. Other cities have lacked economic dynamism and past generations of regional policy have failed to make any real impact.

Greater Manchester has been seen as the main national success case in terms of regeneration, based on a highly coordinated strategy among local authorities working with business and professional leaders. Cultural and sporting institutions (including hosting the Commonwealth Games – a sporting event second only to the Olympics – and the world-brand of Manchester United Football Club more recently joined by Manchester City F.C.) have featured strongly in a shift from traditional industries to a service-based economy. The city region has been giving progressively more importance to placing science and technology and the creative sectors at the core of its economic development strategy. However, to pursue a strategy of a sustainable transition to a knowledge-based economy the city-region would need access to a world class academic institution, driving change through contributions from its research and training activities.

In the light of these challenges a Joint Working Group was established by the leadership of the two universities. The Group was independently chaired by Dr John Beacham, a former ICI (Imperial Chemical Industries) executive and government adviser with regional affiliations. There were four members from each institution. Its remit was “to consider various ways to develop a closer relationship between UMIST and the Victoria University of Manchester in order to build on existing strengths, with the aim of achieving world class standing in research, scholarship and teaching across a broad range of disciplines”. The group was founded after informal discussions had taken place between the chairs of each of the universities’ governing bodies. It did not consult with wider groups of staff until after it had reported.

The group considered several options for the way forward. The “status quo” of no increased cooperation was regarded as a base case which was not acceptable in itself but would be used as a reference point against which to judge other options.⁴ The other options were:

- *Grassroots collaboration*: separate institutions but encouraging individual academics to collaborate in research or teaching. This was seen as relatively easy to

⁴ Left unstated was the further factor that the status quo could have degenerated into unproductive local competition.

implement on a small scale but creating confusion and numerous ad hoc demands on issues such as regulations when scaled up;

- *Federal collaboration:* provision of an overarching structure for collaboration between separate institutions. The experience of the materials and business collaborations suggested that this would have relatively high transaction cost and present a confused view to the outside world;
- *Trade model:* separate institutions but making identities less distinct through combination of common departments and allocation to one or other institution. It was considered that agreement on respective specialisms would be hard to achieve;
- *Combined institution:* a newly constituted combined university.

The preferred option of the Joint Working Group was the dissolution of the two existing universities and the creation of a single new chartered university. It was concluded that neither university was likely to achieve world-class status in all disciplines on its own or to compete realistically with the very best universities. To overcome a future of, at best, incremental growth a strategy for a step-change in performance was needed and this could only be achieved through the combined new university option. The overall aim of this process of integration would be to enhance research excellence at international level, to increase student choice through new and interdisciplinary courses and to contribute to the economic well-being of the region.

10.3 Process of Change

The processes of decision and of implementation were both of necessity complicated. The internal approval timetable began in April 2002 when the governing bodies of both universities agreed to proceed to a due diligence phase. This ran until the following October and the activity was given the name Project Unity. Due diligence was undertaken through a managed structure involving over 250 staff, students and lay members with support from specialist advisers on issues such as pensions and finance. A communications infrastructure was set up to keep internal stakeholders informed; this involved open meetings for staff and students, briefings and newsletters with a dedicated website. Project Unity operated in all of the key dimensions needed to design and operate a university: governance and administration; research; teaching, learning and assessment; estates; human resources; information systems; and finance. One activity in particular required substantial staff involvement. This was the planning and re-engineering of teaching programmes where a subject was taught in both universities. Once the end-point of the degree programmes had been established the transition path had to be planned. Planning co-location in the reconfigured schools was another area of wide involvement.

Ambitious goals and detailed proposals were set out for each dimension of activity. No policy, procedure or structure from the ‘legacy institutions’ was

retained by default – all were designed or selected on the basis of the needs of the new university. The estates strategy was particularly demanding in financial terms, involving several new buildings and refurbishments and a better external environment, both to allow co-location and more generally to support the research and teaching mission of the new university. The strategy eventually was realised as the largest capital programme ever undertaken in the British university system and at one point was the country's second largest capital project of any kind. The dominant visual image was a forest of cranes. At this point, however, the issue was to find the finance to allow the project to go ahead.

A total cost of around £300 million was estimated, the bulk to be spent on estates. Most of this was to come from the formula allocations due to the universities from the Higher Education Funding Council for England, from the universities' own reserves and disposal of surplus assets (in the UK older universities at least normally own their own buildings and estate). Specific funding was sought from the Funding Council's Strategic Development Fund (the lion's share of which went to this single project). In addition the Office of Science and Technology – responsible for the Research Councils – provided £10 million in support of specific research projects in Photon Science and Neuroscience and a substantial contribution was made by the regional authority, the Northwest Development Agency. The city authorities in Manchester were strongly supportive but were not approached for a separate financial contribution.

For many universities a financial undertaking on this scale would be out of the question. Why then was it possible to mobilise a public investment on this scale? For the answer it is necessary to recall the arguments made above concerning the external logic for the merger. In this environment, the case for this extraordinary investment in support of a second node in the economy received a sympathetic hearing at both national and regional levels.

On the basis of the due diligence exercise the academic and overall governing bodies agreed in general to proceed in October 2002 subject to securing external funding, and with more precision in March 2003 at which time full integration was set for 1st October 2004. By July 2003 dissolution of the two universities on 30th September 2004 was agreed subject to the Charter being granted. The process was not quite as smooth as this timetable implies. Staff concerns about potential job losses had been largely allayed by a guarantee of a 2-year moratorium after Foundation and that in any event there would be no compulsory redundancies, though an early retirement and voluntary severance package was available on a selective basis. At the level of the governing body of UMIST there had been some opposition to Project Unity with concerns about losing the distinctive heritage of the institution and of selling science short. Eventually the doubters were won round to secure full approval. The external financial support had been one factor in gaining their commitment.

During the transition the challenge was to keep both universities operating normally so as not to disrupt research and the student experience but also to initiate the structures of the new University. The adopted solution was to create a Company Limited by Guarantee (CLG), a form of not-for-profit organisation with powers

derived from both governing bodies and advised by both academic governing bodies. An Interim Executive Management Team reporting to the Board of the CLG, chaired alternately by the two vice-chancellors, oversaw a programme office which in turn ran a series of projects. The new structure of the University emerged at this point with four large Faculties (in three cases on the scale of medium-sized universities) and a limited number of large Schools (initially 23) which would in many cases consolidate departments and disciplines. The four Faculty Deans, also University Vice-Presidents (accompanied in a matrix structure initially by four “policy Vice-Presidents” in the areas of research, teaching and learning, innovation and knowledge transfer, and external relations), would be budget holders, along with the Registrar and Secretary. Until such time as the Deans could be appointed, Interim Faculty Leadership teams and an interim acting Dean (from another faculty) would develop the structures.

The key appointment of President and Vice Chancellor (a new title with more international currency) was made such that the chosen candidate, Professor Alan Gilbert, would have time to shape the institution before taking operational control. In practice he was present for 8 months before the inauguration as President and Vice-Chancellor designate. During this period, in his own words he had: “several months free from the burden of day-to-day operational management in which to build a senior leadership team, develop the ‘step-change’ agenda in consultation with colleagues across the merging institutions, and design the kinds of governance and management structures that the embryonic institution would need to facilitate its ambitions.” (Gilbert 2007)

In terms of process the merger was close to being an unqualified success. After no more than 2 or 3 years, few staff were referring to or identifying with the legacy institutions except occasionally as geographic descriptions of parts of the campus. There was little or no disruption of students and courses and the new Schools became quickly operational. Probably the only area of significant technical setback was with IT systems – the systems supporting finance and student services were changed simultaneously with the merger and that proved too much to digest, with frustrating delays impeding many activities and even basic services such as email proving troublesome. It took some time before these problems could be resolved. For universities elsewhere contemplating mergers it is useful to summarise the success factors, though these may not be replicable. In essence these were:

- A clear strategic rationale;
- Universities similar in research standing;
- External support and resources (again with a strategic rationale);
- Internal support from staff and students (in part an outcome of a good communications strategy);
- Contiguous campuses;
- Both Vice-Chancellors retiring so no dispute about the CEO position.

For the remaining parts of this Chapter the story will not be one about a process of merger but rather about the subsequent efforts to create a world-class university on a new model. However, the consequences of issues created by decisions during the merger phase will be revisited.

10.4 The 2015 Agenda

It is quite common for universities to project their mission statements by means of their public websites and other media. Far rarer is the presentation of an operationalised strategic plan but any visitor to the University of Manchester's website could find there a document called "Towards Manchester 2015". In 2011 this Agenda was refreshed and relaunched under the leadership of the University's second President and Vice-Chancellor, Professor Dame Nancy Rothwell and is today embodied in a strategic plan known as Manchester 2020, also published on the same webpage. Sadly, the founding President, Alan Gilbert, died shortly after his retirement in 2010. As his deputy, Nancy Rothwell had been running the University for some time during his long illness.

The 2015 Agenda represented from the start the blueprint for the transformation or "step-change" that the University was seeking to achieve. It originated as the President's pre-merger planning document and it was endorsed by a series of planning conferences in the Spring of 2004 and by the Board of the Company Limited by Guarantee, and again by the Board of the new University early in 2005 on the advice of the Senate.

The formal mission was set out in terms of a target: "To make The University of Manchester, already an internationally distinguished centre of research, innovation, learning and scholarly inquiry, one of the leading universities in the world by 2015."

Academic, social, ethical and moral values were stated and used as a foundation for a vision that put ten adjectives in front of the word institution and explains each of them.⁵ However, the core of the document was the 2015 Agenda itself, a set of nine goals and strategies and accompanying Key Performance Indicators that if achieved will constitute the 'preferred future' for the university by that date. Why nine? According to the founding President they reflected years of engagement in trying to challenge strong, large, research-intensive universities to take on step-change improvement.⁶ The choice of nine reflected his judgement of what the cardinal goals were, though in a couple of cases they could have been conflated or separated for presentational purposes. The 2015 goals are summarised below, the first four in more detail:

10.4.1 Goal One – High International Standing

To establish The University of Manchester by 2015 as a world renowned centre of scholarship and research, able to match the leading universities in the world in

⁵ In detail, the statement is that as one of the world's leading universities, Manchester in 2015 will be a people-centred, research-led, innovative, learning, liberal, independent, international, inclusive and engaging institution, and finally a Manchester institution.

⁶ Personal communication 23.8.07.

attracting and retaining teachers, researchers and “critical mass” research teams of the highest quality, and as a higher education brand synonymous with the finest international standards of academic excellence, and with pioneering, influential and exciting research and scholarship.

In some senses this goal was an encapsulation of the rest, as an international reputation is likely to result only from improvement in other key areas. However, there are some actions in terms of positioning (working with leading partner institutions around the world), marketing and promotion and most specifically the appointment of “iconic” scholars and research teams. An iconic scholar was defined as one whose virtuosity has been recognised in ways that provide iconic status within and beyond the international academic community. Nobel prizes were cited as the most obvious criterion and one KPI was the presence on staff of at least five Nobel Laureates (or equivalent) by 2015, at least two of whom were full-time and three such appointments being secured by 2007. The other KPI attached to this goal was clear evidence of improvement in the University’s international and domestic standing as measured by reputable international higher education rankings. The selected measure was the Shanghai Jiao Tong Academic Ranking of World Universities which for all its idiosyncrasies was seen as being objectively based rather than relying on non-reproducible and methodologically obscure peer review elements as did some of its rivals.

10.4.2 Goal Two – World Class Research

To establish The University of Manchester by 2015 among the 25 strongest research universities in the world on commonly accepted criteria of research excellence and performance.

Elite universities are typically judged by their research performance and standing. Apart from striving to create a supportive environment for research and gaining funding for research, the strategy focused on people, with a heavy emphasis upon recruitment and retention of outstanding individuals. This particular dimension was reinforced by the new University having to encounter a major test of research standing rather earlier in its lifetime than it would have chosen, the UK Government’s Research Assessment Exercise (RAE). Since 1986 the RAE has been used to allocate core funding for university research (Barker 2007). The 2008 exercise, was grading Manchester’s performance over a 7 year period, hence a significant part of the period covered was pre-merger, and in terms of publications even more so. Hence, recruitment of virtuoso researchers represented the quickest strategy for improvement against this test. The longer term project of raising further the quality of the entire research activity could only be partly fulfilled at this stage. The University has always been clear that its strategy is driven by its own agenda, not the RAE, but the reputational effect could not be ignored.

The KPIs under this heading evolved over time. The initial focus was couched in the terminology of the previous RAE, accompanied by fairly crude quantitative

targets (such as the doubling of the number of postgraduate research students and postdocs by 2015). A revised approach matched quantity with quality to state the targets as:

- Annual increase in the University's share of the world's high impact research publications;
- Achieving annual increases in external grant income consistent with a doubling of such income (in real terms) by 2015;
- Annual increases in total audited research expenditure (TARE) consistent with the trebling of such expenditure by 2015;
- Achieving annual increases in the number of postgraduate research students successfully completing their programme within the specified period consistent with doubling the number of completions by 2015.

This list also illustrates Manchester's main advantage. While it can be hard to compete in their own fields with some small specialised institutions, the large University can achieve a leading position on indicators which combine quality and quantity – sometimes referred to as “research power”.

10.4.3 Goal Three – Exemplary Knowledge Transfer

To contribute to economic development regionally, nationally and internationally, and greatly to increase opportunities for the University and its staff and students to benefit from the commercialisation and application of the knowledge, expertise and intellectual property (IP) that they develop in the University.

There was a determination from the start that the new University would take a fresh approach to what is commonly termed the Third Mission (Larédo 2007). An early move was to develop an IP policy which gave the most generous terms available to innovators and creators of intellectual property while putting in place an infrastructure for its effective exploitation. To overcome cultural resistance in some quarters of academic life the principal reward system of promotion allows progression through the ranks to full professor on the basis of outstanding performance in knowledge transfer.

This was an area where some national KPIs had been discredited, with examples such as counting the number of spin-off firms created taking no account of their size, profitability or sustainability. These would then be open to manipulation. The more rigorous approach adopted by Manchester has been to set annual increases of 10 % in the value of third party investments in university spin-out companies and in the number and value of licence deals done with third parties. Collaboration with business takes place within the framework of overarching agreements with companies wherever possible. This reduces transaction costs by creating a ready-made and consistent framework for pricing, IP etc. and maximises the chance of spillovers whereby a relationship based, say, on engineering research may also lead to contracts for executive education in management studies. The KPI for this activity

was that the University should increase the proportion of research grant income through industrial sponsorship from its level of 8 % in 2004 to 20 % by 2015. A remaining challenge is to find a way to consistently measure knowledge transfer of the type more open to social science academics, making a major and sustained contribution to policy and practice.

10.4.4 Goal 4 – Excellent Teaching and Learning

To provide students with teachers, learning environments, teaching and learning infrastructure and support services equal to the best in the world.

This goal was turned into a strategy by emphasising the need to enhance the Manchester student experience, using e-learning to enrich teaching and learning, listening to students and, in a similar way to knowledge transfer, creating clear promotion tracks based upon excellence in teaching. Key performance indicators are sustained high levels of satisfaction among key employers with the quality of Manchester graduates, as measured by properly validated employer satisfaction surveys; and annual increases each year until 2015 in the number of students enrolled on on-line programmes. The third indicator, annual improvements in student satisfaction with the quality of teaching they receive and of the learning environment they experience in Manchester, has been the source of much concern. The National Student Survey is a government-backed survey on behalf of the Funding Councils targeted at final year undergraduates. Manchester, along with some other large civic universities, historically has not performed well in this, possibly because of the initial focus on research, stoked up further by the RAE.

Concern about teaching and learning led to a multi-faceted and comprehensive Review of Undergraduate Education which sought to restore to parity of esteem with research and postgraduate training what many external stakeholders see as the core business of a university. At the core of this was a determination to achieve personalised learning, that is working in small groups with tutors and ensuring a close relationship with an academic adviser, in an era when massification of higher education and the consequent decline in the unit of resource available per student has driven universities away from this ideal. Time has shown that there was no single cause for the relatively lower satisfaction ratings in the National Student Survey. These scores also varied to a great degree from subject to subject. While the University is now seeing steady annual improvements, constant attention to detail has been needed to sustain that increase.

10.4.5 Remaining Goals

The 2015 agenda looked outward to the community as well as to business and two goals addressed different aspects of this. Goal Five was that of Widening

Participation by “making Manchester the UK’s most accessible research-intensive university by providing international students from economically deprived backgrounds and home students from traditionally under-represented sections of society with a supportive learning environment in an inclusive and welcoming University community.” Also in this vein was Goal Nine – More Effective Service to the Community, spelt out as to contribute to the development of a secure, humane, prosperous and sustainable future for human society and, beginning in its local communities in Greater Manchester, to explore opportunities to enrich the social, cultural and economic development of the communities, regions and countries in which the University works. Conversion of these high level goals to practical action has centred upon two actions. For widening participation the University devoted a higher proportion of fee income than any of its peers to established merit-based bursaries and scholarships for both home and overseas students from disadvantaged backgrounds, in the latter case from selected developing countries. Community service focuses upon existing students with a flagship “Manchester Leadership Programme” which gives students credits for voluntary work in the local community while contributing to their personal and professional development. Broader regional and community engagement also came into this part of the strategy.

The remaining three goals were more inward looking and focused upon the managerial achievements necessary to drive the other goals. Goal Eight addressed the critical topic of Internationally Competitive Resources and is stated as being “to ensure that the University acquires the recurrent and capital resources necessary to be competitive at the highest international level.” As noted earlier, without the large endowments of its international rivals the University needed to develop income flows that gave it the resource base to achieve its ambitions. Strategies include increased fee income, proceeds from knowledge transfer and a much more organised approach to fund-raising than has been the case historically for British universities.

Goal Seven was Efficient, Effective Management and is embodied through efforts to achieve simple flat management structures with a minimum of hierarchy and a rational, simple committee system. Linked to this was Goal Six, Empowering Collegiality, where the key words are “people-oriented” and “engagement”, no mean challenge in an institution of this size. KPIs are built from a staff satisfaction survey and measures of diversity in the staff profile.

10.5 Progress and Challenges

Writing this chapter in 2013, we will ask what has been achieved and what are the major challenges facing the University? The reference point taken will be the 2015 Agenda as this was forged in the crucible of the merger but its evolution to the 2020 strategy will also be taken into account. Rather than work through all the KPIs some highlights are presented here.

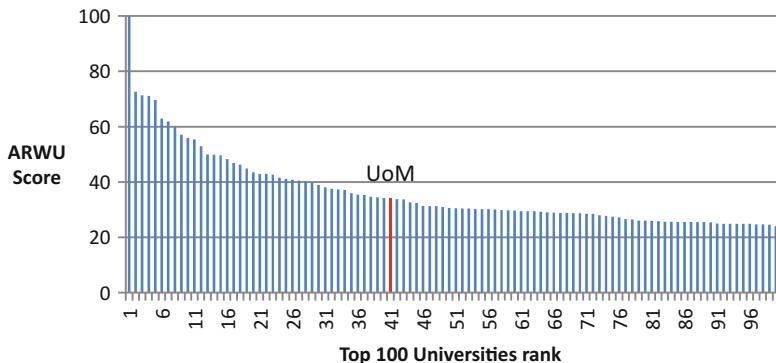


Fig. 10.1 Position in ARWU ranking of top 100 universities in 2013

Concerning the goal of high international standing there was an immediate beneficial effect on the position in the World University Rankings with a move from VUM's position of 78 in 2004 to 53 a year later (the scoring system favours scale). After more rapid progress, change has been incremental since 2008, currently ranked at 41 in 2013 which places the University ninth in Europe and fifth in the UK. The challenge of breaking into the top 25 is illustrated by (Fig. 10.1) which shows the increasingly steep gradient in composite score as the highest elite group is approached. Nonetheless, Manchester is a distinctive mover in a largely static table – its progress being charted in the leading French newspaper, *Le Monde*, as an exemplar for French universities.

In another dimension of international standing, the university is right on track. The intention to make iconic appointments was realised when two Nobel Prize Winners, Joseph Stiglitz and Sir John Sulston took on part-time positions as did further iconic appointees, the influential Harvard political scientist Robert Putnam and the novelist Martin Amis. The benefits of such appointments were clearly demonstrated when an external donor almost immediately endowed the World Poverty Centre which Stiglitz chaired with a sum greater than the cost of the appointment.

While only Sulston remains from this first wave, in 2010 two Manchester physicists, André Geim and Konstantin Novoselov shared the Nobel Prize for Physics for their ground-breaking experiments in the two-dimensional material graphene. Although still open to iconic appointments, the University today focuses on attracting top class academics and students to work in the University under the banner of World-leading Minds.

Research income was another area of spectacular growth, rising from £116 million in 2003–2004 to £174 million in 2006–2007. In the more restricted environment that followed this figure is currently at £200 million but in 2013 there was a 37 % increase in the value of new grants which could be taken to herald a new era of rapid growth. Knowledge transfer has shown good progress but has been typical for the sector in that successes are very lumpy. The largest success to date has been the

nanotechnology spin-off company Nanoco with a market capitalisation of £310 million at the time of writing. Achievements against the KPIs are satisfactory in themselves but given the increasing weighting given to knowledge transfer by the UK government, even as a driver of other income sources, this area will need more attention in the future. Several high profile strategic partnerships have been secured with major companies including the central role in BP's International Centre for Advanced Materials, a \$100 million commitment. Feedback from the companies has indicated that the ability to assemble interdisciplinary teams has been a key factor in gaining the research contracts. It is not unreasonable to attribute this at least in part to the merger, since economies of scope resulted from the wider range of available disciplines and the large multidisciplinary Schools and Institutes helped to create a culture of working with colleagues from many backgrounds.

The post-merger challenges surfaced more at the level of the underpinning goals. In 2006, the University faced a large operating deficit of over £30 million (out of total expenditure of £611 million), some of which was the result of deliberate investment ahead of the RAE but which also reflected a 'structural deficit' of around £10 million attributable to the additional costs from the merger and exacerbated by the 2-year moratorium on job losses. The salary bill had been driven up by higher than expected increases across the UK sector and a post-merger growth in staff numbers of some 2,800 staff in 30 months. While much of this had been driven by increased research income it was clear that urgent action was needed to improve efficiency and eliminate the deficit. A combination of tighter financial management and an early-retirement/voluntary severance scheme that reduced numbers by around 630 people drastically reduced the deficit for 2007/2008 and in subsequent years healthy surpluses have been available for investment. Nonetheless, this episode highlighted the marginal nature of higher education finance and its exposure to potential shocks. A secure financial future is only possible through continued improvements in productivity and growth of high revenue areas such as overseas students, executive education and full cost applied research. All of these areas are highly competitive markets in which only the best will prosper.

Part of the productivity challenge lies in a need to rebalance staff time. Success in research depends upon freeing up time without reducing the quality of the student experience. While students undoubtedly benefit from research-informed and research-led teaching, rising fee rates have fostered a consumerist attitude which does not tolerate any hint of neglect. Solutions can only lie in increasing the efficiency of teaching, including effective use of online learning, use of Graduate Teaching Assistants, and consolidation of uneconomic course options. The latter challenge should be easier in a large University where wide choice can be sustained through the presence of such a large number of specialisms. However, all of these measures depend upon students perceiving a personalised teaching and learning environment that delivers a satisfying experience and strong employability and staff perceiving that excellence in this dimension of their work will be given parity of esteem and reward with research excellence. As noted above, National Student Survey satisfaction scores have risen six points in the past 2 years to stand at 85 % but they are still short of the 90 % Key Performance Indicator target.

One aspect of the 2015 Agenda in relation to students that has clearly been achieved is that of widening participation. The University while maintaining high admission standards (with around seven applications for each place on average) nonetheless has substantially more students from socially deprived neighbourhoods than the entire Golden Triangle combined.

Structures developed at the time of the merger have not been regarded as sacrosanct. In response to changing conditions, three Schools: Informatics; Languages, Linguistics and Cultures; and Education have had their staff and students merged into larger units. The formalised planning and accountability cycle instituted at the time of the merger provides a permanent mechanism for review of progress against targets and for highlighting where there is a need for corrective action and new initiatives.

Productivity also lies in administrative efficiency and here there is a careful balance to be struck between relieving academics of as much of the administrative burden as possible while not creating a large and expensive bureaucracy which drives up overheads on research and teaching. Overall the administration is in many ways a model for others. Its management of the merger was far better than is often witnessed in the private sector⁷ and the capital programme is largely complete on time and within budget. A major new phase of capital investment was announced in 2012. This was a £1 billion Capital Masterplan with its centrepiece representing in many ways the physical completion of the merger. The former UMIST campus is the location for the University's engineering schools but they occupy buildings that are becoming progressively less fit-for-purpose and expensive to maintain. To address this, and to meet targets for a reduced carbon footprint, a state-of-the-art engineering building is being constructed on the main part of the campus. This is being financed in part by £300 million raised on the public bond market. The relocation will further facilitate integration across disciplines.

At the time of writing only 1 year remains to achieve the 2015 goals. In the timescale in which reputations are built this is a rather short period. The publication of the 2020 Strategic Plan is a tacit acknowledgment that the initial period was too short for some of these goals, although the document also introduced some key new elements, in particular placing Social Responsibility as the University's third key goal alongside teaching and research (a commitment that has led to many practical actions and a distinctive position for a research-intensive university). Nonetheless, where guiding principles and targets are concerned the middle-to-long distance always appears more inspirational. Progress can certainly be claimed but numerical targets are unforgiving, particularly when they were formulated in a pre-austerity era.

⁷ A study by the author and colleagues of the effects of industrial mergers on R&D activities of firms – the closest analogue to universities in a business merger – found that companies typically underestimated the issues involved and did not subsequently achieve the improvements in innovative performance that they expected (James et al. 1998).

It also needs to be emphasised that there is not a fixed target at which point the status of top 25 is achieved and all can relax. The nature of the modern university and the expectations society and the economy place upon it is itself evolving. Manchester is seeking to redefine the rules for excellence, not only because the Golden Triangle and the Ivy League are “clubs” closed to new members but also because those institutions in their present form may themselves not be fit to meet the challenges likely to be imposed upon Western universities. While the verdict is clearly still open the hope is that the maxim of the Industrial Revolution will hold once more, “What Manchester does today, the World does tomorrow”.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Barker, K. (2007). The UK research assessment exercise: The evolution of a national research evaluation system. *Research Evaluation*, 16(1), 3–12.
- Gilbert, A. (2007). The Manchester merger, stretching the Golden Triangle. In H. Burgh, A. Fazackerley, & J. Black (Eds.), *Can the prizes still glitter? The future of British universities in a changing world*. Buckingham: University of Buckingham Press.
- James, A. D., Georgiou, L., & Metcalfe, J. S. (1998). Integrating technology into merger and acquisition decision making. *Technovation*, 18(8/9), 563–73.
- Larédo, P. (2007). Revisiting the third mission of universities: Toward a renewed categorization of university activities? *Higher Education Policy*, 20(4), 441–56.

Chapter 11

The Experience with Creating University of Lorraine by Merging Four Former Universities

Jean-Pierre Finance, Hervé Coilland, and Pierre Mutzenhardt

11.1 Introduction

This chapter describes the setting up of the University of Lorraine, the reasons behind the merger of four “historic” universities in Lorraine, the method used to implement the merger and the lessons that can be learned from the whole process. It is composed of five parts: background (brief history of the French higher education system), the context, the merging process, the lessons learned and conclusions.

This chapter is written from a French national perspective, however, the initial strategic analysis undertaken by the universities in Lorraine and the resulting process were strongly influenced by the international and especially European academic contexts. Thus, to name but one example, the setting up of Aalto University as a result of the merger of three distinct universities with their own disciplinary fields (the Helsinki School of Economics, the University of Art and Design Helsinki and Helsinki University of Technology) reflects a similar approach.

Building up an international network with partnering universities that share a somewhat similar history as ours, that are multidisciplinary and have a strong focus on societal expectations, mixing fields that can be labelled as “hard sciences”, “humanities” and “technologies”, a whole set of skills we feel entitled to claim, will be one important action line in our future international strategy. A rapprochement between universities is a process that involves the whole academic world well beyond national and European borders (Walbaum et al. 2012). In this trend, we move in the same direction as the University of Copenhagen and Aarhus University in Denmark, Aalto University in Finland, the University of Manchester in the UK or The University of Western Sydney in Australia. We have already enjoyed partnerships with some of these universities and we will be able to rely upon the common experience of a successful merger to build new partnerships.

The authors thank the editors for their careful reading and constructive comments.

J.-P. Finance (✉)
European University Association (EUA), Bruxelles, Belgium

University Henri Poincaré, Nancy, France
e-mail: jean-pierre.finance@univ-lorraine.fr

H. Coilland • P. Mutzenhardt
University of Lorraine, France
e-mail: herve.coilland@univ-lorraine.fr; pierre.mutzenhardt@univ-lorraine.fr

The first three parts factually describe the merger process. The history of France's universities is briefly reminded as well as the national and regional university context. A special focus is put on the situation in Lorraine, a region in France marked by the divergence between North and South, in and around the cities of Metz and Nancy.

The merger chronology from 1985 to 2012 puts an emphasis on the initial strategic vision and the technical, political and human difficulties to put it into action.

Part four and the final conclusion form an analysis of the merger, the methods that were used and the result achieved. This analysis made by those who have been heavily involved in the process endeavours to be insightful and realistic. Key critical points have been identified: the difficulty in sharing a long term strategic view with those who are active on the ground, the complexity of the process driven by the construction of the target institution (University of Lorraine) and the drive shared between four founding universities. However the result in an unexpectedly short time lag was satisfying. Finally it seems clear that such a process would not have been possible without the firm support of the partners (Region, National Research Bodies) of the universities in Lorraine and of the State.

11.2 Background

At the beginning of the twenty-first century, the French academic landscape is still influenced by decisions taken during the French Revolution in 1793. At this time, the universities, considered as corporatist and anti-revolutionary, were replaced by "faculties" (some of them being mainly focused on academic teaching disciplines – humanities and sciences – the other on professional skills – medicine and law -) and "grandes écoles". The latter were strongly oriented towards professional skills, which were to have a major structuring effect on the French higher education system. This particular model lasted until 1969.

The events of May 1968 in France required a deep reform of the higher education system. The "Faure" law (named after the Minister in charge of national education at this time) re-created "universities" by merging the former faculties. This act fundamentally modernized university democracy but only partially changed the French system of higher education. Indeed, the newly created "university" often remained focused on a group of topics (which were to contribute to increasing the split between the technical sciences and the humanities). The "grandes écoles" remained mainly outside the universities, even if some of them kept their public status, and others their private status. Since 1939, a considerable part of public research activity was entrusted to Research Performing Organisations – RPOs (so-called EPST in French: Public Scientific and Technological Research Institutions): at the beginning the CNRS¹ which aims to cover all

¹ CNRS: National Center for Scientific Research, about 11,300 full time researchers, 14,000 administrative and technical staff.

disciplines, followed by various, more or less specialized institutions like INSERM,² INRA.³ Public research was therefore carried out in universities, some “*grandes écoles*” and RPOs, often in laboratories whose tutorship is shared by several institutions (the “Joint Research Units”).

One might therefore understand the wave of Universities mergers, started in France in 2009, as a continuation of the reorganization which had begun in 1969. But this wave of mergers is also a consequence of the on-going deep changes: the implementation of the Bologna Process, the increasing impact (even if it is denied) of international rankings and assessments, the launch of a national debate on closer links between universities and local site policies and discussions regarding the competition between the university system (wider access) and “*grandes écoles*” (selection process). The latter turned out to the advantage of the “*grandes écoles*” which became the way for preparing the elites (except for health and law).

In this context, the Lorraine experience is exemplary because it integrated “engineering schools” and abolished the French historical distinction between “faculties” and “*grandes écoles*” at the regional level.

11.3 The Context

Lorraine is the French region that was the most affected by the upheavals in European history since the end of the nineteenth century. The region’s tremendous potential with its resources of coal, iron and salt made it highly attractive and the French defeat in 1870 at the hands of Germany led to Lorraine being partitioned. The effects of this division were still evident almost a century after the subsequent reunification of the region and involved the separation of the Moselle area around Metz from part of the rest of Lorraine around Nancy. This historical division has been the source of tension between the north and south of Lorraine and has also played a major role in structuring the socio-economic and cultural make-up of the region.

11.3.1 *The Chronology of the University System*

The development of the university system in Lorraine has also been affected by the rivalry between the two “capitals” and was further exacerbated by the chronology and types of universities set up in the area. Four universities were set up in Lorraine contemporaneously between 1970 and 1972, following “Faure’s law” but the

² INSERM: National Institute for Health and Research in Medicine.

³ INRA: National Institute for Research in Agronomy.

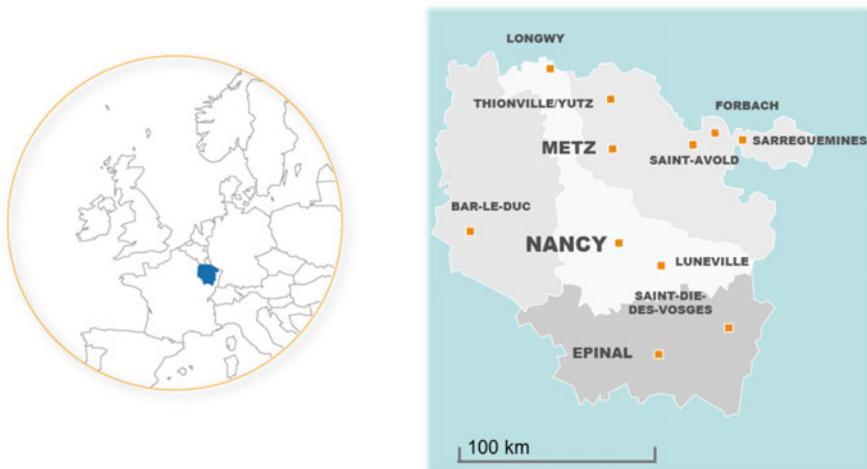


Fig. 11.1 Lorraine: geographical location and sites locations

presence of universities in Nancy dates from much earlier. University institutions were divided between complementary “Faculties” and “grandes écoles” in the middle of the nineteenth century, while Metz hosted a branch of the University of Strasbourg. When it was founded in 1972, the University of Metz took on a multidisciplinary profile (not including Faculties in the field of health) to provide the broadest range of courses possible but this multidisciplinary set-up was immediately seen as being in direct competition to the university courses already on offer in Nancy. However, over the years several joint projects have been run between Metz and Nancy (a number of Masters’ programmes, the graduate schools, some joint labs especially in chemistry).

The year 2005 marked a time of much reflection and questioning for the university in Lorraine (Fig. 11.1 and Table 11.1).

This period was perhaps even more critical for Lorraine because of the economic situation in the region, which was still difficult 30 years after the steel industry crisis, the closures of the iron ore and coal mines and the end of the textile industry, all combined with demographic stagnation. Moreover, in 2005 the four Lorraine Universities began working under a new “four-year contract”. It should be noted that Universities in France mostly receive public funding, which is awarded on the basis of two mechanisms. The more determining mechanism is based on a calculation of essentially quantitative criteria, primarily the number of students. The second mechanism is used to calculate funding for specific projects linked to the university’s strategy.

The preparation of the 2005–2008 contract with the state at the start of 2005 was an opportunity for each university to redefine its strategy in detail.

Table 11.1 The University setup in Lorraine in 2005

Nancy	Henri Poincaré Nancy 1 University (UHP)	Mathematics, computing, automation
		Materials sciences and life sciences
		Health, sport
		Engineering sciences (3 engineering schools)
		Technology (3 University Institutes of Technology, degree level)
		16,500 students, 1,200 teacher-researchers and teachers
Nancy 2 University (UN2)	Nancy 2 University (UN2)	Literature and humanities
		Humanities, social sciences, law, economics and management sciences
		Computing
		Technology (2 University Institutes of Technology, degree level)
		16,500 students, 650 teacher-researchers and teachers
		National Polytechnic Institute of Lorraine (INPL)
METZ	Paul Verlaine University – Metz (UPVM)	Engineering sciences (7 engineering schools)
		3,800 students, 340 teacher-researchers and teachers
		Mathematics, computing, automation
		Materials sciences and life sciences
		Literature and humanities
		Humanities, social sciences, law, economics and management sciences
		Sport
		Technology (3 University Institutes of Technology, degree level)
		15,300 students, 730 teacher-researchers and teachers

11.3.2 A Shared Strategic Vision for Nancy

In February 2005 the presidents of the three institutions in Nancy decided to evaluate the overall strategic situation of the site (see SWOT analysis below) and to develop a shared strategic vision. This shared strategic vision in Nancy in itself marks the start of a profound change – moving from the sharing of support services and pooling resources to a shared political analysis. This analysis highlighted a number of strategic questions, for example the choice and priorities of scientific subjects. While the broad range of courses and research work was seen as a strong point, it was also problematic to an extent, because the broad range of courses on offer was attractive on a regional basis (at Bachelor degree level) but could also potentially penalise Masters and Doctorate level courses if these were considered insufficiently specialised.

The possible compromise between a wide range of courses at the 1st cycle degree level and a narrower, more specialised range of Masters and Doctorate programmes could also be risky. A wide range of diversity at Bachelors level induced student dispersion into a variety of curricula. This did not always lead to the development of curricula at Masters level, yet on the other hand, it does not provide sufficient potential for local recruitment to Masters level programmes and potentially weakens the link between research and training. How could an optimal balance be achieved? While promoting excellence in certain subjects offered the means for increasing the attractiveness of universities in the region, it also meant neglecting other sectors, a socially unacceptable outcome for universities and the public at large (Table 11.2).

At the same time, universities possessed very tangible strong factors that enabled them to provide effective responses to these issues namely:

- The long history of research work in the shared laboratories (some of which were associated with national RPOs such as CNRS, INRIA, INRA or INSERM⁴) meant that the rapid implementation of a scientific policy for the site could be envisaged.

Table 11.2 Overview of the SWOT analysis

Strengths	Weaknesses
Research laboratories shared between the institutions	Inter- and intra-institution organisational and cultural heterogeneity
Recognised excellence in certain scientific fields	Insufficient prestige, visibility and clarity
Broad range of courses and research	Insufficient coordination between the Universities and local authorities
Shared inter-university services	Poorly coordinated international and partnership projects
Consultation on scientific, research and course issues	
Efficient administration	
Proactive digital policy	
Opportunities	Threats
Launch of major national and European scientific programmes	Decrease in demographic and cultural aspect of students who turn away from natural sciences
Change to staff population: planned redeployment and restructuring programmes	Ambiguity of regional policies: development of flagship metropolitan projects but regional dispersal
Involving local authorities	Increasingly competitive national and international context
Original tools, museums, research infrastructures, resources and ideas to be promoted	Too much individualism
Strong staff involvement and motivation	

⁴ INRIA: National Institute for Research in Computer Science, INRA: National Institute of Agronomic Research, INSERM: National Institute of Health and Medical Research.

- Shared inter-university services were the basis for the construction of reinforced operational cooperation in Nancy.
- The three presidents got on well and had a frank working relationship, which meant that all issues could be discussed openly and that the future was not a taboo subject.

Although the human dimension was a determining factor, conversely it also involved the risk that the project might not be robust enough if it depended overly on the relationship between a few decision-makers. As early as spring 2005, the question arose of how to set up institutional “ratchets” or safeguards, capable of securing the emerging strategy without unduly alarming a community that might not be entirely ready for the idea of a merger of Nancy’s universities.

11.3.3 North-South Relations

During the same period the Paul Verlaine University in Metz was also rethinking its strategy. Tensions with Nancy were progressively disappearing and the preparation of the “2005–2008 contract” had provided an opportunity to construct “jointly developed course programmes” between Metz and Nancy. The main aim of the consultation process was to avoid unnecessary competition while preserving the way courses were spread out over the region. In parallel, research coordination and cooperation was being consolidated between Metz and Nancy. However, the Paul Verlaine University was also working on its own development within the home territory (the Moselle area) having benefited, since its setting up, from the solid support of the local authorities and the socio-economic landscape of the dynamic Moselle area. In 2006, the setting up of ISEETECH (the Higher European Institute for Business and Technologies), a coordinating body for the Moselle area, clearly demonstrated this dual political and economic involvement in higher education. The Paul Verlaine University was to play a major role in this Institute.

The Universities of Metz and Nancy were each equally unsure as to whether their neighbour was more of a threat or a potential partner. The idea of the universities coming together first came up in Nancy because of their geographical proximity, being located on the same site, and the complementary nature of the disciplines taught. However, the idea of a federation was still a long way from being accepted in Nancy, let alone a merger. Two main types of higher education programmes existed side by side in Nancy, namely, more classical academic courses and engineering courses that tended to be interdisciplinary. There were also significant organisational differences and divergences regarding teaching methods and professional perspectives for students. The main organisational difference lay in the entrance processes to courses, as mentioned earlier. To add to the complexity, in Nancy, seven schools were grouped together in one single institution with its own particular status (the INPL) and three other schools made up a more “conventional” University (UHP). Therefore at the start of 2005 there was

only talk of bringing Nancy's higher education institutions "closer together". When this began to occur, it appeared that the North-south divide between Lorraine's universities might develop even further and lead to a definitive divide in higher education in the region in the future. The following period was thus to prove critical.

11.4 The Merger Process

11.4.1 Phase 1: Strategy and Pragmatism (2005–2007)

The merger process leading to the setting of the University of Lorraine evolved over five phases. The first phase was to leave its mark on the whole process, providing a method for simultaneously working on the strategic planning, the progressive pooling of resources and services, and the operational management of the joint projects being set up. The relations between Metz and Nancy were developing but closer and more tangible links were being forged between institutions in Nancy leading to:

- The setting up of the "Nancy-University Federation" which took the idea of the "Nancy-Universities" label created in 2001 much further.
- Regular meetings of the three presidents (G3) and of a "political think tank" (G9).
- The setting up of the "Scientific Coordination and Steering Committee for Lorraine (CCOSL)" at the start of 2007, bringing together the four Universities, the four national research institutions in Lorraine and the Nancy University Hospital Centre (CHU).
- The setting up in March 2007 of the Nancy-University PRES⁵ providing institutional support for the Nancy Federation.

11.4.2 Phase 2: The Turning Point in Lorraine (2008–2009)

2008 was to be a crucial year for the future of universities in Lorraine. The four Lorraine Universities decided to make a joint bid for the "Campus" call for projects launched by the French government at the start of the year. This decision and its consequences were to trigger the process that led to the merger. Following the joint project's initial failure to be selected in July 2008, the local authorities, including those in the north of Lorraine, agreed to support the property development

⁵ PRES: The Lorraine Research and Higher Education Pole (in French: Pôle de Recherche et d'Enseignement Supérieur) was set up with the status of a French Public Institution for Scientific Cooperation (EPCS) as set out in a law from 2006. Decree n° 2007-384 dated March 21st 2007 (Légifrance 2011).

programme (which was mainly a sub-project of the initial one) focused exclusively on Nancy and to remain partners in this new plan “from the Lorraine region”. In July 2008 the cities of Metz and Nancy and the Moselle (North) and Meurthe and Moselle (South) areas and the Lorraine Region all signed a “territorial pact for the University of Lorraine” (Eureka 2011; Région Lorraine 2011). The concept had not been clearly defined in its entirety at the time but this support for the Lorraine-Nancy “Campus” project confirmed that the whole region was involved in the process of bringing higher education institutions closer together.

The “Lorraine Campus” project was finally approved by the French government in December 2008 but in September 2008 the three Nancy Universities and the University of Metz had already voted to “mandate their president to lead work in bringing institutions closer together”, work to be carried out by all four! Thus in October the G3 became the G4 (bringing together all four presidents) and met weekly until December 2011 thus truly co-steering the four Universities in Lorraine. On May 12th 2009 at a joint meeting, the four Boards of Governors approved the development of a “project scheme” and more specifically the setting up of political working groups (made up primarily of members of the councils) to manage the organisation and governance, research, training and human resources. In October 2009 the Nancy-University PRES became the “PRES of the University of Lorraine” with a new threefold mission, to manage joint projects, provide logistical support for the upcoming merger and to provide a framework and assistance for the four universities strategic planning.

During 2008–2009 the Boards of Governors expressed their support for this process clearly, though cautiously. In September 2008 they “authorised planning” for bringing the universities closer together while in May 2009 they gave their views on the work being done. However at this stage, no tangible developments were achieved and the statutes and organisation of the future “UL” remained to be defined. Only when this was completed would the governing bodies be able to decide whether to confirm the merger.

11.4.3 Phase 3: The Period of Major Joint Scientific Projects (2010–2012)

The “Projet Investissements d’Avenir” (PIA, Investment for the Future Project), was launched in France at the start of 2010. The four Lorraine Universities jointly replied to the various calls for projects with varying degrees of success. It was particularly disappointing in February 2012 when the University of Lorraine (in existence by then) did not manage to secure approval for the project it developed in response to the “Excellence Initiative” call, despite reaching the final selection phase. The joint response from the four Universities to all the calls for projects enabled them to work together on scientific planning which had previously never been the case at that level. This helped to define the structuring of scientific directions for the future. The PIAs were an opportunity that helped accelerate the merger process.

11.4.4 Phase 4: The Construction of the University of Lorraine (2010–2012)

The schedule for the planned merger was dependent on internal electoral timelines. Only one date was possible for the start-up of the University of Lorraine: the beginning of 2012, as it was difficult to find a suitable date before 2016 due to the election of the Boards of Governors and Presidents for a 4-year period. At the start of 2010 designing the structure of the future organisation became a priority. A key issue to be addressed related to whether teacher-researchers were to form part of the “teaching units”⁶ and research laboratories. This was not clearly defined and varied according to their area of scientific work. It was therefore impossible to set up a mono-dimensional structure in many sectors and therefore a matrix form of organisation was selected. There were 85 laboratories and 45 teaching units within the four Universities. It was not possible to carry out an in-depth restructuring of these labs and units in the short term particularly because this would require the merger of units belonging to different institutions. An intermediate organisational level was needed: collegiums (which would bring together the teaching units) and scientific poles (bringing together the laboratories).

In June 2010 the Boards of Governors worked on and approved a political statement of the three main ambitions they had set for the University of Lorraine:

- To meet the double challenge of excellence and proximity.
- To build a “Campus for the Region” with our partners.
- To take control of our future.

In July, work began with the French authorities to formulate the statutes for the future UL. The status of “Grand Établissement” (Major Research and Higher Education Institution),⁷ which would be a derogation in relation to the “Law Relative to the Freedoms and Responsibilities of Universities” (LRU or Law Pécresse) was designed to adapt the governance and organisation of the future institution to its broader geographical territory and to the diversity of its constituents. In January 2011, the Boards of Governors approved the planned statutes and the merger itself despite the opposition of certain student organisations and part of the university community. Operational working groups, led by internal sector experts to prepare the actual merger of services in practical terms, then replaced the political working groups.

In May the French National Higher Education and Research Council (CNESER) gave an unfavourable opinion on the draft decree setting up the UL. As this was an

⁶ Teaching unit could be a faculty, an engineering school or a university technological institute which is, in France, a dedicate model of technological teaching unit delivering diploma below Licence.

⁷ A special legal status for academic institutions which allows flexibility of internal organization but has been little used for conventional universities.

advisory position, the government continued with the process, submitting the decree project to the French *Conseil d'Etat* (Council of State) whose approval was compulsory given the UL's requirement for derogation.

11.4.5 *Phase 5: Creation of University Authorities: December 2011 to June 2012*

On September 22nd 2011 the University of Lorraine was created by decree (Légifrance 2011) and a transitional phase began with an Interim Board of Governors, whose main role was to prepare for the elections of the future UL's authorities. A student organisation immediately appealed against the decree but this was rejected by the *Conseil d'Etat*.

In December 2011 the collegiums and scientific poles elected their boards and directors. The elections for the “central councils” took place in February 2012. Due to successive appeals, the election of the President by the Board of Governors and the setup of the leadership team were delayed until May 25th 2012. Although without political impact, these appeals greatly delayed the implementation of the presidential team, which therefore could not address the most pressing issues before September.

11.5 Lessons to Be Learned

There are a number of lessons and success factors which can be derived from the Lorraine University merger experience, including:

11.5.1 *Decisive Initial Commitment and the Originality of the Approach*

Two key points stand out from the above summary – the origins of the merger process and the methods used to bring it to fruition.

11.5.2 *An Approach Based on a Shared Analysis and Mutual Trust*

The merger project was born of the determination of the university presidents and their teams who shared the same analysis and vision of the future when they met in Nancy in 2005. Their determination was only possible because of their good

relations and mutual trust. This was confirmed in 2008 by the personal commitment to the project shown by the President of Paul Verlaine University Metz at a time when the “Campus Plan” could have caused the university world in Lorraine to explode. The project and approach were initially based on the mutual trust of a small group of people and benefited from the unfailing commitment of the idea’s initiators despite points of uncertainty and opposition to the merger. It did however suffer from the following two weak points:

The project would have been jeopardized if any of the main initial participants had lessened their commitment or if an external event had led to a change in the decision-makers involved. (This did in fact occur during the elections in 2006 and 2011 of new presidents at the INPL and UN2 but the new incumbents shared the same commitment as their predecessors). The university community did not become sufficiently engaged in the project and often tended to think that the project was “the presidents’ business” which led people to becoming uninterested in and even opposed to the merger.

11.5.3 A Method Combining in Parallel the Political Aspects of the Project, Operational Management and the Preparation of the Target Operational Organization

Close examination of the dates of events shows that the real decision to merge was taken in January 2011 when the four Boards of Governors approved the draft decree. Therein lies the originality of the method used. Rather than starting from a founding political goal and then rolling out the project, almost the opposite occurred. From 2008 to 2012 the four universities were steered completely by the G4 whose weekly meeting conferred a unique character to the merger project in Lorraine. The increased level of cooperation from 2010 onwards even led those who were in favour of the idea of a University of Lorraine to conclude that the Lorraine federation already existed and was functioning properly, and thus proceeding further with the merger was unnecessary. Whereas in effect the way the structure functioned was both complex and fragile because it was not founded on established statutes.

Closely linking the running of joint projects on an operational basis to the strategic planning for implementing the merger did tend to increase the complexity of the overall project, a criticism often expressed at this time. Conversely, a method which proved particularly effective in the Lorraine context, was the decision to work simultaneously on the merger strategy and on increasing operational links. It meant progress could be made very quickly, despite the complexity of the initial situation, by progressively helping the teams involved to get to know each other and by facilitating the joint construction of projects. The strong individual commitment of the originators of the merger guaranteed a stable and clear line of strategic

direction which gained the trust and support of those involved outside the University even if internal support was less easily obtained. But was internal support possible during a period when French universities were undergoing a phase of profound change?

11.5.4 Perception Among the Academic Community (November 2008–February 2009)

Beyond the positions held by groups with specific political and trade union commitments, a survey was undertaken among 75 stakeholders (research unit directors, student and staff representatives) between November 2008 and February 2009. Respondents were asked to express their expectations and reservations regarding a unified University of Lorraine whose form was yet to be defined at the time. Even though this survey did not lend itself to statistical analysis, the answers were interesting in qualitative terms.

In response to the question “*Why create one single university in Lorraine?*” there were four main types of answers:

To exist in the future which seemed easier if united rather than separate. Such responses involved several key notions like visibility, academic reach, readability, impact, safety, survival, credit and necessity;

- To serve the community by creating a new opportunity, higher profile and solutions for certain societal demands. The “Campus Region” concept (meaning campus throughout the region, in contrast to the concept of “city campus” or “campus area”) was associated with territorial distribution and a regional identification of territorial scopes in connection with those of the (future?) University;
- To change by facilitating internal, physical and subject-related mobility, smooth circulation of ideas, cross-disciplinarity, complementarity and training linkages and bridges for students;
- To be ambitious by leveraging a boost in potential as a result of bringing universities together and extending capacities to take risks and innovate, etc.

In response to the question “*How to build a single university in Lorraine?*”, respondents almost unanimously approved of the proposal to bring universities closer together, provided benefits could be gained from increasing levels of scientific excellence without sacrificing the regional distribution of locally available educational programmes (Bachelor level). But opinions differed as to the ways and means of implementing such a merger: was it to involve federated institutions, which would remain independent, or was it to become a full merger? The merger model was perceived as a source of concern because of the expected organisational burden and the risks of imposed job shifts in the Region.

It is important to note that issues that had emerged in 2005 at a time when a strategic analysis process was initiated in Nancy, found their echo among a section

of the academic community in Lorraine in 2008. The respondents' answers reveal that the merger was expected to combine the diversity of the subject spectrum while promoting and improving its "shining rays", a balance that was seen as impossible to achieve in each university separately. These were the observations that inspired the objectives set out in the policy documents submitted to the Board of Governors in 2010.

11.5.5 External Incentives and Opportunities

The role of external factors in the merger process is significant with certain external factors being perceived as a threat in 2005. These included demographic pressure and national and international competition, which contributed to encouraging initial strategic analysis. Legal and organisational evolutions in the environment of French universities (Acts concerning research, the PRE and autonomy and responsibilities of universities) required each institution to adapt and provided opportunities for common initiatives. Maturity dates in regular contracts with the State in 2006 and 2010 were the same for the four Lorraine universities and this led to a common timing in the planning process and the necessity of conducting a strategic analysis seemed more efficient if conducted jointly. Finally, although not a determining factor, emulation of other universities also came into play. There was particular curiosity about what had brought about the creation of the University of Strasbourg, for example, even though the situation in Strasbourg differed from Lorraine in that it was restricted to one single metropolitan area.

Two opportunities that could not have been foreseen in 2005 significantly boosted the merger process (without being decisive factors) and helped the merger to actually occur before the initially planned date of 2016. The Campus initiative, followed by the PIAs, brought the institutions closer together. The former initiative, as already mentioned, acted as a boost, while the PIAs were opportunities with an accelerating effect rather than actual objectives.

Did the Lorraine universities react to threats, seize opportunities or deliberately chose to launch the merger initiative to join forces? Undoubtedly all three played a role though the very proactive initial approach was fundamentally decisive. Above all, the oft cited reason that "there was no choice", is not considered valid. Even taking into account potential threats and opportunities, the four institutions could still have remained separate while improving their partnerships without sharing a single common strategic approach. Long-term outcomes might well have been very different.

11.5.6 Necessary and Crucial Support

As opposed to what could have been sources of external pressure, numerous examples of support that backed up this initiative were essential prerequisites for its success.

First and foremost, supportive local authorities of all political persuasions and at all levels of authority (City councils, Departments and Region) proved instrumental. This support was asserted concretely twice when territorial pacts were published and put an end to a long period of tensions and uncertainties. The local authorities did not impose the merger but backed academic stakeholders so long as their initiatives involved all the universities in Lorraine.

Secondly, scientific support played a key role. As early as January 2007, the national research organisations supported the concept of a regional scientific policy. They fully committed themselves to helping the universities build their scientific programmes during the future investment programmes (or PIAs). They had naturally come to the conclusion that they would now have “one” university counterpart in Lorraine. They did not interfere in the merger process, as they were satisfied that this *de facto* unity had turned *de jure*.

Last but not least, State support was the third key enabler. The State showed interest in the Lorraine initiative as early as 2005 before the changes that occurred over subsequent years because it saw the project as a demonstrator from two angles. First, it would provide a single university for one geographical administrative region, and secondly it brought together universities (as they are usually understood in a French perspective) and “Grandes Ecoles” which had been historically separate in France until then. This support became particularly apparent in the final stage when it became evident that a special status for the new University would be necessary.

11.5.7 The Human Factor as a Critical Point

While the wealth of institutions lies in their human resources, it is that very human factor that was the most difficult to take into account in implementing the merger in practical terms. Without actually going as far as calling it a “culture shock”, habits and attitudes were quite different in each institution owing to their historical roots and their disciplinary fields. Even though governed by law, the practices of “academic democracy” differed substantially and led to long debates in the task force that was to address organisational and governance issues. These debates were all the more sensitive because the special status planned for LU in 2010 left more room for manoeuvre as to the construction of representative bodies. Thus, dialogue conditions with staff and student representative organisations took several forms, ranging from the conflictual to the constructive, according to the labour organisations. The transition from four original institutions to one single university brought about an increase from 360 elected representatives to 537 – at equivalent staffing and enrolment levels – which indicates that “academic democracy” was not affected by the merger.

In addition to institutional differences, practices and attitudes, varied with regard to partnerships with local players (business and society) in the vicinity of the university. At the risk of an oversimplified analysis, it is understandable that the

engineering school maintains a level of links with industries, which is different from the department of literary studies. However, this aspect was one of the merger's challenges: to share perspectives and practices while ensuring respect for the different identities and cultures of each sector.

In June 2010, the prospect of designing a new organisation raised concerns among staff with regard to possible changes in location that it might bring about. A Charter was signed by the four university presidents stating that the merger would not impose a relocation of workplace to another city. However, it contained no undertaking to ensure a convergence of optimal social conditions. There were numerous disparities between institutions in terms of human resources management, allowance systems (premiums), and especially the organisation of work time. Aligning all these items with the most favourable scheme was unsustainable for the budget of the new university. This was by far the most critical issue. In November 2012, the Board of Governors managed to pass a vote on this matter. Even though some non-majority labour organisations endorsed this agreement, the resulting overall social discontent is still far from being appeased but no other solution was reasonably conceivable.

During the whole process, two reactions, both of which are usual in such circumstances, could be observed:

- Opposition between the proponents of a project-oriented mind-set and those allegedly caught in a structure-based framework. Both groups seemingly forgot that these approaches could be complementary and mixed together.
- Criticism of a lack of communication despite the existence of a dedicated website, the distribution of printed and digital material and some 40 mailings directly sent to the universities' employees in 2 years.

However, in communication and pedagogy the receiver is never wrong; the problem lies with the sender. No doubt, this is where the approach could have been improved. It would have been more effective if "academic middle management" had been mobilised as local relays. However, in universities, middle managers are also elected representatives who may be very reluctant to convey a message perceived as coming from the higher strata. But in 2011, most heads of administrative and technical departments had been involved and played a decisive part in preparing the organisational merger process. It is questionable whether they should have been involved at an earlier stage.

11.5.8 Choosing a Status

In France, universities are public institutions of a scientific, cultural and technical nature (so-called Etablissements Publics à Caractère Scientifique, Culturel et Professionnel – EPSCPs) whose legal framework is set out by the Education Code (Code de l'Education). Pursuant to its Article L717-1, institutions can be created as Larger Higher Education establishments that may depart from the

common rules of the organisation and governance of universities. In 2012, there were only four French institutions with this status: the Grenoble Institute of Technology (Institut Polytechnique de Grenoble), The Bordeaux Institute of Technology (Institut Polytechnique de Bordeaux), University Paris-Dauphine, and Lorraine University (Université de Lorraine – UL) which is the only large-scale fully cross-disciplinary institution with this status.

Integrating seven engineering schools into UL was the main reason to choose this status. As they were already pooled together in the INPL, they needed guarantees for maintaining their identities and the way they are organised. Opting for a special status meant the existence of an “Engineering Schools Collegium” could be included in the decree setting up UL. This is the only collegium to be explicitly mentioned in the decree and it comprises the seven schools that belonged to INPL and three others from the former Henri Poincaré University. This is a very firm guarantee that UL is hereby not entitled to abolish or fundamentally change the collegium by a mere decision of its governing bodies. A special status was necessary to ensure such a guarantee; otherwise the decree could not have contained provisions on the internal organisation of UL.

This status was a necessary prior pre-condition for the engineering schools (*grandes écoles*) to endorse the project and it also helped to define internal and governing bodies which are adapted to the size of UL. However, it also caused two difficulties:

- The greater freedom it afforded, complicated the preparation of the status on a political level; with each category (faculty, technical and administrative staff, students) wanting to take advantage of this freedom to set up a balance within the governing bodies as stipulated by law.
- The creation of the institution required a more complex legal process, which needed to be endorsed by the French State Council (*Conseil d'Etat*).

11.5.9 Current and Future Challenges

The academic community in Lorraine initially expressed radical opposition to the merger, including understandable concerns, high expectations and a strong desire to be involved in the process. Following the merger, the reactions included a mix of regret, a wish to go forward, doubts and satisfaction.

The first kind of opposition was ideological. For those who questioned the validity of the universities’ autonomy, and disputed the concept of “excellence” or for those who were unwilling to go along with the notion of competition, there were no grounds for approving a process that partly relies on the necessity to adjust to such a background. Once implemented, the merger did not change these reasons for opposition that instead turned into regrets and attempts to contradict the political decisions now made within UL. But this is part of the normal democratic

functioning in universities. Numerous other concerns were expressed concerning the risk of setting up a new institution whose size and diversity was felt to make its governance difficult and its organisation more complicated. Members of the engineering schools from the former INPL, in particular, were used to a smaller-scale institution with short and reactive decision-making processes. The subsidiarity principle was adopted in the UL statutes to address this concern, together with the engineering school collegium, which is the only one to be explicitly mentioned. This has remained a concern since September 2012 when the university officially started to operate, but it is an issue that is being carefully monitored by the governing team.

However, the merger has already proven beneficial for the scientific policy because it has already paved the way for an agreement with research organisations in which a subject-based policy is clearly formulated. The merger is also expected to promote cross-disciplinary endeavours even if more significant research and educational projects have still to come to fruition.

A community that has been through such a mutation is naturally inclined to express more regrets (or indifference) than satisfaction. Even for those who express their satisfaction, the most sensitive question still remains definitively unanswered, namely – was this type of merger worth the advantages gained? All the arguments put forward to justify this choice on the grounds that other options could not function will never be fully convincing and acting experimentally in this field would have been particularly difficult! There are concerns that the policy-making team is too distant from the grass-root level, and there are worries about administrative complexity, loss of identity and fears of extensive restructuring of education programmes. But UL has been operational for less than a year at the time of writing and most of this discontent can be eased by appropriate internal decisions.

It must be noted, however, that most difficulties encountered at present are caused by the current economic situation and external circumstances. Owing to the economic crisis, there is not much room for manoeuvre to rapidly launch large-scale research and educational efforts that would have contributed to giving a more beneficial impetus. However, the UL is now in a much more favourable position when entering into negotiations with national authorities than was the case with the four separate institutions. In itself, this status opens up prospects that need to be shared internally and which should bear results in the upcoming contract period (2013–2017).

The text presented during the Governing Board session of 2010 propounded seven principles for the organisation: *Diversity, Proximity, Territoriality, Dependability, Subsidiarity, Reactivity, and Collective Responsibility*. The university bylaws are fully consistent with all these principles. The implementation of certain principles, in particular diversity, dependability, subsidiarity, territoriality and collective responsibility are both satisfactory and discernable. Reactivity and proximity are still a cause for discontent but their impact can be improved in the short term. Regular review of the project's stated goals is most important because their achievement is the major indicator of success of the merger.

11.6 Conclusions

Can we extract first lessons from the merger? A strong strategic commitment shared by the Presidents and their close collaborators since 2005, as well as the strong support of political and scientific partners were crucial in carrying out the merger in 2012. Even the most optimistic could not imagine this happening before 2020, and pessimists did not see it happening at all! Was the method of combining strategic projects and operational management the most effective one? The definitive answer is impossible to give, but pragmatically, one can conclude that this was a successful method. The critical success factor is to involve teams in the process and to keep the community informed on an ongoing basis of the progress on the merger. There is always room for improvement. Finally, certain opportunities which were undertaken with greater or less success (“*Plan Campus*”, “Investments for the Future”), played a role as accelerators without having proven to be necessary or sufficient for the completion of the process.

By comparing the situation in 2012 to that in 2005, it is clear the merger process has brought about greater recognition for Lorraine University both nationally and internationally. Such recognition has been reflected in the reputation earned during the “Campus” and PIA efforts and the ability of UL to devise a credible scientific strategy with its partners (which is hardly achievable for separate institutions with national-level research organisations). UL’s ARWU 2013 (ARWU 2013) – or Shanghai – ranking improved immediately, due to effect of size, (rank between 201 and 300) but time is needed to assess the impact of the new identity on national, international, industrial and academic partnerships. UL is now one single direct contact for its partners, thus strengthening confidence in its long-term position and stable alliances. Another positive factor in this respect is the appointment of a Vice-President for International Affairs and Partnerships, with power to call upon departments specialised in the field to quickly consolidate existing initiatives and start new ones consistent with a genuinely institutional policy.

As far as proximity is concerned, UL will preserve and maintain curricula, at least for degree levels, based on a territorial distribution of training programmes and users’ service provision. Creating a first year of Health Studies in Metz has even strengthened its profile. Owing to the current situation, the four former institutions would have been hard put to preserve their curricula on site. Finally, UL has the capacity to develop the university life aspects of its policies, which the former universities would only have been able to do through complex systems of contractual arrangements. Overall, by overcoming the need for these institutions to enter into agreements between one another, greater simplification is expected to be achieved in all fields in the long run, even if this is not yet apparent.

Aggregating excellence and proximity has now become part of the daily reality for UL. UL has achieved regional political and socio-economic status, and its attractiveness will contribute to that of Lorraine. The superposition of academic and regional perimeters enables consistent training, research and innovation policy-making. Partnerships with the local economic network, especially SMEs, are still considered insufficient but UL can provide both a single entry point

to further contacts and a large spectrum of action spheres to facilitate projects. When economic and political initiatives are set up outside the region, at cross-border, national or international level, it is easier and more efficient to build up fact-finding task forces comprising academics, business and policy-makers with one university rather than four. A pool of regional academic stakeholders has begun to emerge with UL as an aggregator. In this way the Campus Region, a single university, distributed throughout the region, has become a reality. Its membership in UniGR (Greater Region University) extends the notion of Region to a larger cross-border dimension, which, hopefully, is in line with the future of Europe.

The prospects for the future forced the former universities in Lorraine to find ways to be able to defend themselves against possible threats and it may now be reasonably assumed that they are stronger as a single university. However, the future also calls for the development of new capacities of initiative, innovation and development. The potential is there for the political leadership to harness these capacities, but only time will tell if the new UL will be successful in steering its future.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

Appendix: UL Structure, Organisation and Key Figures

53,000 students (inc. 7,800 foreign students)	830,000 sq. m premises (app. 8,934,045 sq. ft)
Faculty: 3,800	517 ha estate (app. 1,280 ac)
Staff: 3,000	555 M€/year consolidated budget
Scientific poles	Collegiums
Agronomy, agriculture and food industry, forestry	Arts, literature, language studies
Biology, medicine, health	Law, economics, management
Knowledge, linguistics, communication, societies	Education of teachers, institute for life long learning, Institute for German Studies
Chemistry and molecular physics	Engineering schools and preparatory schools
Energy, mechanics, process and product engineering	Medicine, pharmacology, odontology, sports
Informatics, automation, electronics and mathematics	Life and physical sciences
Materials, metallurgy, mechanics	Humanities and social sciences
Lorraine earth and environment observatory	University Technological Institutes
Law, political science, economics and management	
Time, space, literature and language studies	

References

- ARWU. (2013). *Academic ranking of world universities*. [Online] Available at: www.shangairanking.com
- Eureka. (2011). *Ce qui va changer avec l'Université de Lorraine*. [Online] Available at: www.eureka.lorraine.eu
- Légifrance. (2011). *Décret n° 2011-1169 du 22 septembre 2011 portant création de l'université de Lorraine NOR: ESRS1113874D*. [Online] Available at: www.legifrance.gouv.fr
- Région Lorraine. (2011). *Un pacte territorial pour l'enseignement supérieur, la recherche, l'innovation et le développement des entreprises en Lorraine*. [Online] Available at: www.net-education.cr-lorraine.fr
- Walbaum, B., Loisel, S., Scheftel, H., & Gjosteen, F. (2012). *Quels enseignements tirer des regroupements universitaires?* Paris: Dual Conseil & Kurt Salmon.

Chapter 12

Strategic Aggregation of Universities in Spain: The Spanish Program International Campus of Excellence and the Experience of the Technical University of Madrid

Luis Delgado and Gonzalo León

12.1 Introduction

In 2008 the Spanish government launched a new strategy to foster the modernization and internationalization of the Spanish university system, the Strategy University 2015 (SU 2015).¹ The main goal of this initiative was to allow Spanish universities to fulfil and exploit their potential to contribute to the development of a knowledge-based economy and society.

With 2015 as its time horizon, the strategy, adapted to the specific characteristics of the Spanish universities, was aimed at addressing the recommendations of the Modernization Agenda of Universities launched by the European Commission in 2006,² namely promoting the development of highly internationalised, well managed and well funded universities, with a solid education and research basis, contributing to the global production of knowledge and to the sustainable economic development and innovation of their territorial environments. As schematised in (Fig. 12.1), the strategy proposed four main axes and several strategic lines: Missions; People; Institutions and Environment.

¹ Strategy University 2015. Modernizing the University. June 2010. Ministry of Education. Spain.

² COM (2006) 208 final “Delivering the Modernization Agenda for Universities: education, research and innovation”.

L. Delgado (✉)
Ministry of Education, Culture and Sport, Madrid, Spain
e-mail: luism.delgado@mecd.es

G. León (✉)
Technical University of Madrid (UPM), Madrid, Spain
e-mail: gonzalo.leon@upm.es

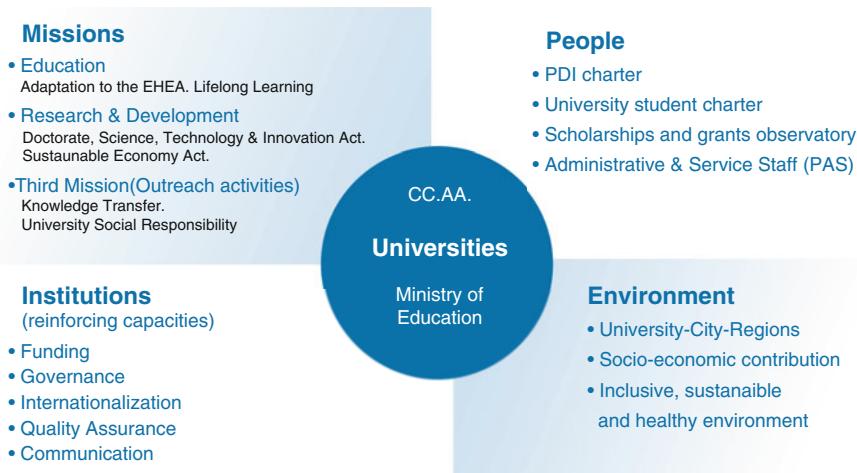


Fig. 12.1 Strategic axes and lines of Strategy University 2015

Within this strategy a new programme, entitled International Campus of Excellence (CEI) was launched in 2008. The main aim of the CEI programme was to position the top Spanish University Campuses among the best of Europe, promoting their international recognition and supporting the strengths of the Spanish university system. The purpose of this paper is to present the main results of the CEI program concerning the main alliances and strategic aggregations resulting after three consecutive CEI calls at 2009, 2010 and 2011.

An overview of the National context will be given. Then, the main characteristics of the CEI program will be presented as an introduction to the case-studies described. Two different perspectives will be used. First from the perspective of the policy maker, a cross-case commentary on two strategic merger cases representing different types of campuses will be presented. This will include information provided by the CEI projects,³ details of the institutions involved in the process, the rationale for the aggregation, the process of change as well as the progress and outcomes achieved in each case. An in-depth study of a thematic campus involving a Technical University on technology will be given from the perspective of the university involved in the campus. Finally, the main conclusions and lessons learned will be addressed.

³ Special thanks are giving to the Coordinators of BKC, Prof. Manuel Barranco and Prof. José Dorronsoro from UAM-CSIC, who provided information on their respective projects.

12.2 National Context

The challenges faced by the Spanish university system are common to other EU countries, though with some special characteristics because of the largely decentralised administrative structure of the country and the large impact on the Spanish economy of the economic crisis.

The Spanish University System is composed of 81 universities of which 50 public, developing their activities in 236 university campuses scattered all over Spain. Catalonia, Madrid and Andalusia account for almost 75 % of the total university campuses. There was a tremendous increase in the number of universities over the last 30 years, with a growth in the number of universities from 28 in 1975 to 73 in 2005, due to the need to increase access to university education all over Spain, as well as to improve the transfer of education competences to the regions. During the academic course 2011–2012 there were around 1,600,000 university students, including the third cycle, of which still around 900,000 were in the former 1st and 2nd cycle structure, 550,000 were bachelor students, 100,000 Masters students and 30,000 PhD candidates.⁴

12.2.1 Teaching

The three level structure adopted under the EHEA consists of a 4 year (240 ECTS) Bachelor programme (1st cycle), a 2nd cycle or Master level programme with a duration of 1–2 years (60 to 240 ECTS) and the 3rd cycle the Doctorate level on advanced training in research, not measured in ECTS. This 3rd cycle is structured around Doctoral Schools as Units created by one or several universities in possible collaboration with other national or international R + D + I bodies, centres, institutions or entities, with the objective of the organization of the PhD in one or several knowledge domains or with interdisciplinary character.

In the academic year 2011–2012 Spanish universities offered a total of 2,413 Bachelor's degrees and 2,758 Master' degrees, showing an excessive uniformity of the study offer with some duplication and very little differentiation.

12.2.2 Research

In the area of research and development (R&D), Spain, though still a catching-up country in the EU in terms of R&D Intensity (1.33 % of GDP in 2011), made a

⁴ Datos y Cifras del Sistema Universitario. Curso 2011. Ministerio de Educación.

strong effort in the years to 2008 to increase its investments in R&D (1.35 % of GDP). Thus, within the period 2002–2006 the real growth of Gross Domestic Expenditure on R&D (GERD) in Spain was of 61.9 % (14.8 % in EU-27),⁵ with a share of 3.1 % of the world scientific publications, above the share of Spain in the global GDP (2.7 %). Spanish universities accounted for 28.2 % of the total GERD in 2011, representing an increase of 11.8 % as compared to 2007.⁶ Since 2008, due to the impact of the economic crisis there has been a decrease in R&D Intensity from 1.35 % of GDP in 2008 down to 1.33 % in 2011 but with an increase in the university share of the GERD (26.8 % in 2008 and 28.2 % in 2011).

Universities are the second major employer after business of researchers in Spain with 80,900 full-time equivalent researchers (37.6 % of the total). Within the National Plan of R&D in the area of Fundamental Research, universities participate in 75 % of the awarded projects receiving 63.5 % of the total budget in 2008. After businesses, they are the second research performer in the Seventh Framework Programme of Research and Technological Development (FP7), accounting for 24.6 % of the competitive funding coming from FP7.⁷

In the international context, Spain has very few universities acting as major research centres of scientific reference, with 11 universities in the Top-500 (2.2 % compared with a share of 2.7 % in the global GDP) of the Shanghai ranking. The international mobility of Spanish university students (1.8 %) and the enrolment of foreign undergraduate students (3.6 %) in Spanish universities are below the average for OECD countries,⁸ though at postgraduate level the foreign enrolment increases up to 16.9 % at Masters level and up to 24.7 % at Doctoral level.

12.2.3 Challenges and Weaknesses

Though a large proportion of Spanish universities have almost completed the curricular reform within the so-called Bologna process to have a common framework for university education within the European Higher Education Area (EHEA), other reforms of the Modernization Agenda for Universities, mainly the governance reform, involving aspects of links with businesses, internationalisation, social dimension, quality, etc. and the funding reform have still to be completed.

Spanish research universities need to adapt to a changing global environment in which knowledge is the key driver of socioeconomic development, driving improvements in certain key areas. They need:

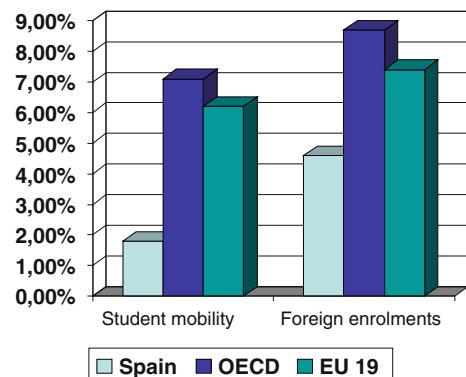
⁵ Science, Technology and Competitiveness key figures report 2008/2009. EUR 23608 EN.

⁶ Statistics on R&D Activities 2011. National Institute of Statistics.

⁷ Indicadores del Sistema español de Ciencia y Tecnología. 2012. Ministerio de Economía y Competitividad.

⁸ Education at a glance. OCDE Report 2011.

Fig. 12.2 Student mobility and foreign enrolment at undergraduate level in Spain



- To pursue excellence in strategic knowledge domains, increasing their participation in global research and innovation networks, interacting with other universities, research centres and business in a sort of knowledge ecosystems or education, research and innovation communities, where they can interact with other knowledge-related agents, develop and excel.
- To differentiate and specialise, adapting their training and research agendas, responding to the increasing complexity and inter and trans-disciplinary nature of research, and to the grand societal challenges.
- To increase their level of international activities in education and research (joint degrees, doctoral schools, joint research programmes, etc.), boosting the international mobility of their students and staff, attracting, retaining and motivating the best talents (Fig. 12.2).

In 2009 when the first CEI call was launched, there was a need to modernize Spanish universities simultaneously with the process of adaptation to the European Higher Education Area. This was at the core of a very hard economic crisis having an impact on the public budget available for higher education.

12.3 The International Campus of Excellence Program

To address the major challenges and weaknesses detected in the diagnosis of the Spanish university system made by SU 2015, the CEI program was intended to promote strategic aggregations among universities and other research institutions and business placed within the campus, to develop university-centred knowledge clusters, acting as local hubs of international excellence and contributing to the regional economic development, social cohesion and employment, by:

- Introducing a new funding instrument at institutional level to support new forms of cooperation – competition at national level among universities and other knowledge-related agents, around a new concept of university campus.

- Strengthening cooperation with other knowledge-related agents.
- Fostering the contribution to the development of a new model of sustainable, knowledge-based socioeconomic growth.

The main declared objectives of CEI were:

1. To improve the international visibility of the best Spanish university campus through the promotion of strategic aggregations to reach critical mass and excellence;
2. To promote the diversification and specialisation of universities and
3. To promote the development of innovative regions whose economic development is based on knowledge.

The CEI program developed a new concept of university campus based on three key concepts: internationalization, aggregation and excellence.

Other important dimension of this campus' concept⁹ is to create territorial environments of university life, socially and economically integrated within the urban or regional territories. The campus will pay special attention to achieve a high quality of services and environmental sustainability, i.e. healthy and sustainable campus that can contribute to increase the attractiveness of the territory for international students, academics and researchers, as well as for knowledge-related investments.

Under the CEI program the universities had to present strategic plans to transform their university campuses into CEI. The proposals were evaluated in a two stage peer review process, first by a National Technical Commission composed by independent academic and research experts making an initial selection of the projects, passing to the 2nd phase where they were publically presented and evaluated by an International Commission who finally selected the projects to be awarded with the CEI label (Fig. 12.3).

The public presentation of the CEI proposals was a somehow media event with more than 600 attendants each year, representing the major stakeholders: academics from the universities, including Rectors of the CEI proposals, political representatives at national (Parliament, Senate, political parties), regional (Presidents and Education and Research Counsellors of the regions), business with Presidents of large companies participating in the proposed aggregations, socioeconomic agents (Unions, Social Councils), etc.

The evaluation criteria included the appraisal of three transversal dimensions, mainly the quality and sustainability of the strategic aggregation, internationalization and specialization and of the four strategic axes:

1. Teaching improvement and adaptation to the European Higher Education Area;
2. Scientific quality and knowledge transfer;

⁹ Developing International campuses of excellence. Màrius Rubiralta and Luis Delgado. Ministry of Education, Spain. CELE Exchange 2010/4. OECD 2010.

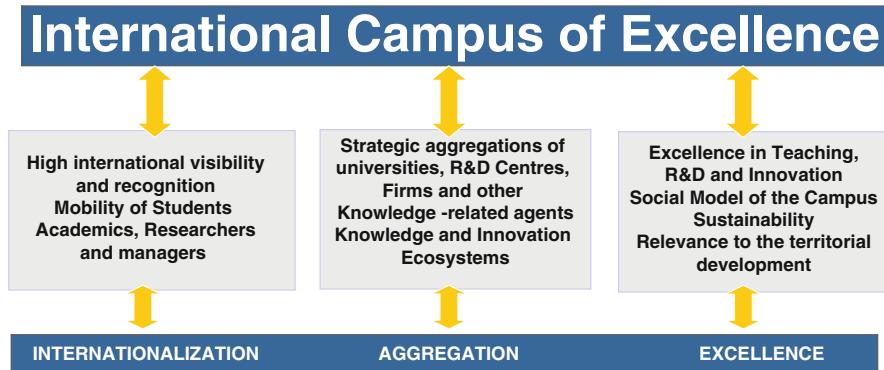


Fig. 12.3 The key concepts of the CEI program: internationalization, aggregation, excellence

3. Transformation of the campus to develop an integral social model and
4. Interaction with the territorial environment.

After some preparatory actions in 2008 signing agreements with the regions to involve the Autonomous Communities in the programme, three consecutive calls were launched in 2009, 2010 and 2011 involving two main subprograms: Excellence and Strengthening. The CEI Excellence subprogram awarded CEI excellence levels and funding through loans via the Autonomous Communities to specific projects developing institutional strategies to transform specific campuses into CEI in a 4 years process.

The CEI Strengthening subprogram (in 2010 and 2011, once the first CEI labels were awarded in 2009) included specific funding lines through direct grants to universities to strengthen concrete aspects of the CEI projects.

It consisted of two main parts: Consolidation of CEI with public funding and Public-Private Partnership (PPP) including private funding (see Table 12.1). This PPP modality of the CEI Strengthening subprogram selected partial aspect of the CEI projects to be financed through an agreement between the former Ministry of Education and private entities on the aspects shown in Table 12.1.

The total funding of the CEI programme in the period 2008–2011, since the launch of the preparatory actions in 2008 until the last call in 2011, has reached 686.7 million Euros with an average of 171.6 million Euros per year, of which 84.5 % are loans awarded to the Autonomous Communities where the universities are located to be then transferred to the CEI projects, and 15.5 % are direct grants to the universities.

The programme was originally managed by the former Ministry of Education, currently the Ministry of Education, Culture and Sport (MECD) in collaboration with the former Ministry of Science and Innovation, currently the Ministry of Economy and Competitiveness, and the support of the Autonomous Communities.

Table 12.1 Specific funding lines under the CEI strengthening program

	Consolidation	Public-private partnership
Internationalization	Trans border campus	
	International bridges	
	Setting of world-class centres abroad	
	Organization of top international events in the priority areas	
	Participation in international projects, associations and networks on education, research and innovation	
Academic excellence	Institutional strategies and programs on learning and knowledge mobility	
	Adaptation to the European higher education area	Pedagogy and leadership
	Attracting and incentivising talent	Organization of meetings with Nobel Prizes
	Development of vocational education and training centres	Scientific summer campus
Coordination of higher education	Creation of International and Interuniversity Doctoral and Post-graduated Schools	
	Setting up of collaboration networks	
Governance and management of the CEI	Governance	Training of CEI managers
Entrepreneurship and technological development	Promotion of innovative ecosystems	Promotion of entrepreneurship
		Applied research
		Sustainable labs
Creativity		Creative parks, artistic creation networks
Excellence towards the environment	Creation and rehabilitation of university housing	Technological environment to facilitate access to ITC
	Diffusion of knowledge	Rehabilitation and adaptation of university areas improving accessibility and inclusion of disabled people
	Modernisation of labs	Use of new technological resources improving accessibility and inclusion
	Development of virtual platforms for employability	Inclusive summer campuses. Campus without limits
	Improvement of sport spaces	

12.3.1 Results

The balance of the results of the three consecutive CEI calls¹⁰ is summarised here.

Thirty two (32) excellence CEI labels out of a total of 236 campuses in Spain were awarded in 2009, 2010 and 2011, in two main categories: 15 CEI: international Campus of Excellence at global level and 17 CEIR: International Campus of Excellence of regional (in the European context) level (see Table 12.2).

As indicated in (Table 12.2), the concept of campus established in the programme leads to certain universities being involved in one or more CEI. This is due to the fact that it is not the whole university which is involved in CEI projects, but only the part of the university related to the specific priorities of the relevant CEI project.

All the CEI labels are initially awarded on a provisional basis to projects that, in the opinion of the International Commission evaluating the proposals, have a high potential to achieve a level of international excellence by the end of the 4 year duration of the projects. An annual evaluation of the progress of the project is carried out every year with possible consequences for renewal or removal of the label.

The geographical distribution of the current CEI and CEIR is provided in (Fig. 12.4).

The thematic specialization of the CEI projects is presented in (Table 12.3)

12.4 Cross-Case Commentary of Two Cases: Barcelona Knowledge Campus and Campus UAM + CSIC

The two cases studied here from the perspective of the policy maker include an urban campus in Barcelona, **Barcelona Knowledge Campus**¹¹; and another related to the aggregation of a university and a research centre, **Campus UAM + CSIC**¹²:

- **BKC**, CEI project involving two complementary universities located close to each other in Barcelona with major facilities and buildings along the Diagonal street: University of Barcelona, UB, and the Technical University of Catalonia, UPC. No significant previous attempts to merge or form alliances among UB and UPC until the CEI programme encouraged strategic aggregation.
- **UAM + CSIC**, CEI project involving the Autonomous University of Madrid (UAM) and Spain's National Research Council (CSIC), specifically the 10 CSIC centres located within the UAM campus, together with other

¹⁰ Balance de tres años del programa Campus de Excelencia Internacional. Memoria 2008–2011. Ministerio de Educación.

¹¹ <http://bkc.ub.upc.edu/>

¹² <http://campusexcelencia.uam-csic.es/ss/Satellite/CampusExcelenciaUAM/es/home.htm>

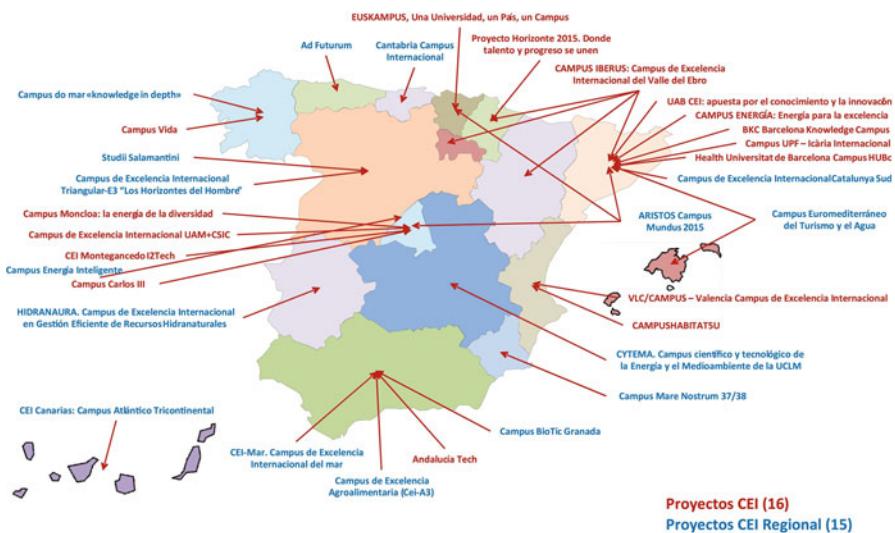
Table 12.2 List of the 15 CEI and 17 CEIR awarded in 2009, 2010 and 2011

Call	CEI project	Universities
2009	Barcelona Knowledge Campus	U. de Barcelona U. Politécnica de Cataluña
2009	Campus Moncloa. La Energía de la diversidad	U. Complutense de Madrid U. Politécnica de Madrid
2009	Campus Carlos III	U. Carlos III
2009	UAB CEI: Apuesta por el Conocimiento y la Innovación	U. Autónoma de Barcelona
2009	CEI UAM-CSIC	U. Autónoma de Madrid, CSIC
2010	Andalucía TECH	U. de Sevilla. U. de Málaga
2010	Campus Energía UPC: Energía para la Excelencia	U. Politécnica de Cataluña
2010	Campus IBERUS: CEI del valle del Ebro	U. Zaragoza. U. de La Rioja. U. de Lleida. U. Pública de Navarra
2010	Campus UPF – Icària Internacional	U. Pompeu Fabra
2010	CEI Montegancedo I2Tech	U. Politécnica de Madrid
2010	EUSKAMPUS. Una Universidad, un País, un Campus	U. del País Vasco
2010	Health Universitat de Barcelona Campus HUBc	U. de Barcelona
2010	VLC/Campus–Valencia CEI	U. de Valencia. U. Politécnica de Valencia
2011	Horizonte 2015	U. de Navarra
2011	Campus Habitat 5U	U. Politécnica de Valencia. U. de Valencia. U. Jaume I de Castellón. U. de Alicante. U. Miguel Hernández de Elche
Call	CEIR project	Universities
2009	Campus de Excelencia Agroalimentaria CeiA3	U. de Córdoba, U. de Almería, U. de Jaén, U. de Huelva, U. de Cádiz
2009	Cantabria Campus Internacional	U. de Cantabria
2009	Campus Vida	U. Santiago de Compostela
2009	AD FUTURUM	U. de Oviedo
2010	Campus Biotic Granada	U. de Granada
2010	CEI Catalunya Sud	U. Rovira i Virgili
2010	Campus do Mar “Knowledge in depth”	U. de Vigo, U. de La Coruña, U. Santiago de Compostela
2010	Campus Mare Nostrum 37/38	U. Murcia. U. Politécnica de Cartagena
2010	CEI CANARIAS: Campus Atlántico Tricontinental	U. Las Palmas de Gran Canaria U. de La Laguna
2010	Studii Salmantini	U. Salamanca
2011	Campus Euro mediterráneo del Turismo y el Agua	U. de Les Illes Balears. U. de Girona
2011	Hidranatura. CEI en Gestión Eficiente de Recursos Naturales	U. de Extremadura
2011	ARISTOS. Campus Mundus 2015	U. Ramón LLull. U. de Deusto. U. Pontificia de Comillas

(continued)

Table 12.2 (continued)

Call	CEI project	Universities
2011	CEI-MAR. Campus de Excelencia Internacional del Mar	U. de Cádiz. U. de Almería. U. de Granada. U. de Málaga. U. de Huelva
2011	CEI Triangular E3. Los Horizontes del Hombre	U. de Valladolid. U. de León. U. de Burgos
2011	CYTEMA. Campus Científico y Tecnológico de la Energía y el Medio Ambiente	U. de Castilla La Mancha
2011	Campus de Excelencia Internacional Energía Inteligente	U. Rey Juan Carlos. U. de Murcia. U. de Extremadura. U. Politécnica de Cartagena

**Fig. 12.4** Geographical distribution of CEI and CEIR**Table 12.3** Thematic distribution of the CEI/CEIR

Knowledge field	No of CEI/CEIR
Biomedicine/health	18
Biotechnology	11
Sea and marine sciences	4
Natural sciences (physics, materials, chemistry)	5
Heritage and culture	7
Information and communication technologies	6
Environment & sustainability	14
Energy	8
Agriculture, food & nutrition	8
Social sciences & humanities	13

Table 12.4 Basic data of BKC and UAM+CSIC

	BKC	Total BKC	UAM-CSIC	
	UB	UPC		
No of students	33,813	21,842	55,655	29,802
No Bach. degrees	30	17	47	76
No Master degrees	71	61	132	129
No PhD programs	39	30	69	45
No Professors	2,562	1,528	4090	2,485

Table 12.5 Position of universities in global ranking

Ranking	UB	UPC	UAM
ARWU	201–300		201–300
THE	201–225	351–400	301–350
QS	187	350	206
ARWU Eng/Tech		151–200	
ARWU Maths		151	

institutions located in the Campus such as the Scientific Park of Madrid PCM and the Madrid Research Institutes IMDEA, with the goal of becoming the leading CEI in Spain in teaching, talent and research in four main areas: Biology and Biomedicine, Nanosciences & Advanced Materials, Theoretical Physics & Mathematics and Social Sciences, Law & Humanities.

The basic indicators for each campus are given below (Table 12.4):

The position of the universities involved in the three projects in global rankings, i.e. Academic World Ranking of Universities (ARWU), Times Higher Education (THE) and QS World University Ranking (QS) is given in (Table 12.5).

12.4.1 Rationale for the Alliance

The key drivers and expectations are summarised in Table 12.6 for each CEI project.

12.4.2 Process of Change

The main measures to implement the three projects can be summarised as follows:

Table 12.6 Rationale for alliances. Key drivers and expectations

CEI project	Key drivers	Expectations
BKC	Achieve international excellence in research, knowledge transfer and teaching	Transformation of the campus through innovation and specialization in three areas: life sciences, social sciences and technologies
	Become a campus open to the world and committed to society and to economic and social progress, responding and adapting to the social, economic and strategic needs	Emerge as a magnet for attracting international talent
	Make progress towards excellence from the integration of activities favouring the aggregation of both institutions	Position the campus in different areas of cutting-edge knowledge and research such as Space, Nano and Environmental Sciences as well as Entrepreneurship – Increase the existing relationship between research teams from both universities with positive effects in international rankings
	Become a catalyst and test-ground for initiatives to be extended to the rest of the university, acting as a tractor agent to excellence	Incentive for the university community to continue the development of its goals
	Consideration of the CEI mention as a recognition and intangible value motivating to further advance in excellence	Contribute to the development of a sustainable urban environment to make the campus attractive. Open sports areas, museums and cultural facilities
UAM + CSIC	To achieve excellence in research in the priority areas: biosciences, nanoscience and materials science, mathematics and theoretical physics. These areas must act as tractors for other research areas	To increase the international relevance of the CEI, with an ambition to become the leading Spanish CEI and achieving a major jump in international rankings
	To get graduate and doctoral programs of excellence and active talent attraction	To achieve a close involvement with its surroundings, in order to lead the social, cultural and economic development of the Madrid North area

12.4.2.1 BKC

- Attracting foreign students to BKC PhD programmes through calls for postdoctoral grants
- Strengthening BKC's international reputation by introducing double bachelor and master degrees, and participating in European mobility programmes
- Increasing the range of Erasmus Mundus master degrees and programmes taught in English
- Signing strategic agreements with Chinese universities to set up the BKCnet network and enable students from that country to attend BKC courses

- Offering education based on transversal competencies in entrepreneurship
- Participating in the creation of technology-based companies, as well as in the growth of spin-offs and start-ups, supporting these enterprises
- Consolidating a new model of business relations and strengthening the links with companies by launching the Innovation and Technology Centre at both universities
- Creating initiatives (nanos, geos, cosmos, and entrepreneurship) for cooperation/coordination in specific research areas.
- Collaboration between international relations offices (joint international action, centres of excellence abroad)
- Reciprocal extension of “best practices” of the partner universities
- Creation of the management and communication unit, to increase the visualization of the BKC actions

12.4.2.2 UAM + CSIC

The first measure in developing the CEI UAM + CSIC was to set up a tool to steer the joint project between two organizations, UAM and CSIC, with different legal and organizational status.

The “Association for the Development of the CEI UAM + CSIC” was created to develop and follow up the execution of the shared strategies of excellence and internationalization. It is responsible for the set up and follow-up of the joint programmes defined in the project, the impulse of new strategic aggregations with knowledge transfer and research organizations, and the national and international communication and projection of the CEI. Several coordination commissions have been set up to follow up the work done in the project’s sub-areas and for managing concrete activities.

The main actions have focused on creating or strengthening joint scientific infrastructures (platforms) or relationships (Biocampus), thus reinforcing the aggregation itself. Several initiatives of talent attraction for students (Graduate Programs of Excellence) and staff have also been launched.

12.4.2.3 Funding

Total funding allocated to the **BKC** project under the CEI 2009, 2010 and 2011 calls amounted to a total of 46,307,204 Euros, of which 39.2 M€ were loans and 7.1 M€ direct grants. The total funding allocated to the **CEI UAM + CSIC** since 2009 is 24 million Euros including specific grants under the Strengthening subprogram and loans under the Excellence program. In addition, existing resources at the University and CSIC are, at the end, behind the most relevant CEI initiatives. Most of that money has gone to new specific scientific infrastructures, but also common campus facilities such as the Plaza Mayor building. Other CEI income has been devoted to strengthen ongoing programs on graduate and PhD studies and on talent

attraction. While being small, it must also be pointed out that investment has been made on several tools of the aggregation process itself, such as communication, branding or a specific website for the CEI.

12.4.2.4 Engagement

The engagement of staff and students in the aggregation process was driven by some key factors promoted by the **BKC** management such as creativity to contribute to the new campus, innovation and desire to learn from a new experience. This was soon to achieve an increased feeling of belonging to a cohesive urban campus with implications for the city's development. Collaboration was first established at postgraduate level, where a better use of the complementarity between the two universities could be made.

Within **UAM + CSIC**, the **deployment** of staff and students is being promoted by the CEI management, which provides information on the CEI developments on a regular basis, including the actions to foster participation and ownership by both academic and students. In addition, communication channels have been established to receive their suggestions and forward them to the responsible agents. Many have been addressed. This has enabled the development of some low cost actions that have nonetheless a high impact on the community. A clear example in this direction is an ongoing initiative for a Campus-wide ID card that will grant access to services provided by the different agents of the aggregation regardless of the specific group (UAM, CSIC or other) which the beneficiary belongs to.

12.4.2.5 Resistance

Within **BKC**, resistance to change stemmed from an initial mutual distrust of the other side and a distinction between "Us" and "Them", as well as from organizational and structural differences between a generalist university (UB) and a technical university (UPC) with certain divergent interests between the allies. Other resistance came from the parts of both universities excluded from the BKC project and from the rigidity of the present structures.

No resistance to change has been so far detected in the CEI **UAM + CSIC**. Scientific and general collaboration between UAM and CSIC began many years ago and the two communities see the CEI as an opportunity to enhance their relationship, generate synergies and leverage existing resources.

12.4.3 Progress and Outcomes

The initial plans drawn in 2009 to build up "BKC" have been affected by the impact of the economic crisis reducing the budget available. Therefore, some of the largest,

expensive structures are postponed or cancelled due to economic reasons. Some others have been redirected to make their building affordable. However, most actions in the initial project are progressing well, with some difficulties in implementing campus governance.

The major **outcomes** so far of the project are: a wide range of master degrees taught in English, new International Welcome Point, new international alliances, PhD grant programme, new scientific equipment, open campus, implementation of the energy consumption monitoring system, new study rooms with state of the art equipment, teaching activities aimed at young students, joint technology catalogue, joint Innovation and Technology Centre, Knowledge to Market programme, new social learning areas, new PhD School (technology area), full adaptation to the EHEA.

The assessment of the success of the BKC project, by the International Commission tasked with evaluating the progress of the CEI projects in 2011 and 2012, indicates that BKC has made reasonable progress in creating a strong pole of innovation in support of the regional and national economy by realizing synergies through the joint activities of UB and UPC, giving more visibility to the new BKC brand and focusing on clear areas of strength (life sciences, social sciences and ICT).

The initial plans of **CEI UAM + CSIC** has to a large extent been achieved, resulting in the allocation of 88.6 % of the budget for CEI specific grants at the end of 2012. The assessment of progress on the CEI made by the International Commission in 2012 shows good progress (by comparison with the assessment of “reasonable” progress for BKC) with sound advances in some areas such as teaching, research and development of the social model of the campus, and less progress in others, such as technology transfer and links with firms, as a consequence of the contraction of R&D funds in Spain. More than 50 CEI-specific actions have been implemented or are under development since then. As a consequence, the project has consolidated itself with the support of all the relevant stakeholders, generating synergies and measurable results that are expected to increase in the near future.

A summary of the major strengths and problems for each project is given in Table 12.7.

12.4.4 Conclusions and Lessons Learned

A recent study¹³ concluded that the Campus of International Excellence **Barcelona Knowledge Campus** would occupy first position in the ARWU Shanghai ranking,

¹³ Aggregate ranking of Spain's universities in the Shanghai ranking (ARWU): Effect of autonomous communities and campuses of international excellence. El profesional de la información 2012, julio-agosto, v 21, n 4, ISSN: 1386-6710.

Table 12.7 Summary of strengths and problems in each CEI project

CEI project	Strengths	Problems
BKC	Joint internationalization activities and overseas structures (China, Brazil)	Financial problems with a disappointing level of funding below the initial expectations of the CEI program
	Increased interaction between UB-UB and UB-UPC research groups	Apparent change in the Ministry priorities after the ministerial reorganization at the end of 2011
	International postgraduate school to improve teaching and research	It is considered that the potential of the CEI concept to increase international recognition and multiply and diversify funding sources must help to overcome these difficulties
	Clear governance structure	
	Support to entrepreneurship	
	Attention to the needs of disabled students	
UAM + CSIC	Opening the CEI to VET through apprenticeships scheme, especially in the fields of entrepreneurship and biomedicine	
	Adaptation to the EHEA	Definition of the CEI's own governance model, different from the ones followed by the University or CSIC. The CEI Association tries to clarify the mechanisms of decision-making, offering a high degree of transparency and accountability
	Teaching's improvement participating in the program of the National Quality Agency	
	Transformation of the campus into an university city	
	Reform of research labs and scientific infrastructures (Supercomputing, Food and Genomic Platforms)	
UAM + CSIC	International Post-grade Program. Attraction of talent	
	Joint (UAM + CSIC) research institutes and facilities in the priority areas	Difficult current financial conditions and their impact on university and research budgets, limiting the actions that are being launched
	Two "Severo Ochoa" Excellence Centres out of a total of 13 in Spain	Slowdown in Spain's national CEI program. Nevertheless the CEI UAM + CSIC project has a strong internal logic and, thus, will go on to a great extent independently of external factors
	Three advanced grants and four starting grants in ERC	

among the Spanish CEI, together with two CEI in Valencia, if they were a single university. In addition, if the BKC were a single university, it would be within the 150–200 range of the total ranking. The increase in visibility of a joint CEI **UAM + CSIC** visibility would result in joint teaching and research yearly budgets amounting to approximately 400 million Euros. If successful, this would result in much greater international recognition than currently achieved.

In fact, the project's logic and its key drivers stem from the internal recognition of the underlying relevance, interest and advantages that will be derived from its

successful completion. An obvious advantage of aggregation is the much larger scope for recognition, visibility and, subsequently, attractiveness. Moreover, new investment will be smaller and much more efficient, a factor which is important under the current budgetary constraints.

A great advantage of the “CEI UAM + CSIC” is the previous long history of intense collaboration and shared successes between UAM and CSIC departments. This excellent springboard can only be enhanced and increased through collaboration with new partners, giving the project an important initial momentum and greatly leveraging its chances of success. The Association has a clear role in steering and smoothing the process, as well as reinforcing the project’s brand image and increasing its visibility, both external but also internal. Building a wider awareness of the project among stakeholders and a strong communication plan are also key elements for its success.

12.5 CEI Montegancedo: In-Depth Case Study of the Technical University of Madrid¹⁴

12.5.1 *Rationale*

The Technical University of Madrid (UPM) is geographically distributed in five “ampuses” located in the “region of Madrid”: Moncloa, Montegancedo, Campus Sur, Getafe and Valdelacasa (a future project of campus not initiated yet); there are also different engineering schools located at the centre of Madrid for historical reasons.¹⁵

Two campuses of the UPM were selected to compete in the CEI programme (Moncloa and Montegancedo), looking for better chances for success in the evaluation process of the call and to be able to address very different institutional goals. Finally, the UPM obtained official recognition for the following two proposals presented in response to the open calls:

- Moncloa Campus. It was jointly presented with the “Universidad Complutense de Madrid” (UCM) which acts as coordinator of the proposal. The thematic emphasis was placed on five “clusters” (S&T domains) and a set of cross-cutting actions. The complementarity of both universities and the geographical location sharing the same campus was perceived as a unique opportunity.
- Montegancedo Campus. The proposal was presented exclusively by the UPM, but with the “aggregation” of many enterprises and public research centres. The

¹⁴ This perspective complements the policy maker position expressed in the first part of the article in order to discuss the effect of the programme for the coordinator of the Campus in a technical university.

¹⁵ They were located there well before the creation of the University itself in 1971 on the basis of pre-existent engineering schools.

emphasis was placed on open technological innovation by using the information and communications technologies (ICT) as a driving tool in several S&T domains addressed in the Campus.

This section focuses on the experience gained through the development of the CEI Montegancedo through the “I2_Tech” project. The CEI project was oriented towards cooperation with other entities to support user-driven open technology innovation, and the creation and location of new joint research centres or joint research labs with other public or private entities. More specifically, the objective was to increase the support for technological innovation jointly with the business sector, by using information and communication technologies (ICT) as a backbone and catalysing element empowering research activity. This became a fundamental axis of UPM’s activity.

The UPM is committed to developing a “science-driven innovation” approach to support disruptive technological innovation in close interaction with research activity which the University is well prepared for. The CEI at Montegancedo is a key element of this strategy to become an open innovation ecosystem in itself where the UPM and other “aggregated entities” (“allies” in the CEI programme terminology) jointly generate value through the combination of teaching, research and innovation activities as outlined later in this chapter.

This vision is complemented by the need to infuse UPM’s academic effort with an entrepreneurial attitude which extends to all students, at both undergraduate and postgraduate level, and faculty members. This vision should impact on the entire educational range of the university in addition to setting up specific courses or seminars on entrepreneurship.

When the UPM presented its proposal for CEI Montegancedo (UPM 2009), it was intended to build up a model of a university campus which is clearly different from other proposals under preparation by other Spanish universities. Even more important, the Campus was also being used as the basis for experimenting with new approaches for long-term cooperation with industry, based on high-level institutional support and shared commitments.

The “I2_Tech” proposal (implicit reference to the dual perspective of innovation and internationalization) submitted to the Excellence Programme was oriented towards the implementation of a user-driven open innovation scheme with the aggregation of private entities in order to accelerate the innovation process. In addition, the emphasis was placed on the exploitation and commercialisation of research results, considered as one of the areas of activity where the UPM can dramatically improve its performance in the near future.

Further to the identification of a set of actions and requesting funding for them, there was the institutional objective to affirm “excellence in technological innovation” as a common goal for the campus. This vision emphasizes the role which a technical university such as the UPM could play in Spain to accelerate technological innovation in a specific territorial context.

The UPM conceived the proposal from the deep conviction that higher education, research and innovation are closely linked, and public universities, above all

those ones with a technological profile, should play a prominent role in promoting interactions between these dimensions; both through their own activity as well as in its social recognition. For Spain, and in the present context, stimulating science and engineering-driven innovation was identified as a very useful role of a technical university.

For this reason, the actions included in the “I2_Tech”-UPM proposal were aimed not only to develop this perspective from the thematic areas of the research centres located in the Campus (today or identified in the near future), but also to develop a set of distinctive features, including:

1. **Multidisciplinarity** in the scientific and technological approach necessary to address the solution of complex societal problems. The UPM assumed the high value that technology can offer to society in this context.
2. **Open innovation model** based on the creation of long-term and stable partnerships with other public and private entities across the value chain.
3. **Support to entrepreneurship** as a cross-cutting activity within a public university to accelerate a change of mentality among students and faculty members.
4. **Extensive use of information and communications technology (ICT)** by emphasising its role in strengthening the competitiveness of key sectors through the provision of advanced products and services.
5. The **internationalisation of the innovation process** related to the global exploitation of research results and the generation of R&D agreements with non-Spanish entities in a multicultural working context.

This model, when applied to a university campus, was considered as a novelty in the Spanish university context and it was chosen for building up the **I2_Tech** proposal submitted by the UPM to the Ministry’s call for proposals. Figure 12.5 depicts the strategic view whereby many types of activities should be integrated under the three basic dimensions of the knowledge triangle. Some of those activities



Fig. 12.5 Model of the Montegancedo campus from the knowledge triangle perspective

existed in the Campus and others were specifically proposed for funding. This new approach was clearly recognised by the international panel which considered (citing the evaluation report) Montegancedo as “*much further than a typical campus oriented to technology transfer*”.

The proposal which obtained official recognition was designed to convert Montegancedo into a Campus with a strong involvement of industry and other entities, through partnership with the UPM “*focused on the support to technology innovation based on extensive use of ICT looking for new opportunities for collaboration at the international level*.”.

Currently, the statistical profile of the Montegancedo Campus is as follows: 500 researchers, 200 professors, 2,800 students, 8 research centres in operation, and the Faculty of Informatics. The Campus is also the location of advanced services on RTD and innovation (i.e. supercomputing, a set of living labs, technology demonstrators, support to technology innovation, business incubator, etc.). Globally, in the period 2005–2013, the total investment in the Campus exceeded 120 M€ (65 % of them through loans with 0 % or very low interest rate) for infrastructures and scientific equipment.

Figure 12.6 depicts the units located on Campus near their main function. The list of research centres located in the Campus is as follows: **CTB** (Centre for Biomedical Technology), **CBGP** (Centre for Biotechnology and Plant Genomics), **CEDINT** (Centre for Home Automation), **CESVIMA** (Centre for Supercomputing and Visualization), **CITA** (Centre for Aerospace and Microgravity), **COM** (Centre for Open Middleware) and **IMDEA software**. A new one, **CIESP** (Centre for

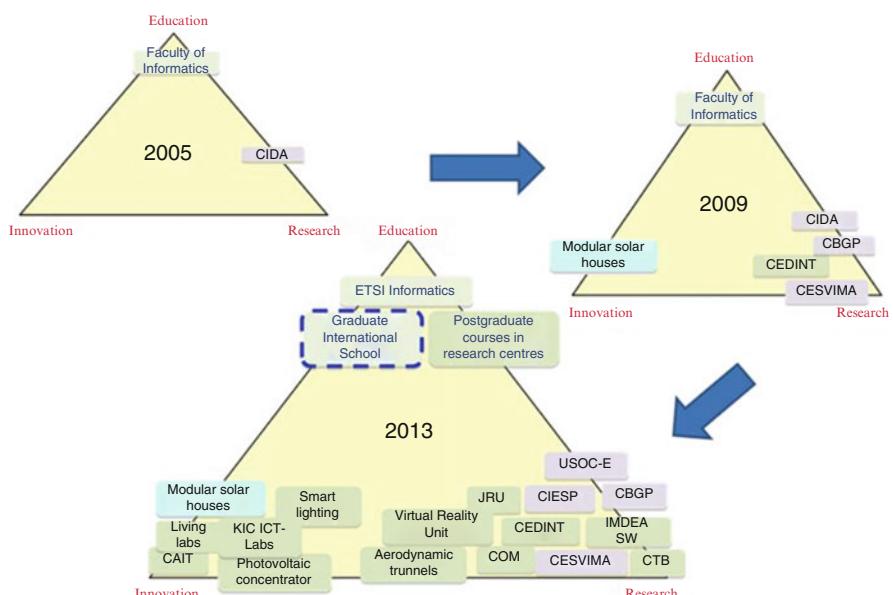


Fig. 12.6 Evolution of the CEI Montegancedo in the knowledge triangle

preservation of the cultural heritage) jointly created with the UCM in cooperation with the CEI Moncloa is being located in 2013.

All of them belong to the UPM with the exception of the IMDEA Software which is a research centre supported by the regional government through a foundation structure (where the UPM participates as one of its stakeholders). Nevertheless, some of them were created as joint research centres with other entities (e.g. CBPG with the INIA, a public research centre on Agriculture, COM with the Santander Group, or with the agreement to create joint labs (e.g. CTB with the CSIC, and two universities UCM, and URJC). The CAIT (Centre for Technology Innovation) and the business incubator complete the set of units located in 2013.

12.5.2 International Perspective of the Campus Montegancedo

Participation in large international research projects with the industrial sector, as undertaken in the Seventh Framework Programme of the EU (FP7), the European Space Agency (ESA), etc., is a strong point of the UPM. More than the 35 % of the UPM's FP7 participation relates to research groups located on the Montegancedo Campus. Furthermore, participation in other large international projects like "Blue Brain" (in the CTB) coordinated by the Ecole Polytechnique Fédéral de Lausanne (EPFL) in Switzerland, the FET Flagship on Human Brain, the Spanish node of the ICT-Labs knowledge and innovation community of the European Institute of Technology, or through the Foundation Bill & Melinda Gates (in the CBGP) also provide a strong international networking profile in research activities.

In order to extend this international perspective, several agreements with other entities were signed to address the following aspects:

- To develop capacity to create **joint labs in ICT or Biotech with other entities**. As an example, the creation of the associated node of the IC-Labs (KIC-EIT) or the joint centre with Campinas were successful examples from this perspective.
- To design and implement **joint graduate programmes** (Master degrees in research centres) in cooperation with other non-Spanish entities. The setting up of the Masters in Bio-energy with UNICAMP (Brazil), or the Masters in translational clinical research with the Colorado University (USA), or participation in another Masters in Computer Science with the University of Toulouse (France), are examples embedded in this strategy.
- To accelerate the **exploitation of research results at the international level**. It also includes some agreements with foreign business incubators to help in the expansion of the spin-offs created by the UPM. Joint activities were carried out with the *Technical University of Munich* (TUM) and the *Politecnico di Torino* (POLITO).

This strategy was also pursued through the signature of **agreements with private firms to create joint ventures** oriented towards the creation of joint labs, participation in large projects, or even the setting up of joint research centres.¹⁶

A specific programme for **attracting international talent** through the opening of post-docs positions (partly funded by People-FP7) in research centres, or pre-doc fellowships was mainly oriented to attracting foreign researchers. This vision was completed with the international recruitment of **senior researchers from abroad**. The agreement signed with the BBVA and the European Commission (COFUND scheme in the People programme)¹⁷ provided permanent positions for the creation of three new research groups on Campus. This example also demonstrates the opportunities open through fruitful public-private cooperation.

12.5.3 *The Role of the Private Sector*

The creation of strategic alliances with the private sector was considered as a basic element for the success of the “I2_Tech” proposal. Its rationale was based on the strong relationship and mutual trust with private companies which exists today between the UPM and the industrial sector in the R&D activities. The institutional interest of the UPM should shift from the conventional project-to-project cooperation scheme (even if they are funded by international research programmes) to the implementation of strategic long-term alliances associated to the creation of joint research labs or units (Fig. 12.5).

Some strategic long-term agreements with private firms were signed to support this approach in connection to the research centres located on the Montegancedo Campus: with IBM in the field of high performance computing for computational biology, with INDRA in the area of medical ICT platforms, with Repsol for bio-fuels and simulation of pipelines, with the Santander Group in the area of open middleware, with Elekta in Magnetoencephalography, with “T-Systems” in virtual reality, with Zeiss in post-processing of microscopy images, with CISCO in the area of cloud computing and virtualisation, with Philips and LPI in smart lighting systems, with Accenture, CREANIA and e-Gauss in the support to entrepreneurship and spin-off creation, and with Telefónica, ATOS, BBVA and INDRA in the creation of a node of the ICT-Labs KIC of the European Institute of Technology (EIT).

Figure 12.7 schematically depicts the concept of open innovation ecosystem created in the CEI Montegancedo.

¹⁶ Some examples were in the EU with Elekta and T-Systems, in the USA with IBM and LPI, in Brazil with Sinopec-Repsol, and smaller ones in other parts.

¹⁷ Two consecutive projects in the FP7-People programme were approved: UNITE in 2010 and PILOT-INN in 2013 (for the whole UPM and not only for the Montegancedo Campus).

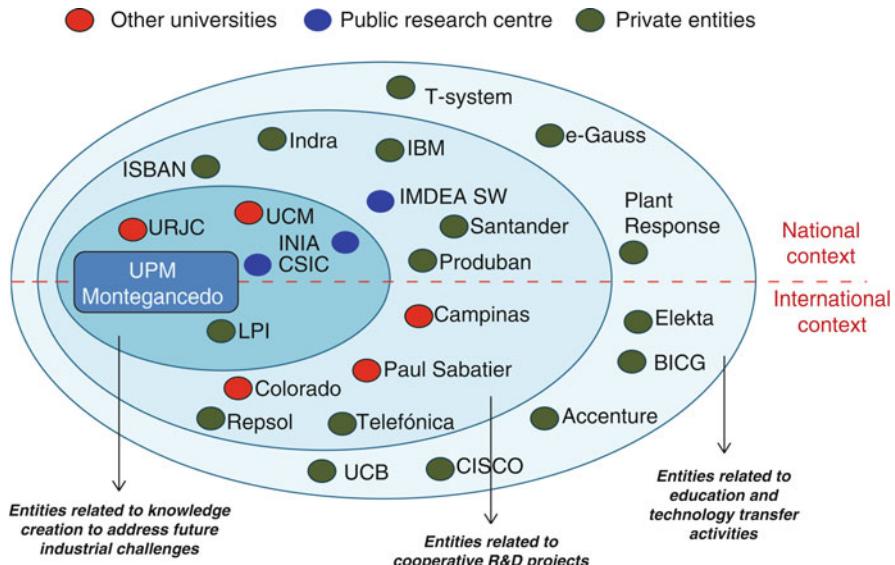


Fig. 12.7 Open innovation ecosystem of Montegancedo

In order to support formal interactions between the university authorities and the aggregated entities (a total of 25 public and private entities were formally aggregated in 2013), the UPM promoted the creation of an Advisory Council. By meeting regularly, and also by setting up specific working groups (in 2013 two working groups were created on Internationalisation and Technology Commercialisation), the Council became a useful instrument to exchange ideas and to prepare new actions in bilateral or multilateral formats.

It is too early to assess the validity of this approach but it is envisaged that the need to find flexible and operational easy mechanisms for the progressive introduction of aggregated units in the daily life of the Campus of Montegancedo will be achieved.

12.5.4 Support Centre for Technology Innovation

The UPM is required to improve the exploitation of research results (not only through the licensing of patents but also through the commercialisation of technologies developed by research groups or research centres) in those cases where the technology has not been developed for a specific company by using a contract research model.¹⁸

¹⁸ Usually, contracts with third parties imply the transference of the property and/or the exploitation rights to the entity paying the research activity.

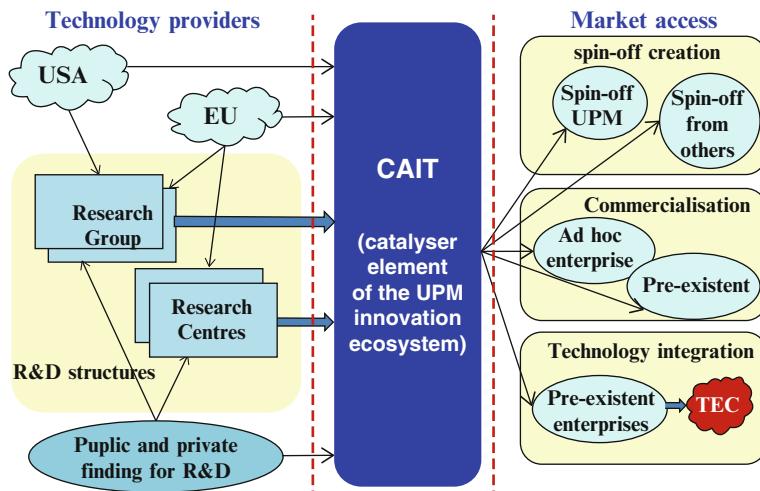


Fig. 12.8 Role of the CAIT in the UPM

Unfortunately, the results generated through research projects are immature and it is necessary to continue their development for a while until they reach a stage where the transfer to a company or the creation of a spin-off is possible based on a consolidated proof of concept. In order to mature promising technologies created at the UPM, the I2_Tech project proposed to create the “Centre for Support Technology Innovation” (CAIT) to catalyze this process. Figure 12.8 depicts its role as a bridge between technology providers and the access to market. The centre started its activities in 2013.

There is a natural/physical bridge between maturing research results, business ideas, and the creation of spin-offs or start-ups because CAIT was built physically connected to the present business centre and competences on spin-offs and business incubator constitute part of it.

During 2013 the main efforts focused on identifying and funding promising technologies through the launch of the “Fund for UPM Technology Commercialisation”, which focuses on proof of concept for select UPM promising technologies. As Fig. 12.9 shows, many other activities are carried out in parallel to support maturity.

When technology matures (if possible, in less than 1 year), two options are possible:

1. to sell it to a third party (at the national or international technology market) as a single product or integrated with others, or
2. to create a spin-off company to exploit it. The first data on exploitation during the period 2012–2013 indicated a huge leap forward.

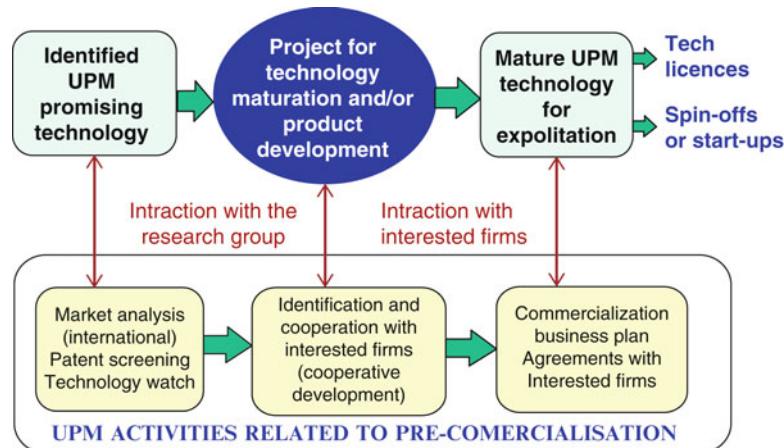


Fig. 12.9 Towards the exploitation of research results

12.5.5 Horizontal Issues

12.5.5.1 Governance of the Aggregations

The concept of “**aggregation**”, as it was conceived in the Spanish Excellence Programme, is conceptually very powerful. Nevertheless, it is also very complex to implement from the decision making perspective. In short, the aggregation is not intended to substitute the decision-making processes currently in place, but to create another level which co-exists with the previous processes. The case of Montegancedo is easier because the aggregated entities do not decide at the global level although they influence its evolution.

Cooperation with the CEI Moncloa was supported in the magnetoencephalography system (located in CTB) and the joint research centre on preservation of cultural heritage (CIESP). Additional joint activities will be launched in the near future.

One of the main challenges noted during implementation of CEI projects was in securing the involvement of the whole university. The concept of “campus” had a geographical context and the selection of some thematic domains made it impossible to incorporate all faculty members and schools in the main actions.¹⁹ Although some effort was made to develop cross-cutting activities, it is evident

¹⁹ It was evident in successive calls of the programme that the ministerial interpretation of the geographical focus of “campus” was relaxed and, in the end, the borders of the concept of “campus” were blurred. Some of the awarded proposals included aggregations of universities located in several regions with a common goal.

that many members of the community did not feel deeply engaged in the Campus of Excellence.

In the CEI Montegancedo the situation was easier because the type of actions were intentionally chosen to increase the opportunities for generating additional research or innovation activities with the industrial sector, and to exploit research activities carried out in other parts of the UPM. These activities would generate enough resources to reimburse the loans through the participation of research centres and also to re-distribute them to other research groups; however, it is too early to assess the level of attractiveness for the industry generated in this context.

12.5.5.2 Concept of Excellence in Innovation

As mentioned above, “excellence” can be applied to a set of university activities and it is not limited to the research perspective. Then, to measure the way that “excellence” in the chosen domains has improved after or as a consequence of its recognition as a “Campus of Excellence” should be a clear goal during the assessment of the benefits of the programme. Implicitly, it is assumed that the funding and the recognition would serve as an “accelerator” for obtaining the intended excellence in the valorisation of disruptive research results at the international level.

The evolution of patents, licences and royalties, and the generation of spin-offs in the last years are very positive. More specifically, more than 50 patents granted in 2012, with 17 spin-offs created and 12 licenses contracts represent a huge leap forward, where CEI Montegancedo is a key catalyst.

Does this evolution come from the funding in the CEI programme? We cannot affirm that it is the only cause, but we are sure that it has contributed to it by stimulating the signature of agreements with other entities, and the attraction of skilled human resources on the basis of the existence of sophisticated scientific equipment.

12.5.6 Lessons Learned

After 3 years, the programme has been (temporally) “frozen” by the incoming Spanish Government in 2012 but the follow-up of pre-existing grants is in progress and a decision about its future is still in discussion. Simultaneously, the economic situation of Spanish universities with sharp cuts in the funds received from regional governments is becoming more difficult and is forcing the re-planning of their strategic actions to ensure long-term sustainability. In many cases, the regional governments (this is the case for the region of Madrid) have not accepted the commitments derived from the long-term loans and these have to be covered by the universities themselves.

The evolution of the UPM will condition the future of Montegancedo. The proposal was defined before the global crisis and many activities were planned

under the assumption that additional funds will be available (for instance, from S&T Parks or from the regional government). The lack of additional calls, the hard conditions for accessing soft loans, and the removal of investments chapters are forcing the redefinition of activities and the need to pay considerable attention to increasing the revenues from international R&D programmes, contracts with industry and the exploitation of scientific equipment and IP.

For the CEI Montegancedo, there are three main elements which will condition the evolution of the campus:

- Scientific **consolidation of the new research centres** located in the Campus. This is a very important element in enhancing its attractiveness for new researchers and to increase participation in international research consortia.
- Increasing the **critical mass of students** with an emphasis on post-graduate students. To compensate for the sharp increase in tuition fees a fellowship programme is being designed with the cooperation of the aggregated industries.
- Strengthening **cooperation with industry** and the **exploitation of research results**. In this respect, the CAIT could provide a very important framework for accelerating exploitation of IP assets.

In summary, the Spanish Programme on International Campus of Excellence constitutes an effort to promote the strategic modernisation process at universities even if the funding of the projects is mainly based on soft loans and strongly conditions the type of activities to be supported. The UPM, after obtaining the recognition of the two proposals oriented towards complementary goals, has a great opportunity to increase its international visibility and to accelerate its excellence in the context of the knowledge triangle. It should be the basis for its new strategic positioning in the international arena.

12.6 Concluding Remarks

After 3 years of operation, the participation of all the Spanish Public universities and 17 out of 29 (59 %) private universities, despite the fact that private universities are not eligible to receive loans through the autonomous communities, indicates that the CEI program is having a real impact on the configuration of the university landscape in Spain.

The impact is significant in terms of the following aspects:

- Providing additional funding to define and develop strategic processes to become a CEI in a 4 year period;
- Creating new teaching and research positions as well as campus managers;
- The internationalization of teaching and research activities;
- Increasing international attractiveness because of the CEI label;
- Promoting social awareness in relation to the universities' role in contributing to the economy recovery;

- Supporting the strategic aggregation of universities, research and technological centres and firms;
- Building up knowledge ecosystems in specific thematic fields related with the social challenges;
- Promoting the role of universities in underpinning “creative cities” and “smart territories”.

On the other hand, and not without difficulties, the CEI program modifies the model of “excellent university” showing that there is not a single model to achieve excellence. Each CEI is implementing the strategic plan and governance setup which allow them to deal with these new challenges:

- High quality in teaching, providing to students with the competences and skills needed for new jobs and innovation;
- Quality and relevance in frontier research in relevant areas to contribute to the solution of societal challenges (energy, food, environment, transport, etc.) and to the innovation needs of SMEs;
- Hub in the International Networks of Knowledge;
- Positive impact in the socioeconomic environment, exchanging knowledge with businesses and society at large;
- Relevant in the process towards the shift to a sustainable knowledge-based economic model;
- Magnet for international talent and knowledge related investments.

In its present phase, the CEI program will continue to assess the progress of the existing CEI allowing for the dynamics of the Spanish university landscape until the CEI projects reach their end in 2015 and promoting additional funding to the Spanish University System, mainly through Public – Private Partnership schemes as the one already in place in the CEI program.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Barcelona Knowledge Campus. (n.d). [Online] Available at: <http://bkc.ub.upc.edu/>
- Campus de Excelencia UAM – CSIC. (n.d). [Online] Available at: <http://campusexcelencia.uam-csic.es/ss/Satellite/CampusExcelenciaUAM/es/home.htm>
- Commission of the European Communities. (n.d). *Communication from the Commission COM (2006) 208 final “Delivering the modernization agenda for universities: Education, research and innovation”*.
- Docampo, et al. (2012). Aggregate ranking of Spain’s universities in the Shanghai ranking (ARWU): Effect of autonomous communities and campuses of international excellence. *El profesional de la información*, 21(4), 428–432.
- Instituto Nacional de Estadística. (2011). *Estadística de Actividades de I + D*. Madrid, Spain.

- Ministerio de Economía y Competitividad. (2012). *Indicadores del Sistema español de Ciencia y Tecnología*. Madrid, Spain.
- Ministerio de Educación. (2008–2011). *Balance de tres años del programa Campus de Excelencia Internacional*. Madrid, Spain.
- Ministerio de Educación. (2010). *Strategy university 2015. Modernizing the university*. Madrid, Spain.
- Ministerio de Educación. (2011–2012). *Datos y Cifras del Sistema Universitario Curso*. Madrid, Spain.
- Organization for Economic Cooperation and Development. (2011). *Education at a glance*. Paris: OECD.
- Rubiralta, M., & Delgado, L. (2010). *Developing international campuses of excellence*. Paris: OECD.
- Science, Technology and Competitiveness key figures report. (2008/2009). EUR 23608 EN.
- Strategy University. (2015). Modernizing the University. June 2010. Ministry of Education, Spain.
- Universidad Politécnica de Madrid. (2009). I2Tech. 2009 Project, Final proposal. http://www.upm.es/sfs/Montegancedo/documentos%202013/documentos%20finales/objetivosEN_2013.09.16.pdf

Chapter 13

The Process of Merging Romanian Universities: Technical University of Cluj-Napoca – North University of Baia Mare

Radu Munteanu and Dan Călin Peter

13.1 Introduction

The chapter starts by highlighting a number of defining elements in the way the merger process of the North University of Baia Mare (NUBM) and the Technical University of Cluj-Napoca (TUC-N), was conducted, within the enabling context provided by the law of National Education (LNA No 1/2011). The vision to promote the merger of Romanian universities was based on brainstorming sessions and consulting with the partners involved, including prominent personalities from higher education, experts in economic and financial fields, and representatives of public and political life. Before 1989, only 10 % of the population in the 20–24 year echelon proceeded to university studies, a situation which improved significantly in the 1989–2009 period. This positive evolution in the last 20 years has taken place despite unfavourable financial circumstances and the threefold increase in the number of universities at national level as compared to a parallel eightfold increase in the number of students.

The higher education system in Romania consists of a total of 112 public and private universities (56 + 56), not taking into account the other five higher education institutions which only offer Masters and Postgraduate programs. According to the Statistical Yearbook of Romania 2011 edition, the 112 universities have a total of 775,000 students and a teaching staff complement of 31,000 people. However, in the last 4 years, according to the *Romania in Figures 2013* publication, it was noted that the number of students have undergone a serious contraction: from 775,000 in

R. Munteanu
Technical University of Cluj-Napoca, Cluj-Napoca, Romania
e-mail: radu.munteanu@mas.utcluj.ro

D.C. Peter (✉)
Technical University of Cluj-Napoca, North University Centre of Baia Mare,
Baia Mare, Romania
e-mail: dcpeter@ubm.ro

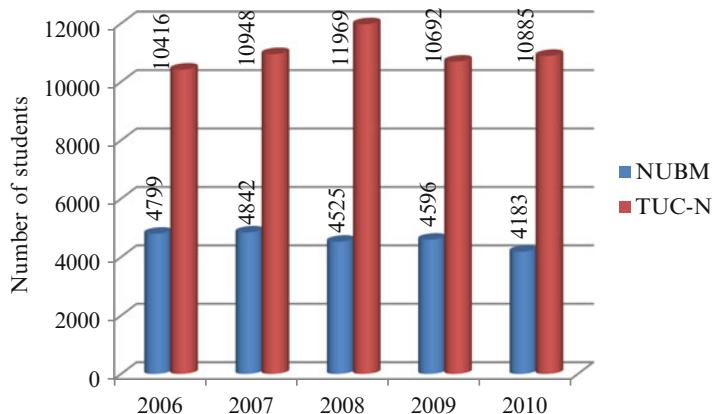


Fig. 13.1 The dynamic of students in the Bachelors' cycle before the merger

2009–2010 academic year to 464,000 in 2012–2013 academic year, a decrease from 361 to 218 students per 10,000 inhabitants whilst in the same period, the number of teaching staff decreased from 31,000 to 27,000. Figure 13.1 presents the fluctuation in the number of Bachelors' students at the two universities in the period before the merger (2005–2010), which shows a declining trend in the number of students, especially at the NUBM.

While for years higher education has promoted the spirit of competition through knowledge, in contemporary society education must take into account the importance of sharing resources and engaging in partnerships. People everywhere now have an acute motivation to assimilate science through education, regardless of their professional background, and they are aware of the benefits accruing from the development of related technologies. This phenomenon is not simple, because the same people also have a definite need for culture, philosophical, historical and even artistic, the more they use technical achievements, in order to understand more correctly the significance of their own acts. Thus the synergy generated by the universities through a larger and more varied professional offer is beneficial at many different levels.

The Quality Barometer (2010 edition) provides a chronology of Romanian universities, indicating that only 18 % of universities have been in existence for over 100 years, whilst 50 % are only 20 years old. The main issue is not related to their post-revolution age, but the low level of institutional diversity, although the majority declares a national vocation in their Charter. After 1990, the universities began to resemble each other more and more and this induced a level of depersonalization. The reasons are multiple and are largely linked to "standardized" implementation, due to unitary funding which does not stimulate institutional differentiation through quality and excellence. In this regard, the younger or smaller universities were particularly disadvantaged and often were not able to conform to the legislation regarding quality assurance and accreditation.

These universities have encountered major problems in their development due to the fact that the global funding has systematically been kept at a low level, and the national budget for the educational system never exceeded 4 % of GDP. There was an increasing trend in higher education funding after 2003 and in 2007 the allocations (1.12 %) equalled the European average (National institute of statistics 2013). However, after that there was a systematic regress in funding with a lowering of the allocation of GDP to higher education of 0.53 % in 2010. This is the context in which the paradox of “high necessity for education and minimal resources” appeared. This was a key factor which affected the North University of Baia Mare, which provides educational services at university level in a region which is important economically and demographically.

The rationale for the merger related to the concept of synergy and its effects in concentrating material and human resources for increasing the (didactic and scientific) performance and efficiency of the educational system associated with an ascendance of the visibility of universities. In this context, a coherent vision for the merger was developed, which was accepted by both university senates. The managerial competencies required by the process, and the factors of success were identified, taking into account the mentality and the elements of risk (Băcanu 2006). It is important to note that this premiere merger of two universities in Romania has been followed with interest by the academic community and beyond. It is unlikely that this merger will be followed in the near future by other mergers or university consortia based on consent.

13.2 Background

The chronology of events in the setting up of the Technical University of Cluj-Napoca and the North University of Baia Mare and their merger, reflects a succession of legislative and policy developments. In 1961, through a Decision of the Council of Ministers (No. 547/30.08.1961), the Pedagogic Institute, was set up in Baia Mare, for a 3 year period, with three faculties: Philology, Mathematics, and Natural and Agricultural Sciences. In 1969, through a Decision of the Council of Ministers (No. 1322/12.06.1969) published in the Official Gazette of Romania (No. 64/16.06.1969), the Institute of Sub-engineers from Baia Mare was established, subordinate to the Polytechnic Institute of Cluj (the current Technical University of Cluj-Napoca). Later, in 1984, the State Council Decree No. 213 from the 23rd of June 1984, certified that the Institutes of Sub-engineers from Baia Mare, Târgu Mureş, Oradea and Sibiu would be subordinate to the Polytechnic Institute of Cluj-Napoca. The situation remained the same until 1990, when these entities became independent, and in 1992, the Polytechnic Institute became the Technical University of Cluj-Napoca.

In 1990, the Institute of Higher Education of Baia Mare was founded through the Order of the Ministry of Education No. 7751/15.05.1990. In 1991, based on the Note of Government from 4.01.1991 and on the Order of the Ministry of Education and Science No. 4894 from 23.03.1991, the institution was re-named the University

of Baia Mare. In 1996, through a Decision of the Government (No. 1241/20.11.1996) published in the Official Gazette of Romania No. 314/28.11.1996, the institution's name changed to the North University of Baia Mare.

13.3 The Merger Process

The majority of developing countries and countries in transition continue to encounter difficulties in addressing persistent/long-running challenges due in great part to inadequate responses. These include ways of broadening the area covered by tertiary education in a sustainable manner; reducing inequalities linked to accessing and exiting the tertiary education system; improving the quality and the relevance of the educational system; and introducing governance structures and efficient management practices (Shattock 2003). Although the total number of student places at tertiary level has significantly increased in all developing countries, the gap separating the most advanced economies from the developing world has also increased. Furthermore, tertiary education systems continue to have a strong elitist character. The financial resources allocated have proven to be insufficient to sustain the increase in both student places and the quality of educational processes (Dumitache and Munteanu 1998). In many countries, the rigid governance models and management practices prevent tertiary education institutions from coping adequately with change and from launching the necessary measures in the direction of reform and innovation.

Tertiary education institutions can play a critical role in assuring the necessary support for the implementation of strategies for economic growth based on knowledge. They also play a key role in building democratic societies, with a high level of social cohesion, by offering adequate/accessible education, training and research programs. In response to this need, the merger of universities could form part of the national strategic vision for higher education in the future.

13.3.1 The Case for the Merger

For the two universities engaged in this merger, the main case for merging was the need to develop a structure to support the development of higher education in Baia Mare in response to major difficulties of sustainability which it was facing. In this context, the TUC-N, having within its strategic policy a component aimed at homogeneous development to ensure the highest possible level of quality in higher education and education in Transylvania, analyzed these trends and decided to support the North University of Baia Mare. The strong historic and current links with the North University of Baia Mare and the fact that a large component of the teaching staff was from Cluj, led TUC-N to decide from 2011 to support the NUBM by providing over 600 budgeted admission seats from its own allocation, in order to ensure the functioning of its partner.

13.3.2 *The Stages of the Merger*

The universities embarked on the merger discussions in 2010 within the context of particular legislation and the actual conditions in the Romanian higher education. Figure 13.2 provides an overview of the merger procedure, in time, through the regulatory decisions of the evolution stages.

This was the first step and the effects were felt immediately. Then, consultation and analysis (including SWOT – Fig. 13.3) took place at the level of the senates and of the administrative managements. The feasibility study was undertaken using modern methods of communication between the two entities, and based on a simulation of their integrated management. Taking into consideration the fact that

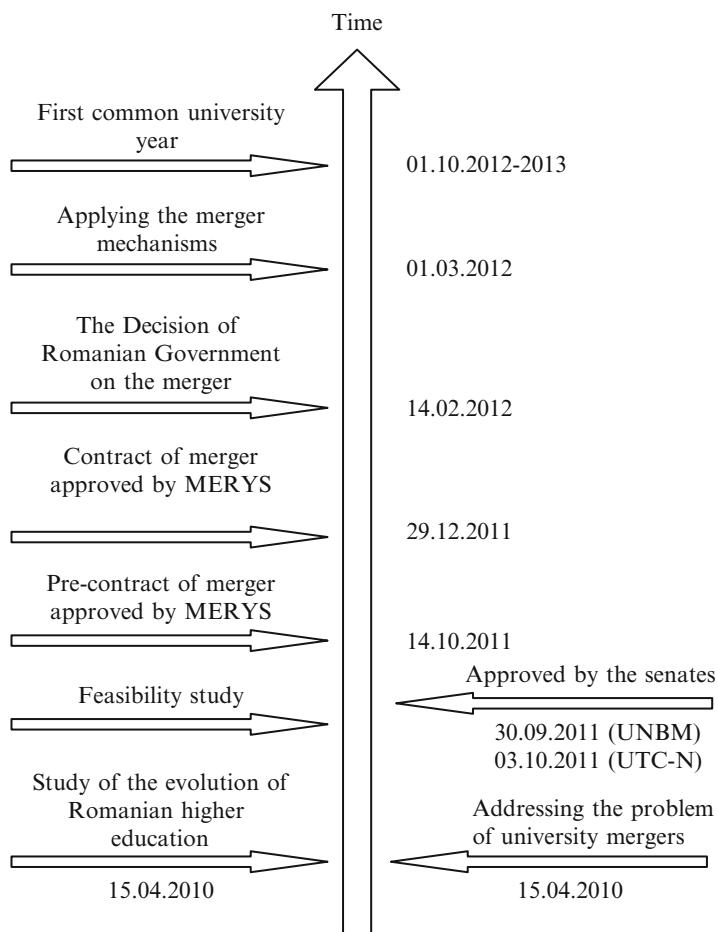


Fig. 13.2 Evolution in time of the merger through absorption mechanism between the TU Cluj-Napoca and the NU Baia Mare

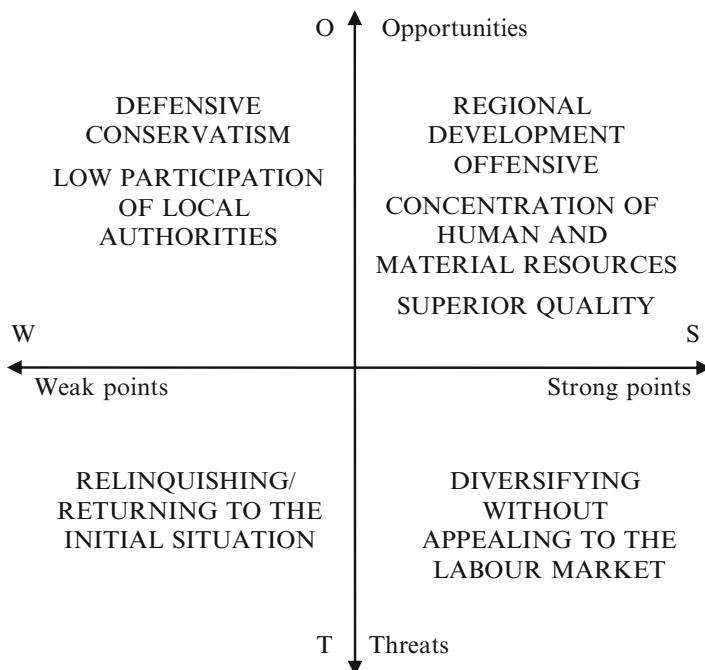


Fig. 13.3 SWOT interpretation of the merger through absorption strategy

the merger would fit with the European education perspective, the Senates independently approved the merger agreement proposal for absorption by the TUC-N. The Senates' decision was validated by the Ministry (29.12.2011) and followed by enactment of legislation through the Decision of the Romanian Government regarding the merger (14.02.2012).

Based on preliminary studies carried out since 2010, (starting with 1.03.2012), the universities proceeded with the application of the merger mechanisms and with reforming the structures of the two entities, such that the first joint academic year was launched on 1 November 2012. It is important to note that the main changes implemented related to efficiency mechanisms and increase in quality, both of which were an area of success. Thus, in 2013, the university was awarded the “high degree of confidence” (Drucker 2007) rating by the RAQAHE (ARACIS) – The Romanian Agency for Quality Assurance in Higher Education. This recognition has considerably increased the effort to introduce reform at Baia Mare.

13.3.3 *Conditions of the Merger*

A modern institution of tertiary education needs an integrated process of strategic planning. Such a process must be oriented, from an organizational point of view, towards both the internal and external environment. It has to simultaneously

consider planning intervals of 10, 5 and 3 years. The modern institutions of tertiary education resulting from a merger are usually much more complex than the educational models that preceded them (Brătianu 2004). The new accents on partnerships, alliances, interdisciplinary programs and on access to other institutional programs require the administrative structures to be flexible and capable of adjusting the ways of delivering services according to the needs of students, clients and funding entities. Furthermore, the majority of institutions consider the granting of a certain degree of autonomy even at the lowest academic levels to be a value generating factor. But in order to allow for the coexistence of a healthy financial control system and an autonomous decision making system, the institutions concerned must have excellent internal communication mechanisms, systems and procedures which can offer the certainty that the same information reaches every level of the organization. The emergence of a modern institution of tertiary education (resulting from the merger) depends on the implementation of an integrated information system for the coordination of three essential components: human resources, financial resources and students. The integration of the informational system is necessary to reduce transfer errors and to assure the uniformity of information at every level.

The most important framework conditions forming the basis of the merger relate to the following four factors:

- At the time when the Contract of merger by absorption was formally adopted in accordance with the Law of University Consortia No. 287/2004, the Technical University of Cluj-Napoca, as the absorbing unit, kept its status of accredited higher education institute and its law of establishment, while the law establishing the North University of Baia Mare, as the absorbed unit, was repealed.
- The rights and obligations of the absorbed institution passed to the absorbing unit.
- TUCN, as the absorbing unit, took over the entire heritage of the NUBM (absorbed unit).
- After the merger, a complex functional unit was established at TUC-N, corresponding to the absorbed unit, without legal personality, and entitled North University Centre of Baia Mare (NUCBM), which was directly subordinate to the TUC-N Senate and its Rector.

The conditions of the merger were defined following this staged approach:

- Discussions with the teaching staff at departmental and faculty level on the opportunity to undertake a merger between the two universities (addressing benefits and concerns on both sides).
- The decisions taken by the two academic Senates relating to the merger (Decision of the NUBM Senate from 30/09.2011 and Decision of TUC-N Senate from 03.10.2011).
- The pre-contract of the merger, approved by the Ministry of Education, Research, Youth and Sports (MERYS) (14.10.2011). It establishes the conditions of the merger, the rights and obligations of both sides, the patrimony and also a strong commitment of both universities to sign a contract of merger through absorption in authentic form before the 3rd of January, 2012.

- The contract of merger through absorption formally signed by the two universities and approved by MERYS (29.12.2012).
- Government Decision dated 14.02.2012 which states that the following four faculties of the NUBM: Faculty of Engineering (FE), Faculty of Mineral Resources and Environment (FMRE), Faculty of Humanities (FH) and Faculty of Sciences (FS), are to form part of the structure of the TUC-N and to function within the NUCBM.

The results of the study regarding the merger process are presented synthetically in a SWOT-format interpretation of the projected strategy (see Fig. 13.3).

13.4 The Operating Principles of the New Structure (the North University Centre of Baia Mare Within the Technical University of Cluj-Napoca)

The operating principles of the North University Centre of Baia Mare within the Technical University of Cluj-Napoca were agreed by the two institutions and are stipulated in the Contract of the merger. They refer to both academic activity and the financial and administrative aspects. The cardinal elements that establish the operation of NUCBM, the absorbed entity within the Technical University of Cluj-Napoca, were defined with the leadership of the NUCBM assured through the Vice-Rector, who is appointed by the TUCN Rector's decision and by a Coordination Council from NUCBM, in an advisory role (Rusu 2003). Their mandate is for a 4 year period.

The Coordination Council of NUCBM consists of the coordinating Vice-Rector, the deans, directors of departments within the centre, the administrative director and the head of the financial – accounting office from the NUCBM, as well as representatives of the students. Its activity is established in the operating regulation approved by the TUC-N Senate.

The financial administration is carried out in accordance with applicable laws and the TUC-N Charter, by a local financial and accounting office led by a head of office. The office reports to the Vice-Rector of NUCBM and to the financial and accounting department of TUC-N.

The funding of CUNBM follows the principle of financial decentralization, applied in the TUC-N. Thus, local own income from fees, income from donations, sponsorship, contracts or any other legal sources remain part of the NUCBM's disposable income, while the income from core funding is distributed to the NUCBM in accordance with the number of its students, after the deduction of the administration fee established by the TUC-N Senate. Subsidies for housing and canteen will be distributed in accordance with the number of accommodated students in the student hostels administered by the NUCBM, and the income from student hostels and canteen self-financing remain at the disposal of the NUCBM. The funds related to scholarships and other forms of social protection

awarded to the students of NUCBM from the budget of the MERYS are managed by the NUCBM.

The administrative activity is carried out in the framework of a local department lead by a deputy general director, in accordance with the applicable laws and with the TUC-N Charter. The department reports to the Vice-Rector of NUCBM and to the General Administrative Direction of the TUC-N. Activities such as acquisitions, human resources, audit, international relations, library are carried out within the departments, bureaus and offices in the structure of the NUCBM, reporting both to their corresponding departments within the TUC-N as well as to the coordinating Vice-Rector of NUCBM.

13.5 Beneficial Effects and Deficiencies of the Merger Process

The immediate impact of the merger was apparent in a number of beneficial outcomes for the NUCBM. Thus, the joint management of the student places has resulted in a better distribution of funded places and a diversified offer which covers a larger geographical area and thus a larger educational space, thus meeting the demand from candidates with modest financial possibilities. The TUC-N gave temporary financial support for viable study programmes within the NUCBM, which are currently in deficit. In the medium- and long- term, the aim is to render more compatible the performance of the two entities, with an emphasis on improving performance in terms of student training and scientific research activity (Chiorean 2011). A concrete plan of action in this context is already in place. Thus, the first visible effects relate to the development of a better institutional management, taking into consideration inter- and cross-subject activity.

From a content point of view, another benefit of the merger is the expected involvement of the NUCBM in the TUC-N departments in Satu-Mare, a city located near Baia Mare. In this context, the new entity of the Technical University of Cluj-Napoca will be engaged in the regional academic program, including the TUC-N extensions in Satu-Mare, Bistrița, Zalău and Alba Iulia. This recommends the TUC-N as a major player in the process of regionalization in the Northern-Western area of Romania.

The correlation of the education and research programs is a core element of the merger process, for the common study programs run in Cluj-Napoca and Baia Mare. This process is currently underway and it will be extended over the study cycle (Hockley 2007).

The merger of the two universities is the first such action in Romania, which is why there were and still are several difficulties encountered. This is partly due to the fact that the legislation does not address all aspects of merger implementation. In addition, other difficulties are linked to the mentality and the process of adapting to the new situation. The merger has been conducted based on the Law of National

Education (No. 1/2011) and the Law of University Consortia (287/2004), which outline the general principles but are not accompanied by a clear methodology which stipulates the approach and procedures to be adopted at all the stages of the merger. This deficiency has been addressed by including details on the stages and procedures to be used in the merger process into the merger contract, with the agreement of both institutions. The Law of National Education makes the following provision in art. 194(2): "MERYS (Ministry of Education, Research, Youth and Sports) preferentially allocates financial resources to consortia or merged universities, according to a methodology adopted in this regard through the order of the minister of education, at the proposal of the NCFHE (National Council for Financing Higher Education)" (Romanian ministry of education 2001). This methodology has not been adopted up to the present time, which means the MERYS has not financially supported the process or merger and this implies additional expenses linked to the operational communication and the integrated management of the two entities among others.

Administrative harmonization between the two entities was and is necessary because, before the merger, the two units had different internal regulations and procedures. The process of administrative harmonization, which started immediately after the merger took effect, was undertaken with certain difficulty. The procedures which were considered most effective by both entities were kept and developed further. Another deficiency which occurred after the merger relates to the operational communication at the level of the Administration Council and of the Senate. The NUCBM is represented both in the Administration Council and in the Senate, based on the same rules applied in the absorbing university, mainly in accordance with the existing faculties and the number of students. In the first few months after the merger, members of the Administration Council and of the Senate had to spend considerable time travelling to Cluj-Napoca for work meetings. The problem was resolved through the acquisition and operation of the necessary equipment for videoconferences. The conservative mentality of local authorities also represented a deficiency for the merger as they did not understand the benefits of the two universities joining forces and their patrimony. This was largely due to the lack of sufficient information and communication on the merger process or due to ignorance. The pressure to adapt to the new situation exists and will disappear in time as the effects of the merger process have had time to mature and to be accepted.

The merger of the North University of Baia Mare with the Technical University of Cluj-Napoca has been an experience both institutions tried to manage with maximum attention and openness from the beginning, taking into consideration both the strong and weak aspects determined by internal and external evaluations. The main administrative problems were overcome through the exercise of correlation and integration of services related to Direction of Administration, Personnel – Salaries, Accountancy and Audit. These services kept their status at NUCBM level, with dual reporting to the Rector of the TUC-N and the Vice-Rector of the NUCBM.

The faculties within the NUCBM retained their identity, but they assimilated constructively the management structure which allows them natural integration

within the TUC-N. The presence of the Vice-Rector appointed to take charge of the management of the NUCBM and of the deans of all four faculties in the Board of Administration of the TUC-N allows a permanent connection to the current and future issues of the institution. This enables as much as possible an understanding and perception of the merger process as a correct and beneficial process, for both the former NUBM and the TUC-N. The Coordination Council of the NUCBM allows and will further allow in the future a facility for the prompt management of specific issues facing the NUCBM, so that they do not escalate into sources of misunderstanding and conflicts.

Of the four faculties of the NUCBM, the Faculty of Humanities will remain a unit with particular features which the management of the TUC-N will have to take into account. The differences are not only of a financial nature regarding the coefficient of budget funding, but also relating to its main mission, of training teachers for preschool, primary, gymnasium and high school education. This also has repercussions on the content of research, which is based on the idea of training (usually poorly rated and financed). The joint efforts of the management of the Faculty of Humanities and of the TUC-N have as result developed a custom projection of all its entities functioning on the principle of unity in diversity.

13.6 Conclusions

In the current situation in Romania and taking into consideration the economic and the demographic conditions and the prospective of administrative reorganization in the development regions, mergers between universities are a process worthy of close attention. Based on to the current population, it is envisaged that based on a generous estimate, there is a university population of below 200,000 in Romania, under conditions of a constant decrease of the school population. Furthermore, the economic market cannot absorb large categories of university educated youth, creating a context in which unemployment of university graduates is a major threat for the future. In this situation, administrative restructuring with the institutional aspects of decentralization will require a different positioning of the educational system, in accordance with labour market requirements. It is envisaged that the perspective of post-secondary school development, linked to the qualifications highly required by the economy and correlated with the normally higher and higher exigency of the baccalaureate, will naturally decrease the student population. The merger of universities is a complex process which is linked to an uncertainty about the future that is fuelled by tradition. It is a complex form of innovation, which will affect traditional operations in a major way in the near future and this is the reason why a new long term strategy is recommended complemented by extensive awareness-raising.

In the last few years, new institutions with an educational vocation in the tertiary field have emerged worldwide, together with new forms of competition, forcing traditional institutions to change their mode of operating and supplying educational

services, in order for them to benefit from the opportunities offered by new technologies in the field of computers and communications (Munteanu et al. 2009). These have become intrinsic performance accelerators, but also provocateurs for the merger of universities. In this context, the merger can be defined in a variety of ways. In a systemic vision, it can be defined as a set of capabilities and expertise, shared among several actors capable of a joint strategy (Munteanu et al. 2010). Finally, it can be understood from our brief experience, that all universities have resources, but not all are capable of using them efficiently. The existence of resources alone is not sufficient to drive a merger process, because the traditional actors are generally reluctant to undergo major changes.

In conclusion, through this merger, the Technical University of Cluj-Napoca strengthened its regional network of higher education in Transylvania, including besides Baia Mare, academic education centres in Alba Iulia, Bistrița, Zalău and Satu Mare. This is the context in which in future it will become an important player in the educational politics of the development region in this part of Romania. The merger is a long-lasting process. The complete integration of the absorbed unit in the absorbing unit will take at least a cycle of study, because implementing common curricula and regulations can only be done in year I of study. From a different perspective, the merger exercise undertaken represents a process of passage from hierarchies to university networks, leading in turn to another passage, from an exclusive development option to multiple options. Although deficiencies were encountered, the academic community is confident of being able to achieve the objectives of increasing quality in the educational and research process and enhancing the university's national and international visibility as a whole.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Băcanu, B. (2006). *Practices of strategic management. Methods and case studies*. Iași: Polirom Publishing.
- Brătianu, C. (2004). Entrepreneurial dimensions in the Romanian higher education. Letters from the Black Sea. *International Journal of the Black Sea Universities Network* (Vol. May, pp. 34–37).
- Chiorean, L. (2011). *Study and research regarding the performance of the university management*. Doctorate thesis, Technical University of Cluj-Napoca.
- Drucker, P. (2007). *Management: Tasks, Responsibilities*. New Brunswick: Transaction Publishers.
- Dumitracă, I., & Munteanu, R. (1998). *Problems of the higher education reform*. Bucharest: Alternative Publishing.
- Hockley, A. (2007). *Educational management*. Iași: Polirom Publishing.

- Munteanu, R., et al. (2009). Modern methods of technological education using virtual environment. In *Proceedings of the 6th international conference on management of technological changes* (Vol. 2, pp. 303–306). Tulcea, Romania.
- Munteanu, R., et al. (2010). Teaching the messenger generation. In *Proceedings of the 6th international seminar on quality management in higher education* (2nd ed., pp. 171–174). Tulcea, Romania.
- National institute of statistics (2013). Romania in figures 2013 – *Statistic summary*. [Online] Available at: http://www.insse.ro/cms/files/publicatii/Romaniaincifre2013_ro.pdf
- Romanian ministry of education (2001). The strategy of Romanian higher education on 2002–2010 period. [Online] Available at: <http://www.edu.ro/index.php/articles/2884>
- Rusu, C. (2003). *The management of change*. Bucharest: Economic Publishing.
- Shattock, M. (2003). *Managing successful universities*. New York: Society for Research Higher Education & Open University.

Chapter 14

The Experience of University of Western Sydney, Australia

Rhonda Hawkins

14.1 Introduction

The University of Western Sydney (UWS) is, in the Australian context, a young university. In 2014 it is also a large and increasingly prominent university with more than 42,000 students, continuing strong student demand, excellent student outcomes and high performing and highly regarded areas of research. The current success and prominence of UWS was made possible through the merger of its constituent colleges in 2,000. Where once it was a complex and contested federation, UWS is now a highly productive unified institution experiencing the benefits of fundamental and far-reaching change to its structure and organisation.

The University was established in the changing and challenging environment of Australian higher education of the late 1980s as three colleges of advanced education located in the large urban region of Western Sydney, were joined together to form the University of Western Sydney (UWS). An Act of Parliament formally creating the University prescribed a federated institutional structure in which each Member of the federation (the former colleges) retained a large degree of autonomy while working within the planning and resource allocation framework of the University at large. Each Member institution operated within its own academic and management structures.

In a hybrid culture of Member-centric planning and University-level monitoring and reporting it eventually became impossible to hold onto the status quo, whatever that meant. Change, therefore, became inevitable. This change took the form of a merger of the three Member institutions of the federation to form a unified multi-campus University with a single administration and academic structure. This process of institutional reform and reinvention was viewed within the Australian higher education sector as both overdue and a major and critical undertaking.

R. Hawkins (✉)

Deputy Vice-Chancellor and University Provost at University of Western Sydney,
Sydney, Australia

e-mail: r.hawkins@uws.edu.au

The years since the merger have seen continuing and comprehensive organisational and cultural change – periods of major transformation as well as times of slow, often hard-won and incremental adjustments, consolidation and realignment, but within the context of a unified institution.

The organisational structure created by the merger provided the resources required for the University to focus on both quality (*excellence*) in teaching, research and community service and on widening participation in higher education (*opportunity*). The standing and achievements of UWS in the past decade would not have been possible without the merger and through this the creation of a united, more efficient and purposeful institution.

The UWS experience of organisational transformation had its origins in the initial federated structural form of the University, its legislative charter, the nature and aspirations of its founders and the experiences and expectations of its communities, students and staff. It represents an institutional response to the changing dynamics within higher education locally, nationally and internationally and most importantly to the inefficiencies and lost opportunities of the University's first decade.

14.2 National Context

In 1987 the Australian Government proposed a seismic shift in the structure and form of the national higher education landscape. At that time the sector was characterised by two layers of institutions, often referred to as the “binary divide” – where (1) a small number of universities (19) were funded to conduct teaching and research across a wide domain of academic interests and activity; and (2) a larger number of colleges of advanced education and institutes of technology were funded to teach in professionally-oriented programs but received little dedicated Government funding for research.

The reforms created a new Australian higher education system and the 36 universities (now 39) which formed, at that time, the “*Unified National System*” were to benefit from more advantageous and open resourcing arrangements and a share of the planned growth in the system. Under the Government’s arrangements for this new system, institutions were to be “*funded on the basis of merit and achievement rather than historical precedent and arbitrary classification*”.¹ The distinctions between universities and colleges and institutes that had determined the allocation of funding for the previous 20 years was removed and institutions were able to determine their strategic priorities and plans and to manage their own resources within a framework of reporting and accountability. To achieve the Government’s objective of “excellence in higher education”, all institutions

¹ Higher Education, A Policy Statement, Commonwealth of Australia, 1987, p. 10 <http://www.voced.edu.au/print/content/ngv9695>

were encouraged to implement measures “*to be efficient, flexible and responsive to changing national needs*”.

Those institutions wishing to continue to operate within this unified system were required to commit to certain internal management, staffing and credit transfer arrangements as well as to a common academic year. All institutions were required to be of a certain size (fulltime student load of at least 2,000) or to merge with other like institutions. These new directions for the nature, size and operations of the higher education sector did not go uncontested and there was a torrent of protest from some universities and smaller colleges. With the requirements for change tied to funding, the outcomes of the Government’s new policy for the sector included:

- a range of institutional mergers and amalgamations;
- a deliberate emphasis on greater diversity within the sector;
- improved educational equality and a commensurate opening up of university education to a wider section of the community; and
- a trend for institutions to modernise to meet the challenges of the international education market and the growing expectations of students.

In the years that followed the unified national system of Australian universities continued to grow and flourish. During the early 1990s the Government provided significantly increased funding to support and gain acceptance of the new system. Many institutions grew dramatically and increased the reach and status of their academic programs and research.

By the end of the first decade of the unified system the election of a new Government saw the previous rapid growth in funding dramatically slowed. Institutions faced more difficult and constrained financial times and increasing competition as the Australian Government sought to reduce its investment in higher education (or at least to slow the rate of growth of government funding). In this more challenging and financially insecure period universities could no longer simply continue as they had always done. These times called for innovation, collaboration, a focus on institutional efficiency and the garnering of resources from non-traditional sources.

The Government managed very closely the growth in student numbers with students required to contribute more and more to the costs of their education as the debate about the private and public benefits of higher education continued unabated. There were notable reviews of the Australian higher education sector, the Australian Government “Crossroads” reforms in 2004/2005 and the Review of Higher Education in 2008. What was increasingly apparent was that universities could not rely on Government funding or student contributions to wholly fund their growth or to improve and increase their research efforts. The clarion call was for institutions to be more efficient and to find other sources of revenue to support their strategic goals and priorities. Competition and collaboration were, at any given time, uneasily juxtaposed in the lexicon of higher education. Institutional strategies, performance and achievements saw the fortunes of some universities plummet while others went from strength to strength gaining international recognition for the quality and reach of their academic programs and research.

14.3 Institutional Context

For many years Western Sydney was regarded as the less developed region of the Sydney basin. Those in the west who wanted to go to university and had the chance to do so had to leave home or commute for several hours a day. The promise of a university that served the region, was comprehensive and respected, held the hopes of many. The first movement to establish a university in the region, in fact, pre-dated the reforms that created the unified national system.

Established in 1989, UWS was an amalgamation of three institutions (colleges of advanced education) with a legislative charter to provide high quality higher education and research at six quite different and geographically dispersed campuses in Greater Western Sydney (GWS), a region of almost 9,000 square kilometres with a population approaching two million people. The University was created as a federation with a central coordinating and steering core, the University “Headquarters”, and three Member institutions – UWS Hawkesbury, UWS Nepean and UWS Macarthur.

The Act of Parliament that established the University is unusual in the Australian context as it specifically requires a focus on the “*needs and aspirations*”² of the community and residents of GWS and on the contribution the University should make to the economic and social development of that region.

The University has an international reputation for its engagement with the communities it serves and for its mission to bring the highest quality educational opportunities to the people of GWS – a region of historical under-provision of opportunity and areas of significant educational disadvantage. In 2007, the University was recognised by the Australian Universities Quality Agency (AUQA) as a “*University of the people*”. Importantly, as a young university, UWS does not have the historical depth of experience in teaching, research and relationships with business and industry that characterise an established and older university. It also does not have the accumulation of assets, endowments and resources that older universities derived from periods of generous public funding (at national and state levels).

14.3.1 *Rationale for the Merger*

The prospect of amalgamating the three Member institutions had been considered at the University’s formation in 1989 during the period of the development of the unified national system in which many institutions did merge to form, or be part of larger universities. Such an amalgamation was not possible at this time due to the pace at which the Government reforms were being implemented and the need to overcome the strong institutional allegiances of each of the colleges, both within the staff and student communities and in their local regional communities. The federated structure was the only achievable outcome at this time.

² University of Western Sydney Act, 1988 – Legislation of the New South Wales Parliament, Australia http://www.austlii.edu.au/au/legis/nsw/consol_act/Uowsa1997375/

In the early years of UWS the constituent “Members” operated much as they had always done and with the legislative authority to manage their own affairs with minimal influence or accountability to the University “Headquarters”. As a result, the management and leadership of the University were predominantly dependent on formulaic planning and resourcing, maintaining the status quo, and inevitably looking inwards.

The federated structure of the University, after a short period of operation, however, became increasingly problematic and the first decade of the University’s life (1989–1998) was beset by internal competition, inefficiencies and an inability to act in concert for the good of the University as a whole, as the three Member institutions concentrated on and promoted their own priorities and aspirations. The University lacked an achievable collective purpose with each Member institution marching to the beat of its own drum.

During this period the concept of all-of-institution strategic planning was often seen as inimical to the interests of the Member institutions. So overwhelming was the influence of the divergent visions of the Members that discussions of a University-wide mission statement took more than 2 years to resolve. The role of the University’s “Headquarters” became one of a broker of some form of compromise on planning issues rather than leadership of institutional discussions of an overarching strategy for the future. This often resulted in an outcome framed by the lowest common denominator and not what was actually in the best interests of the University and the region it serves. Funding was allocated on the basis of a formula reflecting the relative sizes of the Members as they were in 1989, and, as growth occurred, this formula entrenched the historic differences and resource disparities across the University.

Western Sydney is a diverse region and the regional communities proximate to each of the University’s campuses had developed strong allegiances to and support of their local Member institution. This was of considerable significance in the process to garner acceptance of any University-wide development and to increase the engagement of these communities in the life of the University as a whole.

While the federation continued to be a major impediment to fundamental and vital developments within the University, to improving institutional performance and to taking advantage of national policy and funding initiatives, there is no doubt that each Member institution maintained a passionate intentionality to contribute to the development, support and future of their own local communities.

The possibility of merging the Members of UWS was again contemplated in 1995 but for different reasons. It had become obvious that change was needed – as the cracks in the federation were becoming quite clear. Staff members working within the Member institutions were becoming more entrenched and it was often easier to work with another university than with colleagues within UWS. The debate at this time arose from a very public attempt by one of the three Members, UWS Nepean, to withdraw from the federation.

The leaders of UWS Nepean had been encouraged and given strength by some local political supporters and buoyed by arguments about the dysfunctionality of the tri-partite Member structure. The determination of the UWS Nepean President, the support of this Member’s Academic Board and most senior leaders and the

reality that UWS Nepean was the largest of the three Members fuelled the efforts to break away from the federation. Counteracting this and following a groundswell of support for the University from many segments of the community, Government, staff and students, the University's governing body, the Board of Governors, withstood the move by UWS Nepean.

The State Minister for Education was a particularly important player who supported the preservation of the University in its federated form. An external review was established in mid-1995 with a high profile Committee entrusted with the responsibility to advise on the most appropriate response to the issues raised by UWS Nepean and to formulate structural arrangements which would not only allow the University to continue to operate, but to grow and develop in the ways anticipated on its formation in 1989. The outcome was a strengthened federation with a more substantial role for the central core of the University and the creation of Member Councils as new elements of the governance framework of UWS. Importantly, at this time, the University determined to retain the federated structure in the full knowledge that it was a more costly model of operation than a university of similar size and scope with a unitary academic and administrative structure (Fig. 14.1).

At a University-wide level there were formal opportunities for discussions regarding the development of the University as a whole. The University governance structures involved:

- the Chairs of the Member Councils being members of the University's Board of Trustees³ and Deputy Chancellors of the University;
- Member Presidents/Deputy Vice-Chancellors meeting with the Vice-Chancellor through the Vice-Chancellor's Management Advisory Group; and
- staff of the Members coming together to discuss academic matters as part of the processes of the University's Academic Board.

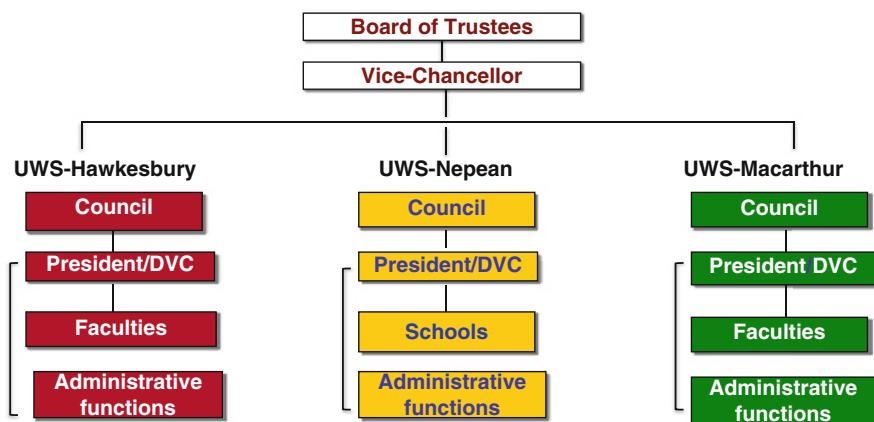


Fig. 14.1 The UWS federated structure, 1996–1999

³The name of the governing body of the University was changed under the amendments to its enabling Act in 1997 and the Board of Governors became the Board of Trustees.

This experience and related governance structures, however, were not sufficient to genuinely unify the University and there remained trenchant opposition to effective cooperation and to working as productive institutional colleagues. In regular annual reporting to the Australian Government, required of all universities, it was noted that UWS was not performing adequately in a number of domains and was not meeting the generally expected level of financial performance.

After a further 3 years of operation of this strengthened federated structure, a new Vice-Chancellor took office in 1998 with a mandate to take the necessary steps to ensure the University could realise its purpose and promise in the region and in this context to address the inter-institutional divides that continued to hold back parts of the University. For the first time staff members could question what they did, how they did it and why the University had not done more as a collective institution.

The approach of this time was encapsulated by Burton Clark⁴ who wrote in 1998: “*With complexity and uncertainty now endemic, no one knows with any degree of confidence what the twenty-first century holds in store for universities. How then to proceed? One answer stands out: step by step, learn by experimenting. We need widespread experimentation that tests ways to move into the future.*”

14.4 Towards a Merger

The process to finally unify the University started modestly in 1998 with discussions of sharing services and of developing an active and strategic vision for the institution as a whole. A group of 28 projects under the rubric of *Agenda 2000* was developed and staff commenced the first conversations about how they might work better together. The ringing response was that the University’s structure and operation really didn’t make sense and were built on boundaries and interests of another time. It was clear that the University was not reaping sufficient and sustainable benefits from its overall size and particular strengths in the new Australian higher education sector that comprised fewer, but larger, institutions. If UWS was to compete and prosper in that environment it had to change.

In late 1999, the Board of Trustees approved the Vice-Chancellor’s proposals for fundamental and institution-building change. These proposals were based on increasingly significant concerns over the costs of the federation and on the University’s reduced productivity and diminishing ability to take advantage of the potential for sector-wide growth. The proposal detailed in the plan, entitled the “*Shape of the Future*”, was that the Member institutions would merge to form

⁴ Clark, B. R. (1998), *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*, IAU Press.

a unified multi-campus University with one administration and one academic structure. It outlined:

1. A blueprint for the unified UWS
2. The principles underpinning the new UWS; and
3. The implementation process.

It was recognised at the time that this merger and accompanying change process was one of the most significant to occur in Australia since the reforms that created the unified national system of higher education in the late 1980s. The objectives, as outlined in the “*Shape of the Future*” of the unification of the University were to:

- improve the quality of services and educational experience for all stakeholders, particularly students;
- provide these services in a coordinated and cost effective way building on all elements of best practice;
- provide a supportive, energising and rewarding working environment for academic and general staff recognising creativity, intellectual rigour and academic excellence;
- allow the University to better manage a very tight and deteriorating budgetary situation;
- establish an operating environment which gave the University the administrative flexibility to respond to the rapid changes in the external environment and allowed it to seize strategic competitive opportunities; and
- develop a united UWS image and direction in ways which added value to its international reputation, competitiveness and standing.

The University’s unified structure was to comprise:

- **Four academic colleges** – and a nested set of schools based on the most appropriate and productive discipline groupings; and
- **Four administrative and academic support divisions** in which all of the functions to support the core activities of the University, its staff and students would be organised.

Fundamental to this process was the anticipation, endorsed by the Board of Trustees, that there would be savings found, or generated from the merger, amounting to at least 10 % of the total costs of the administrative and support areas of the University. This resulted in a savings goal of \$10 million (AUD) per annum (in an annual budget for these areas in 2000 of \$100 m and for the University overall of \$300 m). These savings were seen as vital to arrest a certain and serious decline of the University’s financial position which would likely lead to a deficit result within 2 years. One key rationale for the merger was that the Australian Government had examined the structure, operations and income generating capacity of the University in 1998 and had declared it as an institution at “financial risk” (Fig. 14.2).

In this sense, many within UWS and the sector believed the proposed merger was 10 years too late. While other universities had amalgamated in 1989 when

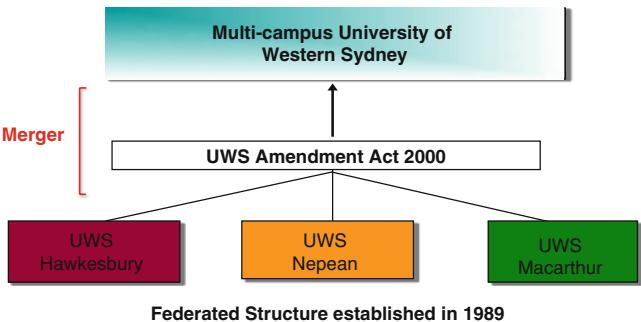


Fig. 14.2 The University structure following the merger

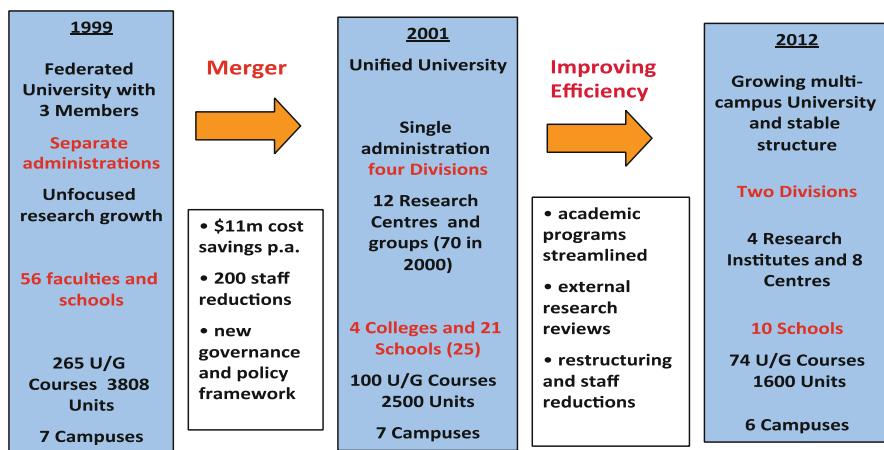


Fig. 14.3 The University of Western Sydney: a decade of change

university funding was growing for all, UWS did not take the opportunity to amalgamate to create a single institution. A decade later, therefore, it was forced to implement significant institutional change and save money at the same time. This was clear for all to see, but was, nevertheless, both uncomfortable and contested. The University community at large knew that it would be a tumultuous time that, while unavoidable, would involve radical change, uncertainty and escalating levels of risk (Fig. 14.3).

14.5 The Merger Process and Structure

Once the Board of Trustees made the decision to merge the three Members into a unified institution (with an integrated organisational structure), it became essential to establish a dedicated project management framework to operate alongside the

“business as usual” activities of the University. A small office led by a senior project manager was created together with a complementary governance structure supporting the University’s senior staff in designing, testing and implementing the proposed new organisational structure and arrangements.

At a University-wide level there were five pivotal groups:

An overarching *Implementation Steering Committee* (comprising the University Executive, Executive Deans, staff and student representatives) which guided the process and was supported in its work by four committees dealing with supplementary detailed costing and benchmarking, student consultation, staffing and communication. These were:

- A *Staffing Committee* – dealing with all the issues affecting staff and developing an agreed process for change. After 3 months of negotiation with the staff Unions the *Staffing Paper* was agreed and was then used to underpin the staffing arrangements for the merger.
- A *Benchmarking Committee* – which rigorously costed every unit of administration, then worked with staff to reshape the units on a new, lower funding base reflecting the merging of like activities and the impetus within these arrangements to implement new and efficient all-of-University structures, systems, processes and policies.
- A *Student Consultative Committee* which discussed with students the proposals for change and sought their feedback, which wherever possible was included.
- A *Communication Committee* – which was to develop the means by which the University could consistently and often advise the community about the merger, the proposals for change and any other information to allay concerns. This included UWS-all emails, newsletters, a dedicated website, campus forums, community discussions, meetings with students and staff and their representative bodies and meetings of the Board of Trustees and the University’s peak academic governance group, the Academic Senate (Fig. 14.4).

14.5.1 The University’s Administrative and Academic Support Structure

Each of the emerging organisational divisions also had a change management group supported by a dedicated project manager. Below this structure was a series of 30 staff work teams. In total more than 300 staff were involved in the design process for the new organisational structures and arrangements. These groups were, in reality, designing the new administrative and academic support structures while at the same time endeavouring to lead and manage a very large and complex institution.

The principal objective of each of the teams designing the newly unified institution was to ensure the most effective, efficient and productive structure based on the extensive input from staff in these areas and identified best practice



Fig. 14.4 Implementation process – management and governance

within the context of the University's own particular circumstances and strategic priorities. Throughout the following year (2000) every unit of the administration was carefully examined and fully costed. The project teams worked with staff to reshape the units to a new, lower funding base for current activities but also with the possibility of additional resources in areas where the merger allowed for new ideas to be implemented or where the former structure had inhibited development. In this complex matrix of organisational design, the working groups were charged with the responsibility to think about, research and benchmark innovative and optimal structures and arrangements for the "new" integrated and unified UWS.

The project teams, in the main, comprised representative staff from each of the Members with responsibility for or working within the area under consideration or staff from units interacting with or requiring the services of the unit being reviewed. These groups worked with staff from the change management team which had the responsibility to benchmark comparative structures and processes, identify models of best practice and to develop an understanding of current costs and potential efficiencies.

All 59 senior and executive positions were abolished and 28 created in their place for which senior staff were required to compete. In general, each of the Member institutions had a similar position to the one being filled within its leadership structure. For example, there were three Registrars, three Librarians, three Directors of Finance across the University with only one being required in the new unified structure. All leadership positions were advertised internally and any staff member with the requisite skills and experience was able to apply. As these senior leadership roles were progressively filled the cascade of the next level of appointments took place, most by transfer from old to new, and some by competition if there was more than one eligible applicant for a job. This process was

arduous, complex, contested and took the best part of a year, primarily, to ensure it was fair, consistent and transparent and proceeded stepwise through the institution. Over 900 administrative staff had to be individually considered and consulted, and either compete for new positions, be “placed” or be offered a redundancy. In the event, 100 staff left the University, with significant costs in severance payments.

Overall the University, in fact, saved \$11 m per annum in administrative costs from the merger. This proved to be a vital outcome as the University battled a continuing decrease in its funding from the Government arising from sector-wide changes.

14.5.2 *The University’s Academic Structure and Operations*

In the University’s federated structure the Members had quite different approaches to the organisation of their academic structures. This led to the University having 56 separate academic units (faculties or schools) at the time of the merger, which had, over the previous decade, been in some form of competition with each other. These had not managed to come together to form a critical mass in either their teaching programs or in research development.

Given the history and the intensity of academic staff feelings about their discipline areas, the University believed it was important that they be directly and significantly involved in the process to develop the academic groupings that would be implemented for the merger and underpin the new academic college structure.

A change management process was developed in which the four proposed University-wide colleges designed broadly around arts, science, business and health, were notionally established and a leadership and project management team, the *College and Schools Formation Facilitation Team* was put in place to manage the development of the next layer of academic structures. Over 1,000 academic staff members were asked to propose and choose a group of academic colleagues, or a discipline grouping, that best matched their academic interests. This process was at times marked by vigorous debate and disciplinary demarcation disputes but was transparent as academic staff were given the right to choose their future school or college within guidelines developed in consultation with staff, unions and the Board of Trustees.

In the early years of the University its research efforts were unfocused and lacked a coherent all-of-institution strategy. Academic staff who were engaged in research often sought to work on projects external to the University rather than to seek to find common interests with their own academic colleagues in one of the other Member institutions. By 1999 this situation had become an anchor to the broader research development of the University and became one of the drivers for organisational change. The organisational form and governance structures emerging from the merger process brought academic colleagues together in a variety of settings and led to greater focus and consolidation of the research enterprise.

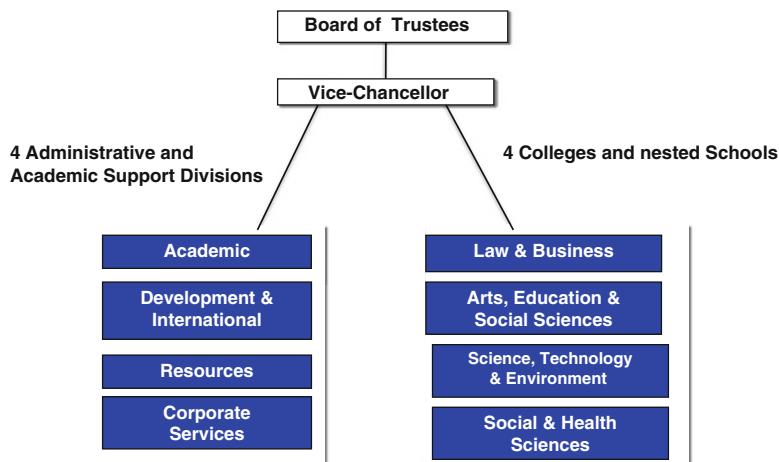


Fig. 14.5 A new UWS organisational structure – 2001

Soon after the merger was finalised (late 2001 and early 2002) the Vice-Chancellor commissioned an all-of-University external review of research, entitled the *Research Landscape Review* to provide the strategic framework to underpin a rapid development of the University's research. This was a pivotal step in creating the successful research strategy now in place at the University which has seen its performance and attraction of high quality research staff improved significantly (Fig. 14.5).

The schools formation process was intended to be a balanced “bottom up” and management guided endeavour. Twenty-eight submissions to form schools were developed. This led to 22 schools being nested within the four colleges replacing the existing 56 academic units.

The fledgling new schools immediately engaged in the urgent task of unpacking the 265 courses of the former Members and remaking them as 102 University-wide courses. At the same time 3,808 subjects currently available were initially reduced to about 2,500, and following a teach-out period, to about 1,600. All this had to be done within a period of 5 months in order to publish the course information for the 2002 academic year.

The changes and associated deadlines were relentless and many staff felt they had lost touch with their familiar networks of friendship, information sharing, assistance and collegiality. These together are the social fabric of an institution and the feelings of loss were apparent for some who had not reacted well to the merger. This sapped much of the goodwill and energy of staff who were tired of the pace and complexity of the changes.

Above all else the UWS process had to be iterative and adaptive. This required being honest about problems and inviting feedback on both the means and the desired outcomes. As problems and shortcomings became evident, so too did the solutions. A number of committees guiding the process were augmented by staff and student representation, additional forums were held on each campus to explain

the process and outline progress and a website was established to provide change documentation and to post frequently asked questions and answers. It was important to give a sense of the scale and scope of the change process, not only in terms of the overarching rationale and objectives, but also what it was intended to deliver structurally and the intensity and enormity of the work involved.

Overall the merger process in 1999/2000 involved more than 400 staff and students, in excess of 500 meetings and generated over 1,200 submissions, email messages and reports.

14.6 Progress and Outcomes

14.6.1 The Impact of the Merger on Students of the University

For students, recognition of the impact of the changes was slower and acceptance, at least by student leaders, took some time to occur. In many ways students were more resistant to the merger despite the potential benefits to them in terms of choice and increased quality in their courses. Current students had enrolled at one of the Member institutions and their loyalty to and recognition of the qualification from that institution was paramount to them as discussions of the merger commenced. This resistance was also due in part to timing as much of the early work happened when students were on vacation.

The student interest in the integration of the academic program and the influence of staff anxieties and reactions to the merger on student perceptions led to a series of public campaigns about aspects of the restructure, complaints regarding services and a general intensifying of expectations.

To some extent this reaction was overcome by establishing forums where students were advised of each change proposal and given the opportunity to comment through the Student Consultative Committee. There were many good ideas emerging from these consultations and plans were amended to include suggestions that would strengthen or improve earlier proposals.

Students, in general, focus their attention on their learning experience and are most often unaware of internal structures. They have a natural wish to improve campus experiences and to form friendships and networks with other students. Concerns they raised were normally related to ensuring good quality teaching, increased student support services, timely and relevant information provision and better food and social facilities. Three areas of significant activity and concern emerged in the student consultation process:

- the form of any new student association (one entity), given there were eight currently in existence across the three Members and whether the new association would be aligned with the new structure or in part reflect the old institutions. In this regard students were vocal in their insistence of “student control of student affairs”;

- ensuring equity of student service provision across the six campuses of the University; and
- any indication of changes to the content, location and delivery of the academic program.

The University's Board of Trustees, which included two elected student members, endorsed the establishment of a project team and process to review current student organisations and to propose a unified structure across all campuses. This was, by its very nature, a contested and complex process, that, at one stage, led to external legal action and a mediated resolution between the University and the student organisations. In time a new student organisation was formed and substantial funding, in the form of dedicated student fees paid by all students, was provided to allow this new student organisation to improve social, representative and collective student activities across UWS.

14.6.2 The Response of the University's Staff to the Merger

Given the extensive period of consultation during 1998/1999 leading up to the decision to merge the institution, the broad rationale and principles underpinning the restructure were, at least, understood and, most often, supported by a majority of staff and by the staff unions. There were, however, clear expectations of further and regular consultation as well as warnings about the mechanisms for change and their intention to closely monitor implementation. The unions provided the lens through which many staff members' views and anxieties could be expressed and transmitted to the University. It was both important and constructive for the process that such concerns, issues and ideas were brought to the University for consideration and resolution. The unions' involvement and voices were important to the acceptance of the various elements of the process and to the broader success of the implementation plan.

As part of a national industrial system all Australian universities enter into negotiations surrounding staff conditions and entitlements with staff unions to produce an "enterprise" or "collective" Agreement. These normally prescribe the employment environment for a period of around 3 years. At the same time as the merger was underway the University embarked on this regular cycle of negotiations of staff Agreements which would frame employment conditions for the next 3 years. Inevitably the development of these new staff Agreements became intertwined with the changes taking place and provided another arena for concerns to be worked through.

At this time, many other institutions throughout the sector were locked into drawn-out negotiations for their new Agreements. For UWS, the sector-wide disputes notwithstanding, the Agreements were closed in a space of about a year, which was shorter in comparison to many other universities.

14.6.3 Communicating the Changes

Much of the energy and momentum of the merger process emerged from the diverse and sometimes fraught discussions within the University community. The myriad of formal and informal conversations occurring across the institution provided a deeper level of insight, as well as more detailed engagement with issues and ideas, giving substance to the process and outcomes. Among the most challenging aspects of the process was how best to garner and incorporate the views of all who wished to comment or contribute, whilst at the same time ensuring realistic expectations of the outcome of this involvement. This required honest, up to date and objective information being provided about plans and progress.

There is no doubt, however, that notwithstanding the multitudinous forms of communication and invitations for comments and for the contribution of ideas, the University community still argued that more could have been done and that the need for meaningful communication was not always met.

A regular newsletter was developed to provide the latest information on what was happening, regular emails reporting on progress from the Vice-Chancellor were sent to all staff, consultation forums on different topics were held, visits to academic and administrative units by the Executive and Project Steering Team were conducted and calls for input into the varying stages of the project were made regularly. In addition there was a significant responsibility for communication in the governance structures of the University, including discussions at the Academic Committees of the Member institutions, within the sub-committees of the University's Academic Board and in the formal consultative processes between UWS management and the staff Unions.

Over time it became clear that where reservations persisted about the extent and effectiveness of the communication process, these were as much about a lack of acceptance of the information being provided as a failure in the process of communication. It was also due, in part, to the sheer complexity of the process and the time being taken to reach milestones or completion of the various elements of the projects underway.

14.6.4 Themes and Principles Arising from the Changes to UWS

It is more straightforward to detail the many activities encapsulated in the change process to bring about the merger, than to articulate objectively the themes and underlying principles of institutional change. The following messages arising from the UWS process of change are not new and resonate with the literature on change.

These were articulated in presentations⁵ about the UWS merger in the immediate period of the change process and remain highly relevant now:

- the new vision of the University must be transformational and entail a re-examination of core values;
- economic and business considerations alone will not lead to successful change nor win the commitment of the University community;
- the twin pillars of reform are structural and cultural change;
- leadership and staff participation in tandem are critical to a sustainable new institution;
- the plan for the process must be adaptive and allow for new ideas and be mindful of current policy and sector-wide issues;
- those who lead at all levels must have clear plans for the process and for the institution and act at all times with integrity and respect for others;
- the change process should be informed by strategies to develop the capabilities of the institution and its people;
- the change process must be underpinned by an effective communication strategy; and
- the commitments and work of leaders at all levels of the University must engender trust, understanding and engagement in the process.

14.6.5 Cultural Change

In its first decade UWS did not have its own identity and sense of community, a collective purpose or the intentionality to develop a new culture or united vision. In 1999 the *Shape of the Future*, foreshadowed much needed cultural change alongside structural transformation. The intention was to bring about lasting changes to the shared ways of thinking, beliefs, values, processes and relationships within the UWS community. A unified culture took several years to emerge as the old ways of operating took time to be replaced by a collective will to achieve a shared vision for UWS. Once the significant disruptions to the University's operations had settled the UWS community came together to discuss and agree a united vision – articulated as “*Bringing Knowledge to Life*” in the region.

Any structure can be made to work if those involved wish to do so. Alternatively, the best structure will often fail without support. The UWS experience shows that cultural change takes time – measured in years, not months. Without a renewal of

⁵ For example: Vice-Chancellor's Helsinki paper – ref. Reid, J. 2001, Creating a new university: Re-invention and cultural change, paper presented at the seminar on “The Financing of Higher Education” Helsinki, Finland, August 2001, The Association of Nordic University Rectors’ Conference; The Nordic Association of University Administrators; and the OECD Programme on Institutional Management in Higher Education.

networks within any new structure, and an examination of policies and processes and the way things are done, fundamental and sustainable cultural change will not be achieved and staff will not feel part of their new environment.

14.6.6 Significance of the Merger

As the University reflected on the merger, and of the further changes to the institution that flowed from it since then, it was evident that had UWS not unified it would have been unable to achieve its potential. Bringing the University together allowed its aspirations and strategic priorities to be captured in an institution-wide planning program beginning in 2006 in which a one-page institutional strategy was created. Revised for the period 2014–2016 the *Making the Difference strategy* specifies that UWS will:

1. Position for success in the higher education environment
2. Create a superior and engaged learning experience
3. Develop focused, relevant and world-class engaged research
4. Develop mutually beneficial engagement partnerships
5. Build organisational capacity

The merger brought structural and organisational disruption, but it created a revitalised and purposeful unified University aiming for the “*strategic flexibility and intelligent opportunism and a capacity to adapt rapidly to market, policy and funding shifts*”.⁶ The 2007 audit by the Australian Universities Quality Agency (AUQA) described UWS as a university which had “*built a robust policy framework, and structures and systems are now capable of sustaining the integrated University well into the future*”, noting that “*UWS is now in a position to move forward with confidence*”.

14.7 Some Lessons from the UWS Merger Process

In any merger a robust and well-communicated process of change is fundamental to success. A well-constructed process removes issues of bias, lack of transparency and anxieties about the impact on areas of the University and on staff and students. While the UWS merger is unique to its circumstances it is one that will have resonance for other institutions thinking about a new organisational form or of

⁶ Presentation to the Board of Trustees, 2005, Professor Janice Reid, Vice-Chancellor – in *Expect the Unexpected*.

garnering the collective strength of like-minded institutions. Some of the key lessons from the UWS are:

1. Present a vision for the Merger

There must be a well articulated and widely publicised vision for the merger underpinned by a clear and well-argued rationale and plan which complements institutional goals. The UWS experience showed that people would generally support the changes as these unfold if the merger has been explained and they see a sense of purpose accompanied by well developed, robust and fair process to achieve what is planned. The community understood that UWS would not achieve its mission unless institutional inefficiencies and blockages were removed and clear steps were taken to unify.

2. Ensure all areas are considered in the change process

All areas of activity should be reviewed in an evidenced-based way for effectiveness and suitability in the proposed structure. It also is important to acknowledge that the initially planned approach may actually not always be the best. Members of the University community (academic and professional staff and students) need to believe that they are genuinely valued and their opinions are important. This will engender commitment and support.

3. Implement a comprehensive communication plan

Any change process of the significance and reach of the UWS merger requires a relentless emphasis on frequent and honest communication at all levels of the institution. Staff, students and the community need to know what is planned and what will happen through tailored and targeted messages that are regular, truthful and open. The community will engage with the merger if they understand the process, are being kept informed and that any feedback received will be taken seriously. While this level of communication takes time and comes at a cost, it is a fundamental part of any successful change process. More importantly the merger will inevitably fail if genuine attention is not given to this aspect of the process.

This approach to communication and to the recognition that the flow of feedback and information was often instrumental in achieving better outcomes, provided a sense of flexibility in the process, which was not only essential, but led staff and students to believe that their input was genuinely valued and considered.

4. Manage the pace of the change

Once the rationale and plan for the merger process is developed, approved and promulgated it is important to ensure staff and students are aware of the timeline and any changes to it. The pace of change will have a significant impact on the acceptance of what is planned or being implemented. Staff and potentially student anxiety increases with uncertainty over time and, therefore, it is critical to make and implement hard decisions early, starting at the top.

5. Appoint change leaders

Identifying and appointing leaders of the process is vital when implementing major structural or cultural change. At UWS real progress was only made once the new team of senior managers was in place to lead the process. The new

senior management team should be there to design and implement the new structure. This leadership must behave with integrity, be authentic and open. The senior leadership team should, act in line with institutional values, be truthful about what is valued, respect others and admit mistakes.

6. Provide the necessary resources for the merger process

Effective change requires sufficient resources, either dedicated project management teams or staff released to be part of the process. The change process will only co-exist productively with “business as usual” when there are clearly identified teams for both activities and each is equally resourced and valued.

7. Use the merger process to improve the way things are done

The merger process provides the opportunity not only to bring about new structural arrangements but also to redesign and optimise administrative processes and workflow. While taking steps to map and refine or reshape the way things are done will take time and additional resources, the returns will be substantial. These benefits are twofold –one will be the positive response from staff involved in the process and the second is the potential for new ideas from staff about how to do things better. This also allows staff to see consultation as fruitful and to be encouraged to seek out best practice.

8. Benchmark costs of current operations and proposed new arrangements

The UWS experience showed that a thoroughgoing review and costing of existing operations paved the way for meaningful consideration of proposed new structures and for savings to be identified. In this work it is critical to ensure tight control of operating costs as the change process unfolds. It is equally important to set in place mechanisms to monitor and manage the costs associated with the implementation and operation of the new arrangements once these are established.

9. Design the academic structure and program in a principled and objective way

The academic program (the suite of undergraduate and postgraduate course that the University offers to its students) frames the University’s attractiveness and relevance to students as well as being critical to the University’s reputation. Equally important is the way in which academic staff members are clustered within a new academic organisational structure. To ensure the success and productivity of a merger it is vital to take a proactive, logical and, where necessary, prescriptive approach to designing the academic organisational structure and program and to minimise the influence of personal and political self-interest on academic decisions.

14.8 Conclusion

The University of Western Sydney was established with a clear mandate to provide the highest quality higher education opportunities for the people of Western Sydney and to contribute to the development of a region with lower rates of participation in

higher education and with a long history of social and economic disadvantage. The region is also one of the most rapidly growing areas in Australia, and, therefore, the University focused the hopes and aspirations of its communities on the transformational power of education and on the importance of research in its regional context.

The University's early years were characterised by inefficiency, contested expectations and the lack of progress arising from its organisation as a federation of three relatively autonomous Member institutions. This led to a growing, and eventually inescapable, momentum for change. This change took the form of a merger of the constituent institutions into a unified and integrated structure.

The years since the merger have seen the University grow dramatically and to build its reputation as a high quality, engaged and purposeful institution. There is no doubt that without the merger the University of Western Sydney would not have achieved the progress it has in recent years, nor would it be on its current trajectory to be even more influential, successful and highly regarded in Australian and international higher education.

The merger was challenging to the students, staff and leaders of the University and, for a time, caused uncertainty within local communities. The comprehensiveness of the merger and related processes cannot be overstated. Consistent attention to detail and to the principles underpinning the work being undertaken to bring about a new structure was critical to long-term institutional sustainability and success. Such fundamental change processes create instability but also, when pursued confidently and against a clear and reasoned rationale, will bring about the institutional change required to provide for a successful future. This was the case for the University of Western Sydney.

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Dawkins, J. S. 1987. *Higher education: A policy statement*. Commonwealth of Australia. <http://www.voced.edu.au/print/content/ngv9695>
- Clark, B. R. (1998). *Creating entrepreneurial universities: Organizational pathways of transformation*. Oxford/New York: IAU Press.
- Reid, J. (2001). Creating a new university: Re-invention and cultural change, paper presented at the seminar on "The Financing of Higher Education". In *The Nordic Association of University Administrators; and the OECD Programme on Institutional Management in Higher Education*. Helsinki: The Association of Nordic University Rectors. Presentation to the Board of Trustees, 2005, Professor Janice Reid, Vice-Chancellor – in Expect the Unexpected.
- University of Western Sydney Act. (1988). Legislation of the New South Wales Parliament, Australia. http://www.austlii.edu.au/au/legis/nsw/consol_act/uowsa1997375/