



Policy mixes, policy processes & policy rationales: an analysis of OECD TIP working group 1994-2014

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Objectives & methodology



- A semantic analysis of the 'products' of the TIP working group
- 330 TIP documents (reports, workshops and mandates TIP as a whole and TIP specific activities).
- Mobilising the digital platform CORTEXT (www.cortext.net)
- Based on an indexation of the 400 central 'multiterms' (not innovation but innovation systems) – on average 23 per document dealing with policy areas, processes & rationales
- Two levels of analysis:
 - the vocabulary & its demography over 21 years
 - → drives to identify 22 'themes': 13 policy areas, 2 policy processes and 7 policy rationales & objectives
 - the links between multi-terms
 - → 6 overall clusters, that act as 'second-order' policy mixes, and evolve over time (3 periods considered: 1994-2000; 2001-2008; 2009-2014*).

Themes: A focus on the 13 policy areas



POLICY AREAS	terms	P1	P2	Р3	total
Public research	33	25%	25%	18%	23%
Knowledge transfer & commercialisation	23	12%	9%	9%	10%
Open science	4	0%	0%	10%	3%
Human resources	11	10%	3%	2%	5%
New and/or specific technologies	12	18%	6%	3%	9%
Services	9	3%	8%	1%	4%
Intellectual property	11	8%	16%	5%	10%
Tax incentives	9	5%	7%	1%	4%
Smart specialisation	7 4	0%	0%	10%	3%
Public private partnerships	7	2%	11%	17%	9%
Environment and green development	18	11%	5%	9%	9%
Global challenges	6	↑0%	3%	10%	4%
Other policy areas	13	4%	7%	5%	5%
	160	100%	100%	100%	100%

Number of terms per area

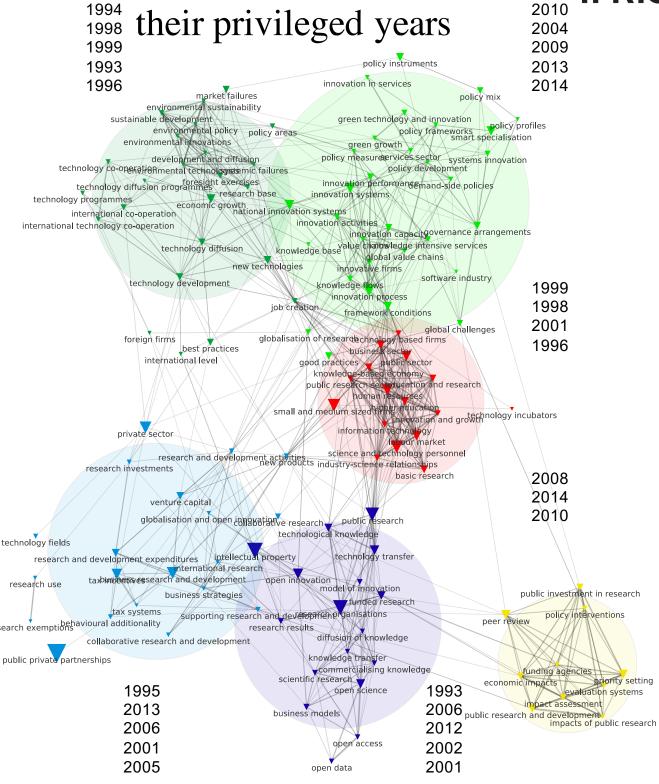
Occurrences of terms per area over the period P1=1994-2000; P2=2001-08; P3=2009-14

Two major results:

- 1) Unequal importance of themes: 5 themes represent 2/3rds of occurrences
- 2) only 4 areas are equally present over the period,
- 7 peak in only one period, 2 are nearly absent from one period

An overall views of links: 6 clusters highlighting 'sub' policy mixes &





Clusters & their policy areas



Environment & New technology

technology programmes

international technology co-operation

international co-operation

Green Growth. Global challenges

innovation in service mart specialisation

sustainability sustainable development green technology and innovation policy profiles policy frameworks smart specialisation environmental policy policy areas environmental innovations green growth policy measureervices sector systems innovation development and diffusion technology co-operationmental technologistemic failures policy development

technology diffusion programmes innovation performangemand-side policies

economic growth national innovation systems innovation activities

innovation capacitgovernance arrangements knowledge base value chainwiedge intensive services

technology diffusion global value chains new technologies software industry technology development innovation process

job creation framework conditions

Tax Incentive Sevel Public private partnerships

global challenges globalisation of researdechnology based firms
business sector public sector sed economy

nnovation and growth nolog

research and development activities science and development activities new products industry-science relationships research investments

venture capital

globalisation and open in a gratique research public les technological knowledge

technology fields intellectual property technology transfer research and development expenditures nternational research

open innovation model of innovation funded research taxburgioggyessearch and development research use

business strategies tax systems

supporting research and developmene ganisations research exemptions behavioural additionality

diffusion of knowledge collaborative r knowledge transfer public private

Public Research

K. commercialisation

Open science **IPR**

access

research open science

commercialising knowledge

public investment in research

Human

resources

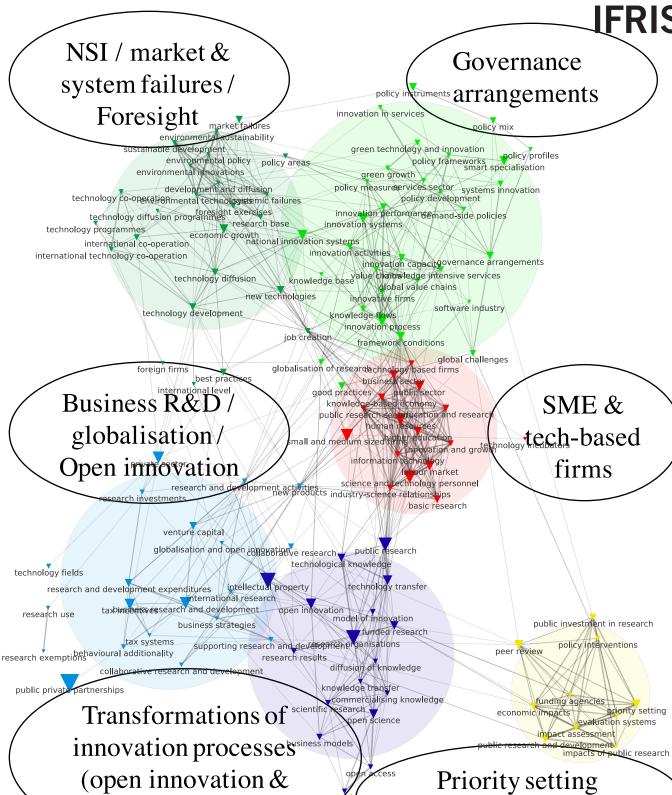
policy interventions peer review

evaluation systems impact assessment

Policy processes & evaluation

Clusters: policy rationales & processes





Impact assessment

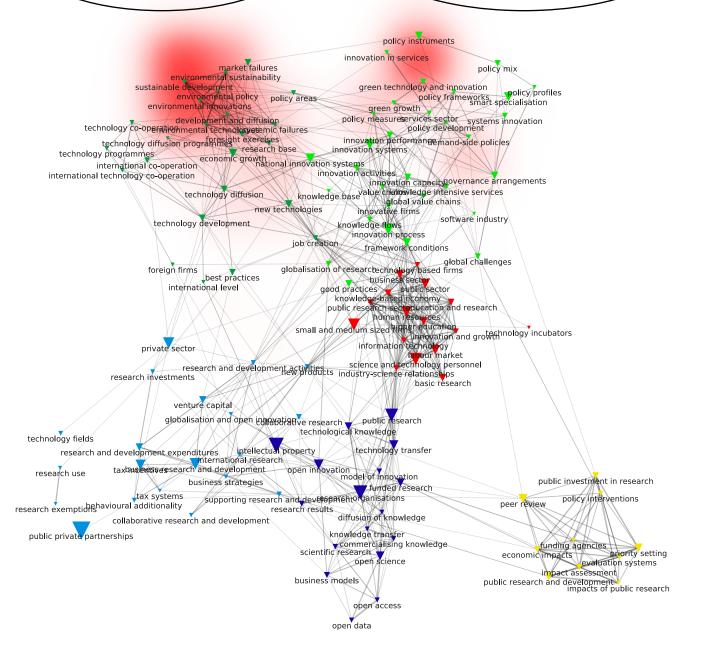
business models)

A focus on environmental issues using 'heat maps'



Environment & New technology

Green Growth, Global challenges Smart specialisation



Conclusions



• On the content:

- A synthetic approach of TIP core policy preoccupations with an understanding of evolutions over time
- Possibilities to analyse in detail both each theme and each 'sub' policy mix

On Methodologies:

- A quite flexible approach accessible on line with multiple graphical possibilities
- sensitive to the selection of documents analysed and of summaries made (here 330 documents, a very small DB, on the lower side of analytical robustness)



 We get out of this exercise with the feeling that there is not such a thing of one R&I policy mix. We have identified 5 different subpolicy mixes that have their own rationales (poorly shared between sub policy mixes), even though they may share some instruments



 Whatever the period (and we have identified 3 in the last 25 years), the composition & role of public sector research has been prevalent, reminding very much of the early times of OECD (e.g. Piganiol report): managing well public expenditure in public research is the most important 'sub' policy mix.



 All the procedural instruments (tax credits, PPP, demand side policies, etc) have all been central in one period, but seldom more, as if enough had been discussed about what they were, what they could do and could not do.



• At the same time there has been very limited discussions about sectoral R&I policies, even IT has been a limited and passing focus. The only very visible (building one sub policy mix) and lasting exception is about the 'environment', turning into green policies in the last period.