Explaining Change in National HRD Strategies: The Case of Three Asian Tigers

DAVID ASHTON

In this article we argue that changes in the national human r esource development policies of the three 'Tiger' economies of Singapore, Taiwan and S. Korea, are best explained by internal changes in the relationship between the state, capital and labour, rather than the impact of external factors. External factors are not without influence but of the two external sour ces of change operating at the international level, it is the underlying changes in the market that are more important than the actions of international agencies, such as the IMF, in explaining the incremental changes which can be observed in national HRD strategies.

INTRODUCTION

The purpose of this article is to tackle the question of whether or not the governments of three Asian T igers have become less capable of pursuing economic policies based on national conditions and priorities. It focuses on the area of human resource development (HRD) policies and, to a certain extent, industrial strategies, using the cases of Singapore, South Korea and, to a some extent, Taiwan.

There are a number of factors which have a powerful influence on the HRD strategies of Asian T iger economies. At the international level there are two main sources of change. The first is underlying changes in the global economy often referred to loosely as globalisation, namely the impact of multinational companies (MNCs), new technology , patterns of trade and other 'market' influences as well as the transfer of cultural items including knowledge. The second is a consequence of actions of the major international agencies, such as the World Bank and the IMF. At the national level, the crucial relationships are those between the state, capital and labour.

David Ashton, Centre for Labour Market Studies, University of Leicester , UK. Email: david.ashton@le.ac.uk. This article draws on research undertaken with Johnny Sung, Francis Green and Donna James and published under the title *Education, Training and Development in East Asia: The Political Economy of Skill Formation in East Asian Newly Industrialised Economies* , London: Routledge, 1999, together with subsequent work undertaken by the author and Johnny Sung on Singapore. The author would also like to acknowledge the contribution of Daniel Fleming whose comments on an early outline of the study were influential in shaping the eventual ar gument.

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The essence of the argument is that, in the case of national human resource development (HRD) policy, it is the changes in the relationship between the state, capital and labour that have been the most important in explaining the HRD strategies of these countries. However, of the two sources of change at the international level, it is the underlying changes in the market and geopolitical relations that are more important than the actions of specific international agencies in explaining the changes that can be observed in national HRD strategies. The conclusion spells out some of the wider implications of this argument.

The first part of the study identifies the distinctive features of the HRD strategies of the governments of the three T iger economies. The second part examines the ways in which these strategies have changed and discusses the relative importance of the dif ferent sources of change. The conclusion examines some of the implications for the conceptualisation of change and for developing societies.

THE DISTINCTIVE FEATURES OF THE HRD STRATEGIES OF THE THREE TIGERS

Compared with the older industrial societies, the three Asian T igers of Singapore, T aiwan and South Korea, are characterised by a number of distinctive features. They are all societies in which the state has achieved a high degree of autonomy relative to labour and capital. They all have highly developed bureaucracies, with substantial administrative capabilities. Moreover, in terms of the quality of their administration, this has been relatively free of corruption, especially Singapore. This has provided the politicians with a reliable tool with which to administer both economic and HRD policies. The autonomy of the state, relative to capital and labour (and political pressures they can generate), has meant that the political leaders were able to pursue long-term strategies for economic growth which have, at certain points in their history , been at variance with the immediate interests of both capital and labour .\(^1\)

In the field of HRD, this has meant that the political elite were in a position to establish an industrial strategy and to or ganise the education and training system to deliver the skills required to make that strategy ef fective. Their industrial strategy provided them with some degree of control or influence over the demand for skills. Their control over the education and training system provided them with the ability to control the supply of skills. In all three cases they established mechanisms, at the heart of government, to coordinate the decision-making process to ensure that supply matched demand. Moreover, because they had some influence over the demand for skills they could anticipate the emer gence of new demands for skill and ensure that the education and training systems were able to supply them. This system proved

effective in permitting these societies to experience high rates of growth without the drag of serious labour or skill shortages [Ashton et al., 1999].

This contrasts with the Anglo-Saxon model or the Germanic models. In the former, the state leaves the process of skill formation to the forces of the market. It provides a general education but the delivery of industry specific skills is left to the forces of supply and demand in the market-place, which in effect means the actions of individuals and employers. In the Germanic case, there are strong institutional mechanisms which deliver a high level of skill through a process of consensus building between the state, capital and labour. What distinguishes the three Tigers is the ability of the state to establish a proactive HRD strategy, an integral component of which is the ability of the state to co-ordinate the supply and demand of skills independently of capital and labour.

Influencing Demand

The ability of the state to influence the demand for skills was achieved through the pursuit of an industrial policy which aimed to develop a strong industrial base in each economy. In the initial phase of industrialisation, all three T iger economies adopted a similar export-oriented industrial policy through which they sought to make a competitive advantage out of their abundant supplies of disciplined, cheap, literate labour . This involved the establishment of labour intensive industries, especially those in textiles, clothing and the manufacture of other cheap consumer goods. In the next phase of industrial development the states' industrial policies sought to move the economies in the direction of higher value-added industries. ³ It was in this phase that the human resource development strategies were particularly important in ensuring that appropriate skills were in place to enable the new industries to grow rapidly .

In Singapore, the government sought to attract multinational companies to provide the requisite capital and help in establishing the appropriate skills base; inward investment was crucial to their success. In South Korea the government took a dif ferent route, placing less reliance on overseas capital and more on developing indigenous industrial giants in the form of the chaebol. Over time the success of this strategy meant that the chaebol came to dominate the economy. In Taiwan, the government sought to encourage local entrepreneurs to develop the industrial base. Some state enterprises were established, as indeed was the case in Singapore, and some inward investment welcomed, but the main strategy was to build up competition among the local small and medium-sized enterprises. All this is well documented in the literature [Ashton et al., 1999].

The important point with regard to HRD strategy was that the development of an effective industrial policy meant the government was in a position to identify the future demand for skills. Through their control over industrial policy these governments were able to identify the type of skills required to prepare for the next stage of growth, something individual entrepreneurs were

unable to do because of their concern with their own immediate skill needs [Green et al., 1999]. Government leaders were aided in this task by the fact that these were all countries catching up on their older industrial competitors and could thereby learn from their experience [__Amsden, 1989]. The government was therefore in an ideal position to identify the likely future demand for skills as the new, more skill-intensive industries were established. This is very different to the West, especially the Anglo-Saxon countries, where the majority of governments eschewed the use of industrial policy, relying on the markets to co-ordinate the demand and supply of skills.

Controlling Supply

On the supply side, all three governments were characterised by an ability and willingness to exercise a tight control of the supply of skills through the education and training system. In Singapore, the government took over the system of community schools and implemented a new national system of education, using English as the official language, although it permitted the use of the other major languages. The main curriculum was academic in nature but streaming was introduced which functioned to steer the less academically inclined into vocational education and later technical education. The curriculum remains strictly controlled from the centre and reforms have been introduced to ensure that the basics, in the form of language, mathematics, science and technology are fully covered. The universities and polytechnics have also been subject to strong central direction with quotas established for different disciplines.

In the field of training, the Skills Development Board, originally part of the Economic Development Board, was integrated into the Singapore Productivity and Standards Board (PSB) which now controls the funding and administration of training programmes. Much of the extensive training undertaken in Singapore through the PSB is funded via the Skills Development Fund, a tax on low-paid labour. This transfers the cost of up-skilling on to the labour-intensive, low-paid industries. However, control over the fund, and the programmes and activities it is used to support, is firmly in the hands of government. Wrk-based training has played a large part in upgrading the skills of the labour force.

In Taiwan, the country had an established primary education system in operation which it inherited from the Japanese. Control of this system was transferred to the KMT state, allowing it to make rapid changes in the output from the system in later years. The Ministry of Education closely controls both the public and the private education system. It oversees the curriculum, the hiring of teachers and the provision of textbooks. It has been the chief instrument for determining the mix of academic and vocational education in schools and for manipulating a 'narrow gate' to higher education. At the tertiary level, Institutes of Technology were created and universities expanded. Changes were introduced into the universities to ensure that more scientists

and engineers were produced. For most of its recent history the government maintained control over universities via the national entrance examination, the funding mechanism and through its ability to vet senior appointments and, at the student level, through KMT infiltration.

With regard to training, government policy has had mixed success. Publicly-funded training institutes, also under central control (via the Employment and Vocational Training Administration), were created in the 1960s. In the 1970s the state attempted to impose a training levy system for firms employing over 40 workers, but was forced to abandon it after criticisms from employers in the context of the oil crisis. Given the dominance of small and medium-sized enterprises, the government has not been able to rely on employers to help upskill the labour force. It has, to date, resolved the work-place skills supply problem by its policy emphasis on vocational education in schools and public training centres and by relying on informal learning processes within enterprises, but the latter is largely impervious to central control.

In Korea, control over general and vocational education is firmly in the hands of the Ministry of Education. Although privately funded education is permitted, the Private School law extends state control over the private sector's admission policies, finance and curriculum for both schools and colleges. In the initial stages of development, investment was made in technical and vocational education and restrictions were placed on higher education. In order to provide the skilled labour necessary for manufacturing industry , the unpopular vocational schools were expanded. Access to tertiary education was limited by the introduction of the Preliminary Examination for College Entrance. Later this was relaxed as new technical universities were opened to provide the skilled labour for higher value-added forms of production, although limits were placed on the numbers graduating, while quotas and funding were also used to control access to different fields of study. Control of vocational training has been vested with the Ministry of Labour, which runs a network of public training centres. It also instituted a training levy which, for a while, was more successful than the Taiwanese equivalent (see below), although this has now been replaced. In Korea, the chaebol have played a large part in enhancing the skills of the labour force through their own training provision, but at the expense of creating a rift in terms of skill development, between those able to upskill within the internal labour markets of the *chaebol* and those employed in the small and mediumsized enterprises who are denied these opportunities [Lauder, 1999].

In all three countries the government has retained firm control over the education and the public training systems, and a mixed degree of influence over enterprise-level training. This control has enabled them to make important changes at all levels, in the balance of the curriculum, in the proportion of students who obtain vocational education, in the flow of students into the tertiary sector and the type of subjects they study there, and in the

quantity and quality of vocational training provision outside the work-place. Within the work-place, governments have had some influence in Singapore and in Korea, though less in T aiwan. Taken together, the exercise of strong state control has enabled a relatively rapid response on the part of the education and training system to the changing requirements of the economy .

Co-ordinating Demand and Supply

In each of these three societies the government has established mechanisms to ensure the co-ordination of supply and demand. The function of these mechanisms is to convey relevant information and to ensure that the needs of the economy are accorded a high priority by all the relevant decision-makers. These mechanisms are clearly visible in Singapore, South Korea and Taiwan, although, like their industrial and education policies, they take on varying forms.

In Singapore the channels of communication are through the Ministry of Trade and Industry, the Economic Development Board and the Council for Professional and T echnical Education. As the most important ministry , the Ministry of Trade and Industry's agenda tends to dominate that of the other ministries. Its representatives sit on the various Boards and Councils to ensure that the process of internal communication is ef fective. It is the task of the Economic Development Board to ensure that the inward investment is forthcoming to provide the capital for the new industries. In performing this function the Economic Development Board is also cognisant of the human resource requirements for those industries. The skill requirements of those industries together with those of existing employers then shape the national skill requirements. Other inputs into the formulation of national skill needs derive from the politicians' objectives concerning the type of industries they wish to attract in the future. On the supply side, the education and training institutions produce data on their existing and projected outputs. Judgements are then made about the future level of output needed from the education and training institutions and whether it will be necessary to fill any gaps by recruiting appropriately skilled labour from outside the country . These judgments are then used by the Council for Professional and T echnical Education to establish specific tar gets for the various components of the education and training system, that is, the Universities, Polytechnics, schools and the Institute for Technical Education.

On the training front, targets for on-the-job and work-based training and for the level of investment in training by employers are set by the Singapore Productivity and Standards Board. It is the responsibility of that Board to ensure that the skills of the labour force are upgraded to meet the demands of existing and new industries and that the supply of labour is sufficient to meet

In T aiwan the mechanism for co-ordinating the supply of educated and trained personnel in order to meet the current and future demands of industry is

manifested in the form of the Council for Economic Planning and Development (CEPD). This powerful ministry helps to generate the industrial strategy and ensures that other ministries fall in line to meet the objectives of the economic plans. The CEPD has the responsibility for ensuring that the education and training system delivers appropriately trained personnel to meet the requirements of the economy, as defined by the Industrial Development Board. For example, in 1966 the CEPD planned the increase in vocational and industrial education to meet the requirements of the economic plan. In the latest plan, the Council still has an important part to play in making T aiwan into the Asia Pacific Regional Operation Centre by ensuring that there is an emphasis on enhancing continuing education, innovation and the quality of education, to provide the skilled labour force and professions necessary for national reconstruction. While the CEPD provides the overall strategy the Manpower Development Committee, which is subsumed within the CEPD, carries out the more detailed planning and direction of policy. This set-up ensures that the broad direction of policy with regard to the supply of appropriately skilled personnel is delivered in practice.

The role of the CEPD is diminishing in importance as the government seeks to rely more on the market. However, it still has a role in ensuring the coherence of government actions across all policy areas and while its influence may be receding in significance, it remains a powerful force in overseeing the direction of policy and ensuring the education and training system delivers the appropriate skills required to sustain economic development. There are, in addition, other mechanisms in T aiwan which assist in the same function. One important institution is the National Youth Commission, which monitors the flow of highly qualified manpower onto the labour market, influencing its education and training. One of its current activities is to entice back some of the more highly trained Taiwanese scientists and engineers resident in the United States.

In Korea, the Economic Planning Board has performed the function of the main linking mechanism. It has had three major functions: planning and formulating economic policy programmes, co-ordination of economic and other policies by ministries and evaluation of policy programmes. It has been, for the last 30 years, the major influence on the formulation of educational and industrial policies. The priority accorded to industrial and economic development by successive Korean governments has meant that deliberations of the Economic Planning Board took precedence over other issues on the agenda of different ministries.

In its planning role, the Economic Planning Board has had the support of the Korean Development Institute and works with the Ministry of Education, the Ministry of Labour and the Ministry of Science and Echnology through its manpower agency. In this way the education and training implications of the economic development strategy are conveyed to the ministries responsible for implementation. Where necessary this has been reinforced through the work of advisory councils, such as the Presidential Commission on Education Reform, located in the Blue House. As was the case with T aiwan's CEPD, there have been pressures in Korea to reduce the power of the Economic Planning Board, leading to its mer ger in 1994 with the Ministry of Finance to create the Ministry of Finance and Economy . That mer ger, together with other forces discussed below , has inhibited the ef fectiveness of these co-ordination mechanisms in S. Korea.

The Conditions for the Maintenance of the Co-or dination Role of the State

At the societal level, each government has been able to use its influence over the present and future demand for skills, together with its control of the education system, to ensure that as the nation's skills need changes the appropriate skills are in place in the labour force. Despite mistakes and many familiar policy problems, these economies managed not only to take-of f on a spell of growth based on investment in low-cost industrial products for export, they also engineered a successful transition to higher value-added production across many or all sectors. This transformation was accomplished without the appearance of major skill shortages.

The consequence of these political mechanisms is that there has arisen a mode of development that is different from earlier modes in the West, especially the Anglo-Saxon model, where education systems have in many cases evolved with considerable autonomy from the central state and where there has been no concerted attempt (nor available mechanisms) to link educational expansion closely to the economic requirements of industry [Green, A. 1990; Brown et al., 2001].

In some Anglo-Saxon countries, one can find instances of centralised planning of quite specific skills supply to meet perceived demand. However , this is not an argument for the efficacy of highly detailed manpower planning shrouded in the technical apparatus of input–output models. Once quite widely espoused, this form of manpower planning is generally discredited [e.g., *Middleton et al., 1993*]. Rather, the state's co-ordinating role is manifested more in terms of lar ger categories, and in the timing and sequencing of institutional development. However, to undertake this effectively the state must have the power (relative autonomy) to override opposition from either capital or labour. We illustrate with reference to two examples drawn from Taiwan and Singapore respectively.

In the case of Taiwan, as indeed was also the case in Korea, the government had to ignore parental pressures from labour for an expansion of academic education in order to channel the flow of young people into vocational education and technical training. This was essential if the requirements of industry for technical skills was to be met. This was particularly acute in the case of T aiwan because its economy was dominated by relatively small

enterprises. Just as elsewhere it has proved difficult or impossible to engender much formal vocational training in these enterprises. ⁵ The public demand, however, continued to be for ever greater access to academic education.

The first integrated manpower plan showed that there was a shortage of skilled workers that could become increasingly acute, and noted that Taiwan's higher education system was skewed towards the arts and humanities during the 1950s and 1960s. The plan emphasised the development of science and technological education to accord with the development of the economy [*Law*, 1994] and the expansion of vocational education. In 1960 only 40 per cent of high schools pupils were in vocational schools, which was considered too low to meet expected skills needs. To change the provision, limits were put on the expansion of general schools while vocational schools were opened. As T able 1 shows, by 1970 the proportion of pupils in vocational education had already risen to 57 per cent. This emphasis on vocational schooling was high by most standards and was later to become even more pronounced. Notable about this shift is that it is attributable to the state rather than public demand.

The demand for general (academic) schooling was high but the state was able to insulate itself against public pressure and limit access to academic education. Although the policy-makers would claim that 'mothers and fathers like vocational education', citing evidence that more than half of high school students attended vocational high schools, the truth was that the manipulation of the ratio between academic and vocational high school numbers was entirely in the hands of the Ministry of Education [*Ch'ang*, 1994: 411].

The deliberate 'narrow gate' policy of the state resulted in 70 per cent of the candidates in the late 1970s failing secondary high entrance examination therefore having to re-sit or go to vocational schools, despite what was sometimes perceived as the social cost [*Lucas*, 1982]. The Confucian/Chinese respect for education in the early stages of post-war development could have resulted in high spending on more academic secondary and tertiary education while the vocational skills demanded by industry may have been neglected. Not only was public demand for education concentrated on academic education, but while capital was still in short supply it would have been cheaper to provide

TABLE 1
DISTRIBUTION OF SENIOR HIGH SCHOOL STUDENTS IN TAIWAN

	1960	1970	1990	1995	2000
General High	60	43	28	30	40
Vocational High	40	57	72	70	60

Source: Chang [1995].

additional academic schools rather than vocational schools. It was the state's manipulation of this high value placed on education which resulted in the 'correct' supply of labour from schools to industry. It cannot be said that the manpower planning resulted in a perfect match. Both Lucas [1982] and San and Chen [1988] refer to the problem of unemployment especially among the highly educated. Moreover, graduates often have to accept employment in which their duties, status and salaries are incompatible with their educational background. This phenomenon may be associated with the popular 'working one's way up', age hierarchies, and gender issues where female graduates are involved. However, government of ficials were not greatly concerned that there was a slight mismatch at these levels [Ashton et al., 1999].

The second example of state autonomy comes from Singapore where, having made the decision to move into higher value-added markets, the government had to 'steer' employers in a different direction to that which they had been pursuing. With the economy having reached full employment in the 1960s and 1970s, through the success of the first policy thrust to attract low value-added industries, the employers were facing pressures for wage increases. It was in their interests for the government to hold down wages to enable them to continue to compete ef fectively with the new generation of industrial countries, such as Malaysia and Indonesia. Instead, the government did the opposite, they introduced a tax on low-paid labour to discourage low value-added forms of production, as well as provide the resources necessary to up-skill the labour force. They then sought to attract new capital for the development of higher value-added forms of production. They also allowed wages to rise, although this particular aspect of their strategy ran into problems and was later abandoned. Nevertheless the government were successful in acting against the immediate interests of many existing employers and moved the economy in the direction of higher valued forms of production. Lee Kuan Yew recounted the implications of this policy for skill development in his speech to the International Chamber of Commerce in 1978.

We learned from the difficulties of other developing countries which had been ahead of us in economic development and industrialisation ... We consciously sought more skill-intensive and less export sensitive industries like machine tools, electronic meters, miniature ball-bearings. Such industries need workers who are literate and skilled in working machines ... We invested heavily in our younger generation [then] we had a trained and educated workforce ready; industries needing such a workforce came and set up operations in Singapore. And because they employed more sophisticated machines, they could pay higher wages ... The older factories, whose product had a high labour content – flour mills, sawmills, textiles, assembly of integrated circuits – stopped

expansion in Singapore. Some have moved out ... The government actively encourages this for the transfer of labour-intensive industries frees valuable land and labour in Singapore for higher skill and capital-intensive factories (*quoted from Sung* [2001]).

Explaining Change in HRD Strategies

While the details of these national HRD strategies vary , their persistence throughout the 1970s, 1980s and 1990s does suggest that the national governments remained in the driving seat. However , as we noted above, in Korea and, to a lesser extent, T aiwan, the governments are encountering difficulties in maintaining them. This provides the opportunity for us to explore in more detail the relative impact of changes at the international or inter-state level <code>vis-à-vis</code> changes in the relationships between classes and interest groups within the society.

The story is not a simple one. There have been pressures from international agencies such as the W orld Bank (WB) and the International Monetary Fund (IMF) to push the 'free market' model of development across Asia, most notably in the wake of the Asian financial crisis. However , prior to that, and given that the experience of Japan and the Asian Tigers did not fit neatly with the free market model espoused by the World Bank, there had been intellectual discourse resulting in the debate over the Asia miracle [World Bank, 1993]. This saw the W orld Bank starting to modify its position, allowing for more government autonomy in the determination of national HRD policies, but still within the confines of the free market paradigm. Indeed, recent work from World Bank economists suggests that they are now coming to the conclusion that the original idea of one single economic model that could be used as a basis for analysis and policy prescription in all societies may not be appropriate [Kenny and Williams, 2001].

In spite of these recent doubts among W orld Bank economists about the validity of their model, at a more practical level, these international agencies have continued to use their command over resources to introduce a form of the Anglo-Saxon model of development into developing countries. This model fits well with the American experience and with the ideology of the free market and has been associated with attempts by international agencies to open up the markets of the third world to western capital, the latest manifestation being the actions of the IMF during the Asian financial crisis.

One would therefore expect that in the wake of the Asian financial crisis there would be pressure on the Tiger economies for the introduction of greater use of market forces in the delivery of education, and especially training. This has not happened. Singapore and Taiwan weathered the crisis without the need for external aid. Characteristically, the Singaporean government responded to the crisis by announcing an increase in their investment in education and

training⁶ but no major change to the education and training system. In Korea, the situation was different, there the government was subject to a range of demands from the IMF to introduce greater transparency into the banking system, a reduction of government regulation ⁷ and for the break-up of some of the *chaebol*, permitting more extensive use of market forces [*Mathews*, 1998]. However, this did not appear to have any direct effect on the education and training system. There, pressure had been building up from government experts, schooled in US free market economics, for the market to play a greater role in the education system, but these have yet to make a major impact on the system. The reforms of the education and training system devised before the financial crisis still went through. Thus the intervention of the IMF during the crisis has not had a major impact on the government's ability to co-ordinate the supply and demand for skills.

Explaining Change in South Korea

While the impact of the IMF was not therefore a major factor, there have been more incremental changes stemming from increasing involvement of Korea in world markets, and the close relationship with the US as a crucial political ally During the 1980s and 1990s the economy was opened up to foreign investment and some state enterprises privatised. Trade unions were legally recognised in 1987 symbolising the growing power of or ganised labour. In the field of education, reforms of the system were implemented to encourage more creativity among students and to provide greater diversity of student choice [Ashton et al., 1999] while the training system has recently been reformed through the introduction of an Employment Insurance System which includes provision for an employers' contribution toward employee development.

However, all these changes reflect more than just the increasing integration of South Korea into the world market. They also reflect more fundamental underlying changes in the relationship between the state, capital and labour which has been more important in reducing the ability of the government to sustain an independent HRD policy.

There have been two sets of changes which have undermined the ability of the Korean government to co-ordinate the demand and supply of skills. The first is in the relationship with labour. In addition to adapting to the increasing power of organised labour, the government has also had to accommodate to the demands from parents for greater choice. This resulted in a diversification of educational provision and the decentralisation of control over the education system as well as making reforms to the system of university entrance examination. All of this signifies a reduction in the ability of the state to control the content and output of the education system. Although these reforms have been sold on the basis of enhancing students creativity and introducing greater flexibility into the system, they do mean that policy levers available to

the state to influence the supply of skills have been reduced. In their place the government is having to rely more on the market to deliver appropriate skills.

The second set of changes are in the relationship between the state and capital. As we have seen, when the government initially sponsored the process of industrialisation it encouraged the growth of the *chaebol*. The very success of this policy resulted in the emergence of giant industrial conglomerates which subsequently dominated the economy [*Amsden*, 1989]. This provided business leaders with a power base independent of government which in turn provided the government with a problem of how to control capital and the future direction of the economy: the chaebol had broken partly free from the chains of state control. The 1990s witnessed a number of attempts by the government to reassert their control. One such attempt was through the privatisation programme, which sought to broaden the base of capital and disperse ownership, thereby reducing the power of *chaebol*. However, this backfired when it turned out the newly privatised companies were acquired by the chaebol who were the only source of the necessary capital required to purchase them.

The growth of the chaebol has also undermined the state's ability to influence the supply of skills through the growth of their own internal labour markets. Modelled in part on the Japanese enterprise, as the chaebol grew in size they were able to provide the equivalent of lifetime employment. Extensive training was provided through their internal labour markets. As we saw above, the state's attempt to influence this through the use of a levy was only partially successful and then only in the early phase of the growth. The recent reforms of the training system, through the Employment Insurance System, can be seen as an attempt by the state to reassert control, but how successful this is remains to be seen. What may appear to be more important in this respect is the reduction in the size of the chaebol associated with the re-structuring of the economy following the financial crisis. This may be reducing the capacity of the economy to upskill labour as the internal labour markets which provide for this shrink in size. However, there is evidence from research with senior management that this restructuring is not likely to see the end of the Korean system of internal training [Lauder and Yadollah, 2001]. Indeed the work of Whitley [1999] and others involved in the comparativebusiness-system approach also suggests that once established national institutional systems possess enduring qualities which are unlikely to be transformed, at least in the short run.

Under these new circumstances the state is struggling to co-ordinate the demand and supply of skills and having to leave their delivery more and more to the actions of the market and the *chaebol*. However, the important point is that these are changes in the relationship between capital and the state. The IMF interventions, through the financial crisis, may be having an impact on this, but it is only mar ginal, and indirect, in that they may be reducing the

power the chaebol thereby providing the state with the possibility of wielding more influence over capital and therefore the demand for skills. However, this is an unintended consequence, not one which would be in accordance with the dominant ideology of the IMF.

Explaining Change in Singapore

In Singapore there has been less change in these relations between the state, capital and labour over the last decade, although there have been significant changes in the evolution of HRD strategy. In this respect the relative autonomy of the state remains intact and the government remains 'in control' of its own HRD agenda.

There have been continuing demands from parents for more academic education, and in response to this and the need for a more highly educated population to compete in world markets, the state has increased provision for higher education. However , it has not given in to the demands for more academic education. Streaming remains a feature of the education system and the distinction between degree awarding universities and non-degree (diploma) awarding polytechnics continues. The government has accommodated to the demands for more higher education by expanding the polytechnic, diploma awarding sector, while still restricting access to universities.

Capital remains fragmented. The government still relies on the MNCs for high levels of inward investment, although substantial progress has been made in developing Singaporean businesses capable of competing in world markets, the most notable example being Singapore Airlines. However , most Singaporean business leaders remain in the SME sector . This represents a far lower level of capital concentration than is evident in Korea, enabling the government to continue to influence the pattern of demand for skills through the policy of inward investment.

While the government remains firmly 'in control' of its HRD strategy change nevertheless remains one of its central characteristics. As we have seen, to facilitate the shift to higher value-added forms of production the government moved from a policy of providing a supply of literate and disciplined labour to one of providing a flow of technically educated young people and up-skilling the older workers ready for the new industries of the 1980s and 1990s. Having lar gely achieved those goals the current policy emphasis has shifted to one of preparing for the next phase of economic growth, namely the 'knowledge economy'.

As ever, there are a number of strands to the current HRD strategy . The essence is to prepare the labour force for the new skills demanded by the knowledge economy . In particular these are high levels of educational achievement, especially in science and engineering, but also the soft skills of creativity, leadership, communication and problem solving. Moreover , the

strategy is not just directed at individuals, the PSB have developed their own Workforce 2000 strategy which is directed just as much at improving the management of labour as the skills of individual workers.

The assumption behind the new strategy is that competitiveness depends on the use of the latest information and practices by management to enhance labour productivity. It also depends on the ability of management to fully utilise the skills of the labour force. Programmes are therefore directed just as much at management as at labour. The People Developer programme provides managers with help in utilising the latest HRD techniques, while W Redesign 2000 provides help for management in introducing modern high performance work practices in order to enhance productivity and worker commitment. Meanwhile the Critical Enabling Skills T raining programme (CREST) provides workers with the new skills including communication, problem solving and leadership. The emphasis in all these programmes is on using the workplace as a source of learning and achieving improvements in performance. These in turn are one further source of competitive advantage for the company and the country as a whole. The approach is holistic in that each programme or initiative complements the other to provide a total approach to workforce development: for example, the W ork Re-Design programme by introducing new working practices increases the demand for training while the CREST programme provides the workers with the skills necessary to implement the new practices [Ashton and Sung, 2001].

The component parts of this strategy are not necessarily home grown. The attempt to introduce greater creativity into higher education relies on partnerships between Singapore's universities and major business schools in the UK and Europe. As in the past, many of the PSB programmes draw heavily from overseas experience as well as the expertise of some of the leading MNCs: for example, the People Developer programme draws on the proven experience of the UK Investors in People programme (IiP) while the CREST programme draws on the experience of MNCs such as Motorola for the content of some of its modules. What is distinctive is the way in which the Singaporeans have combined and shaped this knowledge to achieve their own objectives.

This approach to workforce development is part of a strategy explicitly designed to prepare the labour force with the skills for the next phase of economic development and to provide support for employers to enable them to compete at the leading edge of world markets. There are strong continuities with previous policies but the holistic approach, and the focus on the development of workplace skills by encouraging employers to increase their demand for new skills through the introduction of high performance working practices, is new. It is the government's response to what it sees as the new conditions facing Singaporean and Singaporean-based companies in world markets.

Given the ways in which the Singaporeans have utilised knowledge from different countries and companies, it is difficult to categorise their strategy as 'internally' developed as opposed to 'externally' imposed, in the way in which the IMF or WB impose strategies on less well developed countries. It is a response to a new phase in the development of world markets. Much of the content is drawn from foreign experience, but the characteristics of the strategy, to influence both employers and employees is essentially Singaporean. ¹⁰

In other areas of policy this problem of categorisation is not so acute. If we take the recent dramatic rise in the salaries of CEOs and senior management which has increased inequalities in the Singapore labour market, we can readily identify this as the impact of Singapore's attempt to compete at the leading edge of world markets. Here the government has decided that this is a trend it cannot circumvent and has therefore chosen to work with the market. As a consequence, it has had to abandon its egalitarian instincts and sell these inequalities to its citizens as a price they have to pay for continuing its success in world markets. Similarly it continues to fill certain high level, specialised skill vacancies with recruits from abroad. However , none of these accommodations to pressures from the market have made any fundamental changes to its ability to co-ordinate the demand and supply of skills or its attempt to have the new skills in place ready for the new industries.

CONCLUSION

The conclusion this leads to with regard to the question posed by the conference organisers is that in the case of these three Asian T igers, the impact of the international agencies on the country's ability to deliver its own HRD strategy and, to a lesser extent, industrial strategy has been limited. The HRD strategies of the three T iger economies were conditioned by their attempts to make a successful entry into world markets and thereafter to enhance their competitive position. These strategies can only be understood as an integral part of the changes which have taken place in world markets and the competitive pressures at that level. As such they continue to be formulated as a response to both the changes in world markets and political conditions as well as the changing social, economic and political conditions within the society.

In the case of Singapore, the state has retained its ability to pursue an independent strategy. However, that strategy while unaffected by the actions of international agencies is nevertheless conditioned by the changes currently taking place in world markets and geo-political conditions. In the case of South Korea, there are now serious doubts about the ability of the state and its political leadership to pursue an HRD strategy independent of either capital or labour. The autonomy of the state has been undermined by changes in its relationship with capital and labour. While globalisation has also played a part

in this, the actions of international agencies, especially the IMF, only played a minor part.

While we can establish this as a fairly firm conclusion, it does raise an important conceptual issue. Given the way in which the question has been phrased, it appears that these factors (forces of globalisation and international agencies) act as 'external' agents that then produce an ef fect on the 'internal' national strategies. The question is based on the use of the natural science concept of causality, where one variable can be isolated and its impact then measured on another. As we mentioned above, the World Bank economists are now starting to question the adequacy of that model of science for the analysis of economic and social development. It is perhaps time for us to do the same. The model of causality runs into problems because the strategies we are examining are themselves a product of the growing integration of national societies; the two are inextricably intertwined. The national HRD strategy is a product of the international conditions of which the society is a part. This is very evident in the case of the Asian Tiger economies where the explicit aim of the HRD strategy is to enhance the ability of the society to compete in the global economy. Conceptually, this means that the 'external' context (globalisation) is itself an integral component of the 'internal' HRD strategy . However, the very existence of HR policies designed to enhance the competitiveness of each society does itself increase the level of competitiveness that exists between those societies. These policies, in so far as they are ef fective, then become an integral part of the forces of globalisation. Here we have a case of the 'external' being part of the 'internal' and the 'internal' being part of the 'external', a conceptual problem highlighted by Elias back in the 1950s [Elias, 1956].

This suggests difficulties with the way in which the question is formulated as a scientific problem. In order to minimise this conceptual problem, we have, following Elias, sought to conceptualise the issue as one of the increasing integration of societies at the international or inter-state level. This enables us to observe the impact of the overall configuration of human societies at the inter-state level on the policies of single societies, without resorting to a conceptualisation of them as 'external' agents or the policies of the individual governments as 'internal' to the society . While it may be emotionally comforting to think of the state as sovereign, such a mode of thinking may not be conducive to scientific advances. It may be that further developments in our understanding need to come just as much from such conceptual advances as from the accumulation of further data and case studies.

One final point which stems from this analysis, relates to the point we made in the initial part of the analysis, namely that the three T iger economies all developed relatively strong, independent and effective administrative systems staffed by an effective civil service. In each case they rapidly developed an administrative system capable of delivering their own HRD strategy . This

contrasts strongly with the experience of less well developed societies such as Botswana, where the W orld Bank has been able to impose its own prescriptions for HRD policy, emphasising the use of the market and confining the actions of the state to areas concerned with the supply of labour The lesson is that where the state has been able to develop a strong institutional base for the delivery of skills, then there is less scope for international agencies to intervene. Moreover, once established these structures are now capable of conditioning future options. Change is still occurring as a result of international market and political pressures, but this is now more of a two-way process, these societies are now in a position to start to shape aspects of the international order as witnessed by attempts to strengthen the ASEAN group as a trading community. It may be that the real casualties of the current wave of 'globalisation' are the weak economies of the third world.

NOTES

- 1. The approach adopted here draws heavily on the developmental state literature. Whereas the notion of the relative autonomy of the state has its origins in Marx it was developed by Johnson [1982] and later Castell [1992] to highlight one of the distinctive features of the economically successful East Asian societies.
- 2. Further details of this typology of HRD system can be found in Ashton, Sung and Tirbin [2000].
- 3. For discussion of this transition see Verma et al. [1995].
- 4. South Korea lagged behind in several service sectors and remains at substantially lower GDP per capita than the other two.
- An early attempt at instituting an industrial training levy-subsidy system failed to survive the oil crisis of 1974.
- 6. This took a number of forms; they stuck to their plans to build Nanyang Polytechnic and increased resources for worker re-training, see Goh Chok T ong's May Day message 2000 [http://www.gov.sg/sprinter/].
- 7. Financial Times, London, 15 Jan. 1998, p.6.
- 8. These were discussed extensively at a seminar hosted by the KDI on 'Improving the Economic Performance of Education' Seoul 7–9 Nov. 1997
- 9. Evidence from discussion with senior government of ficials, Nov. 1999.
- The speech by Deputy Prime Minister, Lee Hsien Long, 12 April 2000, spells out the ways in which foreign experience has been used to influence the current strategy of the government [see http://www.gov.sg/sprinter/l.
- 11. See the speech by Deputy Prime Minister Lee Hsien Loong, 12 April 2000, which also spells out the government position on the inevitability of widening inequalities as a result of the growth of the knowledge economy [see http://www.gov.sg/sprinter/].
- 12. Here again it is important to emphasise that such a bureaucracy will need to have the capacity to move beyond merely administering the needs of the market. It will need to develop the capability to regularly lead the market if the country is to move beyond merely making use of its comparative advantage of low cost labour and climb up the value chain. This is not the capacity building which the W orld Bank and IMF are likely to support, given their current concern with ensuring that the state's actions are merely market friendly. However, the European Community, which is not so closely tied to the 'free market' model, may be different. At the moment it is currently funding a form of capacity building in South Africa which is capable of supporting the establishment of a developmental state model. Moreover, the HRD strategy it is developing has been influenced by the success of the Asian T iger economies.

REFERENCES

- Amsden, A.H., 1989, Asia's Next Giant, New York: Oxford University Press.
- Ashton, D. and J. Sung (forthcoming), Learning for High Performance Working, Geneva: ILO.
- Ashton, D., Sung, J. and J. T urbin, 2000, 'Towards a Framework for the Comparative Analysis of National Systems of Skill Formation', *International Journal of T raining and Development*, Vol.4, No.1, pp.8–25.
- Ashton, D., Green, F., James, D. and J. Sung, 1999, Education and Training for Development in East Asia: The Political Economy of Skill Formation in East Asian Newly Industrialised Economies, London: Routledge.
- Brown, P., Green, A. and H. Lauder (eds.), 2001 (forthcoming), *High Skills: Globalisation, Competitiveness and Skill Formation*, Oxford: Blackwell.
- Castell, M., 1992, 'Four Asian T igers with a Dragon Head: A Comparative Analysis of the State, Economy and Society in the Asia Pacific Rim', in R.A. Applebaum and J. Henderson (eds.), States and Development in the Asia Pacific Rim, London: Sage.
- Ch'ang Ch'ing-His, 1994, 'Chiu shih nien lai te T'aiwan hsuehhsiao chiaoyu' (Ninety Y schooling in Taiwan) in Kuo-shu Liang (ed.), *T'aiwan Chingchi fachan lun wenchi*, T'aipei: Shihpao Wenhua, pp.403–45.
- Chang, Suk-Min, 1995, Secondary Education in Korea: 1960–1990, Seoul: KEDI.
- Ch'en Shun-fen, 1990, Kuangfu hou T'aiwan T ich'u Kaot'eng Chiaoyu She Hsiao Chengtse chih T'ant'ao (An Investigation into the Establishment of Institutions of Higher Education after the Recovery of the Taiwan Area), T'aipei: Chungyenuen Chungshan Jenwen Shek'eso.
- Elias, N., 1956, 'Problems of Involvement and Detachment', British Journal of Sociology, Vol.7, No.3, pp.226–52.
- Green, A., 1990, Education and State Formation: The Rise of Education Systems in England, France and the USA, London: Macmillan.
- Green, F., Ashton, D., James, D. and J. Sung, 1999, 'The Role of the State in Skill Formation: Evidence from the Republic of Korea, Singapore and T aiwan', Oxford Review of Economic Policy, Vol.15, No.1, pp.82–96.
- Johnson, C. 1982, MITI and the Japanese Miracle: The Gr owth of Industrial Policy, 1925–1975, Stanford, CA: Stanford University Press.
- Kenny, C. and D. Williams, 2001, 'What Do We Know About Economic Growth? Or Why Don't We Know Very Much?' *World Development*, Vol.29, No.1, pp.1–22.
- Lauder, H., 1999, 'Competitiveness and the Problem of Low Skill Equilibria: A Comparative Analysis', *Journal of Education and Work*, Vol.12, No.3, pp.281–94.
- Lauder, H. and Y. adodollah Mehralizabeh, 2001, 'Globalisation, Multinationals and the Labour Market', Brown, Lauder and Green [2001].
- Law, Wing-Wah, 1994, 'The Higher Education Systems of the People' s Republic of China and the Republic of China: A Comparative Study', Ph.D. thesis, University of London, Institute of Education.
- Lucas, Christopher J., 1982, 'The Politics of National Development and Education in T Comparative Politics, Vol.14, No.2, pp.211–25.
- Mathews, J., 1998, 'Fashioning a New Korean Model Out of the Crisis: The Rebuilding of Institutional Capabilities', Cambridge Journal of Economics, Vol.22, pp.747–59.
- Middleton, J., Ziderman, A. and A. Van Adams, 1993, Skills for Productivity. Vocational Education and Training in Developing Countries, New York: Oxford University Press for the World Bank.
- San, Gee and Chao-nan Chen, 1988, In-service Training in Taiwan ROC, CIER Economic Monograph Series No.20, Taipei: Chung-hua Institution for Economic Research.
- Sung, J., 2001, 'The Developmental W orker: Social Engineering and W orker Participation', Ph.D. thesis. University of Leicester.
- Verma, A., Kochan, T.A. and R.D. Landsbury, 1995, *Employment Relations in the Gr owing Asian Economies*, London: Routledge.
- Whitley, R., 1999, Divergent Capitalisms: The Social Structuring of Business Systems , Oxford: Oxford University Press.
- World Bank, 1993, *The East Asian Miracle: Economic Growth and Public Policy*, World Bank Policy Research Report, New York: Oxford University Press.