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Higher Education and the Labour Force

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Macao and Hong Kong have greatly benefited from economic links between China and other countries, acting as entrepots and service bases for foreign investments. During the restructuring of their economies from dominance of manufacturing to dominance of services, a large supply of highly educated personnel was needed. Recently, the governments of both Special Administrative Regions (SARs) signed agreements for Closer Economic Partnership Arrangement (CEPA) with the national government in Beijing. These agreements aimed to forge even stronger economic cooperation between the two SARs and mainland China.

In Macao, educational enrolments expanded rapidly after the late 1980s. However, the need for overseas graduates remained strong because of the previous neglect of local higher education, and because of constraints in the number of specialist forms of training which could be offered in a small society. The main destinations for Macao's external students were mainland China and Taiwan. Hong Kong had greater training capacity than Macao, but even in Hong Kong local universities met less than 60 per cent of the territory's needs for highly educated personnel. Hong Kong depended on North America, the United Kingdom (UK), Taiwan and Australia for much higher education and training.

This chapter begins with a broad conceptual framework which shows why Macao and Hong Kong are instructive places for study and comparison of links between education and the labour force. Discussion then turns to the development of Macao's economy, the effects of that development, and the supply of skilled personnel. The chapter then provides similar commentary on Hong Kong, which sets the stage for identification of similarities and differences. The final section draws out the conceptual implications of the analysis.

Education, Development and Technological Change

Concerning the general relationship between the economy and education, a widespread perspective is that the investment of public money in 'human capital' is the one of best ways to promote economic development (McMahon 2002; Little 2003). Many human capital theorists (e.g. Becker 1975; Psacharopoulos 1995; Psacharopoulos & Patrinos 2002) have investigated the contribution of education to economic growth, and have endeavoured to measure rates of return to schooling. These theorists have focused on inputs and outputs, rather than on what actually happens in the processes of education.

Such analysts have also emphasised the value of systematic predictions of demand for skills. Manpower planning has been linked to educational provision with the goal of maximising rates of return from investment in human capital. In many situations, manpower planning has led to expansion of investment in tertiary and technical education (Maglen 1993; Bray 2004a). However, an alternative set of explanations for economic progress emphasises cultural forces. In East Asia, analysts have focused on the Confucian ethic, which is believed to have fuelled and motivated both labour and management (Tai 1989).

Most advanced industrial countries have moved from economies largely based on manufacturing to economies largely based on services. This change has affected demands on education and training systems. In general, skill requirements are higher in the service sector than in the manufacturing sector. Harris (1995) pointed out that more highly educated labour produces more output, and that the larger the stock of human capital, the more likely labour will find ways to improve production processes and to develop new and profitable products.

In both Hong Kong and Macao, the existence of a literate and numerate workforce has contributed to economic development (Bray 1995a; Sweeting 1995). However, as the second half of the 20th century progressed, mere literacy and numeracy rapidly ceased to be an adequate underpinning for continued growth. One new element became the link between technology and education. Carnoy's (1995) review of the effects of information technology highlighted the increased demand for highly skilled labour because of the more complex requirements of information systems and flexible production. Carnoy further pointed out that intensified global competition and the development of new information technologies altered the international division of labour. Competition in the production of the most advanced technologies sharply increased among the highly industrialised economies, shifting manufacturing jobs from these economies to a group of newly developing countries in Asia and elsewhere. Training of highly skilled labour became an important public policy issue in both industrialised and less developed economies.

Although Macao and Hong Kong both had fast-growing economies during the 1980s and 1990s, their governments' higher education and skill-training policies were rather different. Comparison brings into focus questions about the quantity of higher education, the types of higher education, and its planning. The labour market in each place has differed significantly. Hong Kong moved from an economy largely based on manufacturing in the 1970s to an economy largely based on tourism and other services in the 1980s. It then moved again in the 1990s to an economy strongly based on financial services. Macao's economy has also depended on tourism, but it has a large gambling sector not found in Hong Kong. Since skill requirements are generally higher in the service sector than in the manufacturing sector, the growth of service employment has tended to increase the average skill demands of work. These and other patterns are best discerned by considering each territory in turn.