CHAPTER 2

WORLD TRENDS IN HIGHER EDUCATION

2.1 Higher education around the world is in a state of considerable transformation. The traditional forms and purposes that were dominant twenty or thirty years ago are still present, but considerable diversity has now appeared. This is a period of dynamic transition. While a number of trends are clear, it is equally the case that there is much national and regional variation. This means that the future profile of what may emerge in or be appropriate to any one national or regional situation is hard to predict. There is a large literature on this topic, and we commissioned expert reports on four areas deemed relevant to this report – the UK, Europe, Asia-Pacific and China. [E2]

2.2 There are various drivers for change in higher education, including: the economic and social objectives of government policies; the financial needs and market opportunities facing post-secondary education institutions, whether private, public or mixed; and globalisation. In many ways, globalisation provides focus and urgency to the other drivers. It accentuates and accelerates elements of the production and transmission of knowledge that are already present, but it does so to such a degree that it transforms the system. First, the dissemination and creation of knowledge knows no boundaries, and knowledge integration straddles national borders. Second, the mobility of institutional staff and students has increased tremendously, making it possible for both to work and study easily and effectively in countries other than their own. In the increasingly globalised world, it is necessary for policy makers to understand developments in other parts of the world that will inevitably affect the local system. Every higher education system has the important mission of nurturing globally competitive students equipped with the capacity to cope with challenges of a more dynamic future, and this mission requires it to compete for talents around the world. However, whatever the unique characteristics of national education policies, our review of the available literature clearly indicates that there are challenges both relevant and common to higher education systems in many countries.

2.3 The first of these is that in almost every jurisdiction there is a move toward expanding the participation rate of those seeking to improve their knowledge base, particularly at the post-secondary level. There are two reasons for this. One is economic: an educated workforce underpins success in global competition, and raising the overall skill levels of the population forms the basis of this "massification" of higher education. This is encapsulated in

the concept of the "knowledge economy", wherein high value-added products demand a much wider proportion of the population equipped with adequately advanced skills and knowledge. The other reason is social fairness (currently expressed most clearly in UK and Australian public policy). Social integration is promoted by developing participation in post-secondary or higher education of social groups previously unlikely to be represented there.

2.4 In addition to expansion of the sector, the second challenge is that policy makers do not wish to see any diminution of the quality of higher education, but rather a broadening of the range and type of education that might be provided. There is very widespread discussion of the quality issue and a wide variety of solutions have been adopted without a single model dominating. However, the most common feature is the intervention of government to insist on quality assurance, whether provided by the institutions themselves or imposed from outside.

2.5 Third, it appears that in most constituencies, these two challenges must be met in an environment of a reduced overall proportion of public expenditure, with greater reliance on the private sector and on institutions raising their own operating funds. In every system, this raises significant issues about the relationship between public and private provision in the post-secondary education sector.

2.6 Achieving all three policies within a system is not an easy task. Massification can easily lead to declining quality unless more funding is realised. At the same time, the introduction of private sector providers or even simply private funding may lessen the ability of government to control developments. These dilemmas lie behind many of the difficulties that governments experience in trying to manage the transformation of post-secondary education in general, and higher education in particular.

2.7 Meanwhile, globalisation has provided impetus for the growth in the internationalisation of higher education. In a highly globalised world, options and opportunities are no longer constrained by geographical boundaries. From this follows the increased mobility of students, faculty and programmes/institutions. Chapter 4 will discuss in greater depth how higher education in Hong Kong can, through pursuing internationalisation, contribute to the city's future success in a globalised world.

QUALITY OF HIGHER EDUCATION

2.8 Concerns about the competitive quality of higher education are

global, reflected both in the appearance of methodologies to establish a world ranking of major institutions and quality audits in various constituencies. The latter are designed not simply for public accountability, but as is the case, for example, in the Bologna process [E3] in Europe, to provide for harmonisation or integration, increased cooperation, risk-taking and innovation.

2.9 The fact that limited resources will only allow a fraction of institutions to become globally competitive comprehensive research universities means that institutional role differentiation is essential to maintaining the quality of education. However, one concern that has arisen, particularly in the USA where mission differentiation is well developed, is the problem of access to various levels of post-secondary education, which may take the form of a socio-economic stratification. The same consideration has led to financial measures and target requirements in both Australia and the UK for the diversification of the social profile of student communities.

2.10 The appearance of international ranking lists (or league tables) also suggests a trend towards a different meaning of quality in the general evaluation of universities and the self-evaluation of their academic staff. The calculations of these league tables are heavily weighted towards research performance. In an important sense, there is a tension between the general preoccupation with quality of delivery, student experience and accountability on the one hand, and the general sense of institutional quality reflected by league tables on the other.

CONCENTRATION OF RESEARCH FUNDING AND FOCUS ON INNOVATION

2.11 The emergence of league tables has coincided with another widespread trend towards the concentration of research funding (although this is not the case everywhere). Initiatives such as the British Research Assessment Exercise have been designed to upgrade the output of research while focusing more selectively on excellence. Elsewhere, there has been a direct concentration of research funding on a select number of institutions or the reorganisation of universities into excellence clusters. Examples include China's 211 Project and 985 Project, the competitive bidding for Denmark's Globalisation Fund, the German Excellence Initiative, South Korea's BrainKorea 21 programme and Taiwan's Development Plan for World Class Universities and Research Centres of Excellence.

2.12 At the same time, the higher education sector is playing an ever more important role in "knowledge", both in its creation and dissemination, which echoes the universal focus on innovation in economic policy. Between

2000 and 2005, higher education expenditure on research and development (R&D) grew by 7% per annum, exceeding the growth rate of both the gross domestic product (GDP) and R&D as a whole [E4]. In Chapter 6 we discuss matters relating to the role of R&D in the competitiveness of an economy, and its relevance to the UGC-funded sector.

INVESTMENT IN POST-SECONDARY EDUCATION

2.13 Through the process of globalisation, particularly during the last decade, aspects of post-secondary education have evolved as businesses, both through encouragement from governments and in response to financial need. This means that markets are informing the nature of post-secondary education and market providers have emerged from the private sector to fill niches not adequately covered by the public sector. Since the mid-1990s, many countries have increased private spending on tertiary education, and the private share of spending has risen. However, it is notable that many of those countries with the highest growth in private spending have also shown the highest increase in public funding [E4], reflecting the importance attached to tertiary education by governments around the world.

2.14 According to *Education at a Glance 2010: OECD Indicators* [E5] and other sources, expenditure on post-secondary education in 2007 was as follows.

	Expenditure on tertiary education (as a percentage of GDP) in 2007 (OECD figures)		
	Public sources	**Private sources**	**Total**
USA	1%	2.1%	3.1%
UK	0.7%	0.6%	1.3%
Australia	0.7%	0.9%	1.5%
New Zealand	1%	0.5%	1.5%
South Korea	0.6%	1.9%	2.4%
Japan	0.5%	1%	1.5%
OECD average	1%	0.5%	1.5%

	Expenditure on tertiary education (as a percentage of GDP) in 2007 (figures from other sources)		
	Public sources	**Private sources**	**Total**
Mainland China	0.72% [E6]	Not available	Not available
Singapore	1% [E7]	Not available	Not available
India	0.64% [E8]	Not available	Not available
Hong Kong	0.88% [E9]	Not available as the Government does not formally collect such data	Not available

2.15 The growth of private finance in higher education is a very complex matter. It is difficult to compare situations in which there are mature private universities (such as the USA, South Korea and Japan) with those in which the decay of public provision has encouraged the recent growth of private universities (such as in parts of South America). The advent of private provision does not necessarily erode the vigour of public institutions. An intermingling of private and public financing is quite prevalent in higher education. It includes, for example, self-financing part or all of the cost of study, the diversification of university income, including fund-raising, collaboration with business and industry, sponsorships, intellectual property revenue and trading income, and subsidiary educational activities of a commercial character. In most situations, universities that are labelled "public" have often quite considerable "private" income and universities that are labelled "private" often receive significant amounts of public subsidy either directly or indirectly. What is clear is that the increase of private income in public institutions tends to increase their capacity for autonomy. Governments have tended in some cases to react to this by increased specification of the objects on which public money must be spent.

IMPACT OF GLOBALISATION ON HIGHER EDUCATION

2.16 It is clear that the development of higher education and government policy around the world has responded to the new competitiveness that characterises globalisation. Indeed, the comparative international performance of higher education institutions in their education and innovation functions helps to shape the global competitiveness of cities and regions, especially in relation

to human capital and creative and entrepreneurial capacities [E4]. Even though each government considers its policies to be unique, challenges are experienced in common for the most part.

2.17 It is no exaggeration to say that globalisation and the associated demand for talents are and will remain relevant to higher education around the world. US President Obama stated that "America's economic preeminence, [its] ability to outcompete other countries, will be shaped not just in boardrooms and on factory floors, but in classrooms, schools, and at universities..." [E10]. Likewise, the former Labour government in the UK stated that "higher education is, and will continue to be, central to [the] country's economic performance in the twenty first century". It also stated that the UK's universities "need to be strongly committed to internationalism; attracting students from abroad; collaborating with institutions overseas; and bringing their expertise to bear on global challenges. They should instil a sense of internationalism in students…" [E11].

2.18 In Chapter 4, we elaborate in detail on the component parts of internationalisation as they affect Hong Kong. However, as testimony to the importance of this phenomenon, let us emphasise just one element of it – the international movement of students. The number of foreign students in tertiary education outside their country of origin increased by 50% between 2000 and 2005 [E12]. The most authoritative recent projection of demand estimates that the number of international students will rise from 1.8 million in 2000 to 7.6 million in 2025 [E13]. Asia has been predicted to represent 70% of global demand by the end of that period, with China and India expected to supply 50% of that demand.

Higher Education in the Asia-Pacific Region

2.19 It follows that the Asia-Pacific region is becoming a zone of great importance in higher education and science, and the most important field of new opportunity [E4]. A notable trend is the increasing importance of the region both in receiving international students (such as in Australia and Singapore) and sending them (for example, China) [E14]. Many jurisdictions in the region also aspire to be education hubs. It will be useful to consider their policy initiatives before we contemplate the way forward for the local higher education system. The following discussion should be read in conjunction with the details on the countries' recent government plans for and developments in higher education that are provided in **Annex C**.

Mainland China

2.20 Chapter 5 will discuss the need for and possible forms of involvement of Hong Kong in the rapid development of Mainland China. Here, we look at the Central Government's strategic objectives for higher education. The government recently published *The Nation's Medium and Long-term Education Reform and Development Outline for 2010-2020* (the Development Outline). The Development Outline emphasises the strategic importance of education in raising the quality of the people, improving society and strengthening the country into one with rich human resources by 2020. The Development Outline also sets out clear directions to give moral education top priority and to emphasise "all roundedness" in student development.

2.21 The Development Outline enshrines the notion that the Central Government is devoted to greatly enhancing the global competitiveness of China's higher education system by 2020. The tertiary education enrolment rate is expected to reach 40% by 2020 (compared with 24.2% in 2009 [E15]); and certain universities are envisaged to reach or approach the standard of world-class universities by that time. The Development Outline also sets out the direction for enhancing the standard of scientific research, including initiatives to step up basic and applied research and promote research-informed teaching. Efforts in implementing two key government initiatives for targeted funding, Project 211 and Project 985, will continue. The projects respectively aim at building 100 top-level higher education institutions and key disciplines, and founding world-class universities.

2.22 In other respects, Mainland China's experience conforms to the world trends previously noted. Indeed, for the last 25 years or so there have been sustained efforts to introduce the market and private finance into education, including higher education. The Decision on the Reform of the Educational Structure in 1985 emphasised the role of the market in higher education. Private investment in education was encouraged in "decisions" in 1992, 1999, 2001 and 2002. The importance of education (including higher education) for economic growth and international competitiveness has been stressed a number of times during the last two decades. We have already noted the institutional concentration of policy objectives and funding in Project 211 and Project 985, to which should be added the choice of key research concentrations and the establishment of key national research laboratories [E16].

Singapore

2.23 Given their geographical proximity and similarity in terms of size and economic positioning, it is common for Hong Kong and Singapore to be

compared. The recent developments in Singapore's higher education sector are certainly relevant to Hong Kong. The Singaporean government has accorded national priority to its Global Schoolhouse Strategy, which aims to develop Singapore into an education hub to offer a diverse and distinctive mix of quality education to the world and its own citizens. Singapore is also nurturing more local talents to meet the growing demand for highly skilled graduates. Education spending will continue to rise over the next five years, particularly in higher education, with the government planning to raise the university cohort participation rate from the current 25% to 30% by 2015. An integral part of this strategy is to increase public and private spending on research, which is targeted to grow to 3.5% of GDP by 2015.

Other Countries in the Asia-Pacific Region

2.24 The government policies (or policy statements) of Australia, New Zealand, Japan, South Korea and India all emphasise the firm intention to further develop their higher education systems. There is a good deal of commonality among the wide range of reasons offered, although they are shaped by the different histories, cultures and circumstances of the countries.

2.25 It appears that the prime objective of further developing higher education is to enhance a nation's competitiveness through nurturing an educated and highly skilled workforce to meet the challenges of a knowledge-based economy. Some governments (such as those of Australia, South Korea and Singapore) are devoting more resources to higher education and/or research and development, while others (such as those of New Zealand and Japan) are seeking to enhance the efficiency of their systems given budget constraints. In the latter group of countries, efforts are being made to consolidate the systems, and to target resources at high-quality qualifications.

2.26 Some Asia-Pacific countries are keen to increase their share of the global higher education market, and have devoted resources to attracting international students. For instance, the New Zealand government's 2010 budget [E17] announced an investment of NZ$2 million (or around HK$11.3 million) per annum for four years (2010/11 – 2013/14) in expanding the promotion of the education sector overseas to aid the recruitment of international students. In July 2008, the Japanese government launched the Global 30 Project, with a budget of 200 to 400 million yen (or around HK$16.6 to HK$33.3 million) per annum for five years, to establish core universities for internationalisation with a view to receiving 300,000 international students by 2020. The Singaporean government is also keen to develop Singapore as an education hub in Asia, as discussed above.

POPULATIONS, ECONOMIES, HIGHER EDUCATION AND WHAT IT MEANS FOR HONG KONG

2.27 The directions that national systems and their universities might follow in their attempts to deal with global and local factors are very much determined by the environments in which they operate. Thus, population size, the economy (and degree of affluence), and the culture of the citizenry all affect the ability to meet the challenges, make changes and cope with the management of change. In the Asia-Pacific region there are great variations in these factors, especially in population size and economic resources. More than a few Asian countries have large populations when compared, for example, to Europe, but others are very small in comparison. Although the economies of Asia are generally expanding, there are still great variations in wealth, affluence and degrees of modernisation. All of these factors are reflected in the nature of their higher education systems, both from the perspective of the social role played by universities and in their capacity to undertake meaningful research and technology transfer.

2.28 It is clear that governments in other parts of the world have been devoting much attention and many resources to enhancing the competitiveness of their higher education systems. However, although there are a number of challenges to higher education that are common to all, we should not simply emulate their policies – there is no one-size-fits-all strategy for success, and the outcomes of many of these policy initiatives have yet to be seen. What is clear from the above analysis is that all governments are moving forward and Hong Kong cannot afford to remain stagnant. In the following chapters we examine how the Hong Kong system should find its way to develop further and remain globally competitive.