LegCo Panel on Manpower

Manpower Projection to 2007

INTRODUCTION

This paper presents the findings of the "Manpower Projection to 2007" (MP2007) and the measures proposed in response to the findings.

BACKGROUND

- 2. To gain a clearer picture of Hong Kong's future manpower needs and to identify potential gaps in manpower supply and demand, the Education and Manpower Bureau (EMB), the then Financial Services Bureau (FSB), Census and Statistics Department (C&SD) and Labour Department (LD) carried out in 2000 a detailed assessment of our manpower requirement by economic sector, occupation category and educational attainment, as well as manpower supply by educational attainment up to 2005. The findings of the study were published in the report "Manpower Projection to 2005".
- 3. To keep abreast of developments in our economy and their impact on the labour market, a new round of manpower projection was carried out in 2002 and early 2003 to assess, on the basis of Population Census 2001 and related projections, the manpower demand and supply situation in Hong Kong by 2007. The major results are set out in this paper. The full report is attached at *Annex* for Members' reference.
- 4. As with MP2005, a two-pronged approach has been adopted in the current projection exercise. The study comprises quantitative projections of manpower requirement and supply for the period 2002 2007 and qualitative analysis of data gathered from establishment and household surveys and consultations with business, labour and related organisations.

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5. In the current exercise, we also carried out special analyses of five selected sectors/domains which we consider to be of strategic importance to the Hong Kong economy. These include "trading and logistics", "tourism", "financial services", "professional services" and "information technology". These analyses cover the past development, present position and future manpower requirement of these sectors/domains.

FINDINGS

6. The major findings of MP2007 are as follows:

Manpower demand¹

- (i) Total manpower requirement, unconstrained by overall labour supply², is projected to grow from 3.03 million in 2001 to 3.22 million in 2007, representing an average annual growth rate of 1.0% over the period or an increase of 193 300 in absolute terms. Having regard to the changing economic situation, the growth rate in the current projection is much slower than the growth rate of 2.4% or an absolute increase of 433 600 in MP2005.
- (ii) Analysed by major economic sector, the growth in manpower requirement of the "financing, insurance, real estate and business services" sector is the highest, at an average annual rate of 3.0% between 2001 and 2007. This is followed by the "transport, storage and communications" sector at 2.4% and the "community, social and personal services" sector at 1.7%. This is in line with our findings in MP2005 which projected that these three sectors were among the ones with the highest growth rates, although the magnitude of growth is relatively smaller in MP2007. On the other hand, the

It covers all employed Hong Kong Resident Population regardless of the places of work. Persons employed by firms in the Mainland and other places are included if they belong to the Hong Kong Resident Population. Imported workers and expatriate staff working in Hong Kong are also included. Foreign domestic helpers are, however, not included.

² Actual employment is determined not only by labour demand, but also by the availability of labour, in terms of quantity, mix, and remuneration asked for to meet such demand. In the present exercise, projection is made of manpower requirement free from constraint on the manpower supply side, so as to be able to reveal fully the degree of manpower resource imbalance or mismatch in the different segments.

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manpower requirement of the local manufacturing sector is projected to shrink at an average annual rate of 5.5% over the same period. Such shrinkage was projected in MP2005 but at a slower pace of 3.8%. Compared to MP2005, the directions of change in manpower requirement for all major economic sectors are the same.

(iii) Further analysed by more detailed economic sectors, "business services", "non-Chinese restaurant" and "non-site construction" are the groups with the largest increase in manpower requirement in absolute terms. In aggregate, they will account for 99 400 of the new jobs projected to be created. These three sectors were also among the sectors with largest projected increase in manpower requirement in MP2005.

In terms of projected annual growth rate, most notable growth is expected in "insurance" (5.9%), "postal/courier services" (5.8%) and "sanitary services" (4.5%). In MP2005, the industry groups with most notable growth were "computing machinery and equipment", "telecommunications and Internet services" and "business services".

Analysed by broad occupation category, the demand for (iv) and administrators", "professionals" "associate professionals" are projected to have the highest average annual growth rate of 1.7%, 3.4% and 4.0% respectively. These three categories were also projected to have the highest growth in MP2005 though at faster rates ranging from 3.0% to 6.7%. On the other hand, decreases in demand ranging from 0.7% to 2.1% are observed for "craft and related workers", "plant and machine operators and assemblers" and "clerks". Worthy of attention is the decrease in demand in "clerks" with average annual loss of 2.1% and a reduction of 71 400 jobs among various economic sectors, including those projected to grow, such as "wholesale, retail and import/export trades, restaurants and hotels" and "financing, insurance, real estate and business services". In general, the directions of change in manpower requirement for most occupation categories are the same in both MP2005 and MP2007.

(v) Future manpower requirement is expected to shift towards the higher end of the educational attainment ladder, in tandem with Hong Kong's progressive transformation into a knowledge-based economy. The demand for workers at "post-secondary" education and above is expected to grow strongly, at a combined average annual rate of 6% during 2001 to 2007. On the other hand, the demand for workers with "secondary school" education and below will decline by 162 100 over the same period, representing an average annual rate of decline of 1%. This is different from the findings in MP2005 where increases were projected for all levels of educational attainment.

Manpower supply³

Local manpower supply is projected to grow from 3.20 (vi) million in 2001 to 3.35 million in 2007, representing an increase of 0.15 million in absolute terms or an average annual growth rate of 0.8% over the period. Such increase includes an estimate of 69 100 one-way permit holders (OWPHs) from the Mainland of China. Supply of workers at all levels, except "lower secondary and below", is projected to grow. The shrinkage in the "lower secondary and below" is 116 500, which could have been larger if not for the additional supply of 48 900 to this education level by the OWPHs. Increases in "post-secondary" and above are most noticeable with a combined increase of 230 300. However, impact from the OWPHs on the "post-secondary" level is negligible. These compare to an all-level increase in MP2005 with a growth in absolute terms of 0.27 million or an average annual growth rate of 1.4% over a six-year period.

Manpower balance

(vii) By comparing the 2007 projected manpower requirement and supply by educational attainment, the projected manpower

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It refers to non-institutional local labour force and does not include foreign domestic helpers and imported workers. The labour force among marine population is included.

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resource balance in 2007 (as shown in the table below) is expected to show substantial surpluses at the "lower secondary and below" and "upper secondary" levels, but shortages at the "post-secondary" and "first degree and above" levels.

Education level	(a) Projected manpower supply in 2007 (No.)	(b) Projected manpower requirement in 2007 (No.)	(c) = (a) – (b) Projected manpower resource balance in 2007 (No.) (surplus (+) /shortfall (-))
Lower secondary and below	1 236 200	1 102 700	+ 133 500
Upper secondary ⁴	989 100	891 000	+ 98 000
Post-secondary ⁵	501 200	566 400	- 65 200
First degree and above	626 000	662 500	- 36 500
All Levels	3 352 500	3 222 700	+ 129 800

- (viii) The views gathered from the establishment survey and consultations on the training needs and employment prospects for the various economic sectors, occupation categories and educational attainment levels are broadly consistent with the above statistical projection results.
- (ix) The pattern of manpower resource balance in MP2005 and MP2007 is also broadly similar. In general, there will continue to be surpluses in manpower with lower educational attainment. In particular, the extent of surplus at the "upper secondary" level will increase. On the other hand, there will continue to be shortfalls in manpower with "post-secondary" and above educational attainment. Between MP2007 and MP2005, the projected shortfall at the "post-secondary" level is smaller whereas the projected shortfall at "first degree and above" increases slightly. A comparison of the manpower resource balance situation is set out in the following table.

Including the upper secondary and craft levels.

⁵ Including the matriculation, technician and sub-degree levels.

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Education level	Projected manpower imbalance in 2005*	Projected manpower imbalance in 2007
Lower secondary and below	+ 136 700	+ 133 500
Upper secondary	+ 22 500	+ 98 000
Post-secondary	- 85 500	- 65 200
First degree and above	- 31 400	- 36 500
All Levels	+ 42 300	+ 129 800

Note: (*) From the last round of manpower projection (MP2005).

(x) Manpower requirements of the five strategic sectors/domains are generally projected to grow at a faster pace than that of the economy as a whole. The projected average annual growth rates for these five sectors/domains from 2001 to 2007 are: tourism at 5.9%; trading and logistics 0.9%⁶; financial services 2.7%; professional services 3.7%; and information technology 6.1%⁷.

OBSERVATIONS

Overall, there will be a gain of some 190 000 jobs between 2001 and 2007, against an increase in the workforce by 150 000. The overall employment situation should improve but, in practice, there will be serious mismatches between job requirements and the qualification of workers. As pointed out in paragraph 6 above, the demand for workers with "post-secondary" and above education will exceed the projected supply, and the reverse is true at the "upper secondary" and below level. These mismatches will need to be addressed so as to take full advantage of the new job opportunities arising.

The annual growth rate for the "trading" sub-sector is projected to be 0.3% and the annual growth rate for the "logistics" sub-sector is projected to be 2.4%. Taken together, the growth rate is projected to be 0.9%.

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⁷ Refers to the average annual growth rate during 2002 to 2007.

- 8. The surplus in supply of workers at "lower secondary education and below" level will amount to 133 500 by 2007. Surpluses of 98 000 are also observed at "upper secondary" level. Workers with low skill and low educational attainment will face employment difficulties with the continued shrinkage of demand. They must acquire new knowledge and skills to maintain their employability and competitiveness in the employment market. There will be a need to provide focused training and education opportunities for these workers to upgrade themselves.
- 9. On the other hand, the manpower requirements at the "post-secondary" and "first degree and above" levels are projected to exceed the corresponding manpower supply in 2007, resulting in shortfalls of 65 200 and 36 500 workers respectively. There will be a need to continue our efforts to upgrade the educational attainment level of our workforce.
- 10. When compared to MP2005, the broad trends of manpower demand and supply are similar, with a continual shift in manpower requirement towards higher educational attainment. Thus there will continue to be a problem of structural mismatch in our labour force.
- 11. We observe notable growth in the projected manpower requirement in the strategic sectors. This will offer new job opportunities, and we have to ensure that the manpower requirements for these sectors are sufficiently met in order to facilitate their development. Surplus workers in other sectors, with proper retraining, may be able to seize the job opportunities in these strategic sectors.

PROPOSED MEASURES IN RESPONSE TO THE MANPOWER PROJECTION TO 2007

12. We introduced a series of measures in response to the MP2005. With the results of MP2007 available, we shall take account of the latest situation in the labour market in adjusting and enhancing our efforts to address the mismatch between manpower requirement and supply. The salient measures that we have introduced and our proposed enhancements are highlighted in the ensuing paragraphs.

Manpower mismatch of workers with high educational attainment

(i) <u>Increase the provision of education opportunities at tertiary level</u>

The projected manpower shortfall at "post-secondary" and "first degree and above" levels by 2007 has reaffirmed the need for offering more post-secondary education opportunities to meet the manpower requirement of the market. We have provided an additional 9 000 places of self-financing post-secondary programmes in the last two academic years and thus have expanded the participation rate in post-secondary education from 33% in 2000/01 to 42% in 2002/03 of relevant age group. shall continue to work towards our target of achieving a 60% participation by 2010. We shall also increase first degree places at second and third-year from the 2005-08 triennium to provide articulation for sub-degree holders.

(ii) Attraction of talents

Given the continued shortfall in manpower supply with high educational attainment, there is a need to supplement the local manpower resources with overseas and Mainland talents. Under the general employment policy, we have allowed foreign nationals other than Mainland residents to enter and work in Hong Kong provided they possess skills, knowledge and experience not readily available locally. In late 1999 and mid 2001, we introduced the Admission of Talents Scheme and the Admission of Mainland Professional Scheme respectively to admit talents and professionals from the Mainland to work in Hong Kong. Recognising that there is a need to tap the expertise and experience of quality personnel from all fields in the Mainland, we will implement a new Admission Scheme for Mainland Talents and Professional in July 2003 which will replace the two afore-mentioned admission schemes. Under the new Scheme, the entry conditions for Mainland professionals and talents will be aligned with those applicable to non-Mainlanders as far as possible. Separately, we have also removed the one-third quota restriction on non-local research postgraduate students and expanded the quota on nonlocal undergraduates and taught postgraduates from 2% to 4% of publicly funded student places.

(iii) <u>Promotion of continuing education through the Continuing</u> Education Fund (CEF)

To help Hong Kong's workforce prepare for our transformation into a knowledge-based economy, we have launched a \$5 billion CEF in 2002 to encourage and subsidise our workers to pursue continuing education in a number of economic growth sectors (viz. financial services, China business, tourism and logistics) and areas of skills which our workforce most need. Since its inception, over 30 000 applications for assistance have been approved. Taking into account the manpower requirement by economic sector and occupation groups in MP2007, we shall review how the CEF can be expanded to cover more industry sectors with growth potential. We are also reviewing the eligibility criteria and considering expanding the scheme to include degree holders.

Manpower mismatch of workers with low educational attainment

(iv) <u>Upgrading of workers</u>

To enhance the competitiveness and employability of workers with low educational attainment, we introduced the Skills Upgrading Scheme (SUS) in September 2001 to provide industry specific and focused skills training for workers with secondary education and below. The SUS currently covers 16 industry sectors and have provided upgrading opportunities for over 36 000 workers. We shall continue with the Scheme and invite other suitable industries to join the SUS to benefit more workers with upgrading needs. Our experience under the SUS will help pave the way for the development of outcome standards for qualifications under the qualifications framework (QF).

(v) Expansion of retraining services

The Government has announced that a levy on employers of foreign domestic helpers (FDH) will be introduced as from October 2003. The levy will provide a stable source of income for retraining services. With additional resources, we aim to increase the number of retraining places and expand the scope of retraining services to cover more unemployed people. The findings of MP2007 will be examined to identify new areas suitable for retraining. The timing for introducing the reform will be

dependent on the outcome of a Judicial Review challenging the imposition of the proposed levy on FDH employers which is in progress.

Other facilitating measures

(vi) Introduction of a QF

We have put forward proposals on the establishment of a QF and the associated quality assurance mechanism in Hong Kong. The QF will provide clear information on courses and standards of providers. With clear and flexible progression pathways, learners can draw up their own road maps to upgrade their skills and pursue lifelong learning. Since qualifications must be subject to a quality assurance mechanism before they can be included in the QF, they will be given wide recognition.

Based on the QF, we will set up Industry Training Advisory Committees to develop Industry Training Specifications for individual industry sectors. The Committees will define competency standards (i.e. skills and knowledge applied at work), their aggregation into qualifications for different levels of jobs in a sector and assessment criteria. The Committees will comprise employers, employees and other relevant parties. Through employers' input in the process, the training needs of industries can be met and the qualifications will be recognised by employers. The QF should contribute positively to the upgrading of our workforce.

(vii) <u>Increasing education opportunities and diversifying learning options</u>

We have provided all S.3 leavers with subsidised education/training with effect from 2002/03 school year and introduced the Project Yi Jin in 2000 to provide alternative progression pathway for S.5 school leavers.

We also aim to diversify learning options to cater for the different aptitudes and aspiration of our students. To do so, we will continue to encourage diverse mode of school operation through the establishment of private independent schools and schools under the Direct Subsidy Scheme where schools are given much more

independence and flexibility in their operations and student Senior Secondary School which provides diversified curriculum will also start operations in the 2003/04 academic year. Apart from more formal academic subjects, these schools will also offer career-oriented subjects like Industry and Commerce, Design, Tourism and Art for interested students. They will also provide a wider choice of articulation routes for their Secondary Five graduates, including the traditional Advanced Level curriculum as well as professional diploma and high diploma courses. Separately, we will introduce a career oriented curriculum in mainstream schools from 2003/04 school year to provide senior secondary school students with a diversity of options and to enable them to understand their abilities and aptitudes with a view to better planning for their future learning and employment. provision of these alternative routes to young people will help provide them with better articulation opportunities to obtain higher qualifications.

(viii) Extension of learning and employment opportunities into the Pearl River Delta

Hong Kong companies have established offices and manufacturing plants in the Pearl River Delta. Many employers prefer to engage Hong Kong persons to be in charge of their Mainland operations. We have to prepare our young people both educationally and psychologically to work in the Mainland. This requires a good foundation in the use of Chinese, fluency in Putonghua, knowledge of the systems and the ability to adapt to the work culture in the Mainland. As a first step, we shall amend the Hong Kong Education and Assessment Authority Ordinance and Vocational Training Council Ordinance to empower these organizations to extend their activities into the Mainland. We also encourage young people to undergo training and workplace attachment in the Mainland, as and when opportunities arise.

(ix) Better match between industry needs and education and training programme

We shall disseminate the projection results to education and training institutions and hold a discussion forum with them so that they would gain a better understanding of our manpower requirement in designing and developing courses and programmes.

(x) Continue with the education reform

The ultimate answer to meeting the manpower needs of a knowledge-based economy lies in the education reform which was launched in October 2000. The aims are to nurture young people who have strong communication skills, are innovative and committed to Hong Kong, and have the aptitude and skills for lifelong learning.

COMMENTS SOUGHT

13. Members are invited to comment on the findings of the MP2007 and the proposed measures to address the manpower mismatch situation.

Education and Manpower Bureau July 2003