
Unemployment & Labour Market

Shandre Mugan Thangavelu
Singapore Centre for Applied and Policy Economics
Department of Economics
National University of Singapore

Scope of Presentation

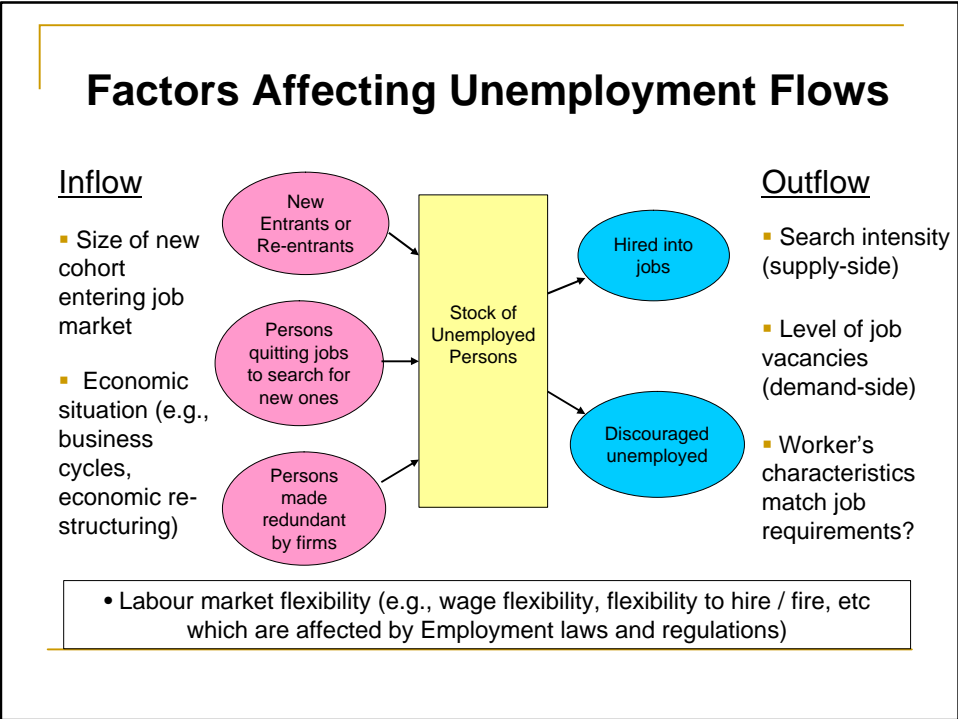
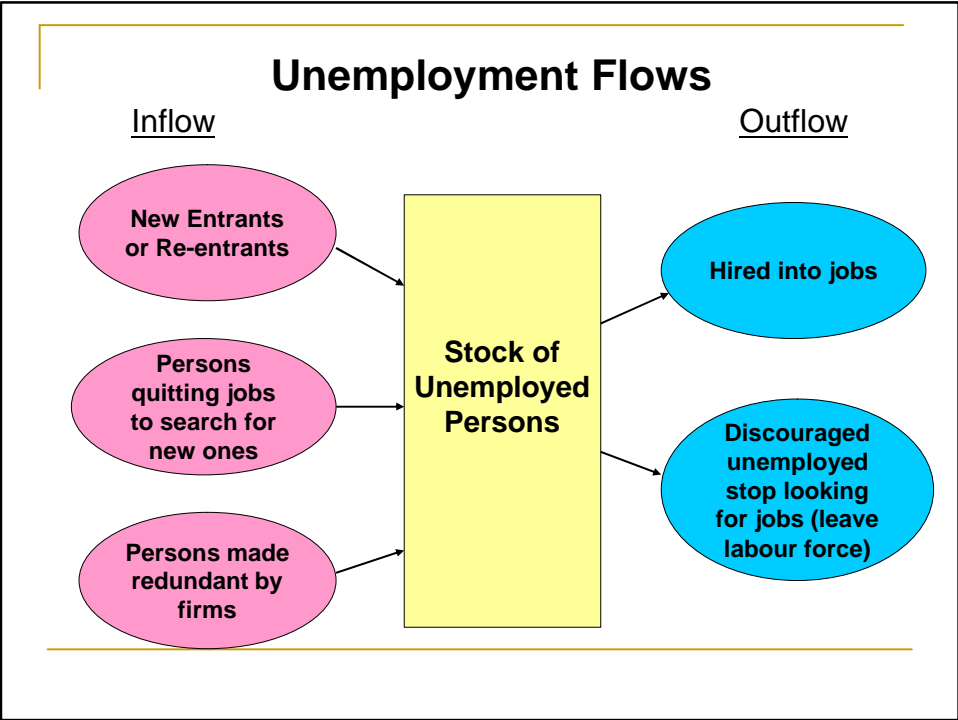
- **Definitions and Concepts**
 - **Employment Trends**
 - **Challenges**
 - **Responses**
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Why should we be concerned about unemployment?

- Costs of unemployment:
 - Lost production – people who don't work can't produce! Okun's law (based on empirical observations) states that 1 extra %-point of unemployment costs about 2% of GDP.
 - Undesirable effects on distribution of income – costs of unemployment borne unevenly; the cost of a recession is borne disproportionately by those who lose their jobs.

What types of unemployment should we be concerned about?

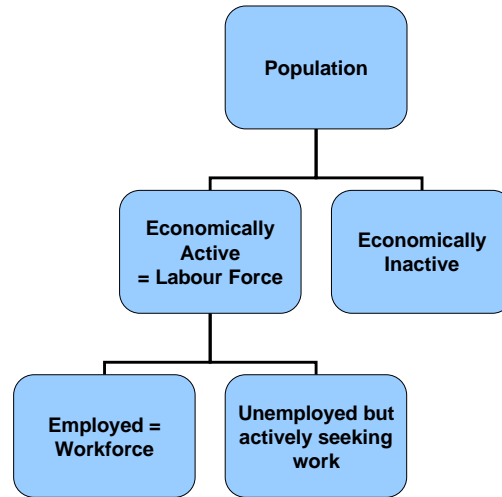
- 3 types of unemployment:
 - Frictional Unemployment - This exists as a result of individuals shifting between jobs and looking for new jobs
 - Cyclical Unemployment - This is unemployment in excess of frictional unemployment, and occurs when output is below the full employment level (e.g., in recession)
 - Structural Unemployment - This type of unemployment is identified with mismatch, i.e., situation where characteristics of the unemployed, particularly in terms of skill, work experience or location, differ from those of jobs that are available



What are some of the labour market indicators we should look at?

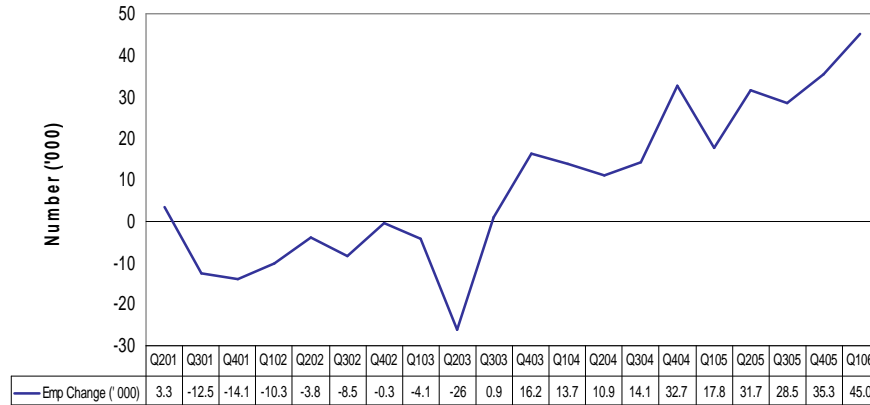
Some Key Indicators

- Labour Force Participation Rates (by Age and Sex)
- Total Employment and Employment Change
- Retrenchments
- Unemployment Rate
- Long-Term Unemployment Rate (by Age & Education)



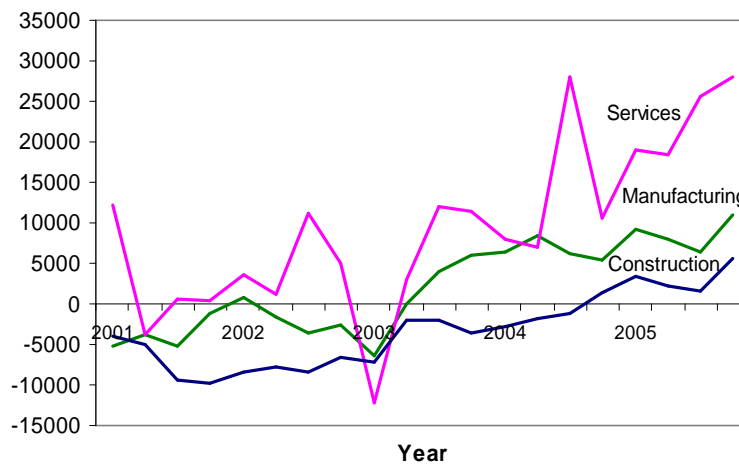
Employment Trends

Employment Recovering Lost Ground



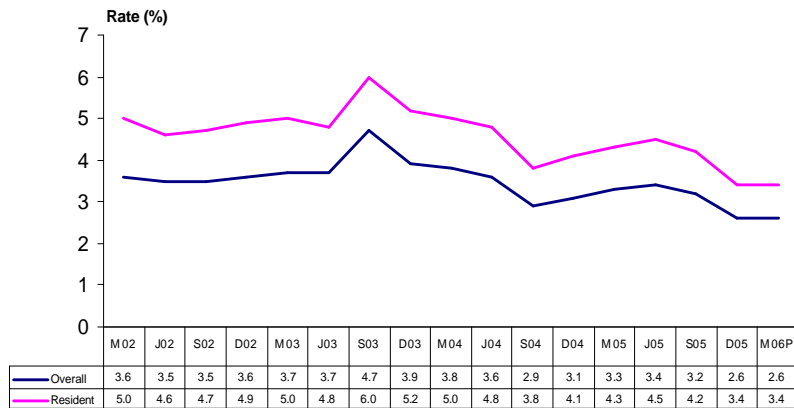
Source: Manpower Research and Statistics Department, MOM

Employment Growth Highest In Services



Source: Manpower Research and Statistics Department, MOM

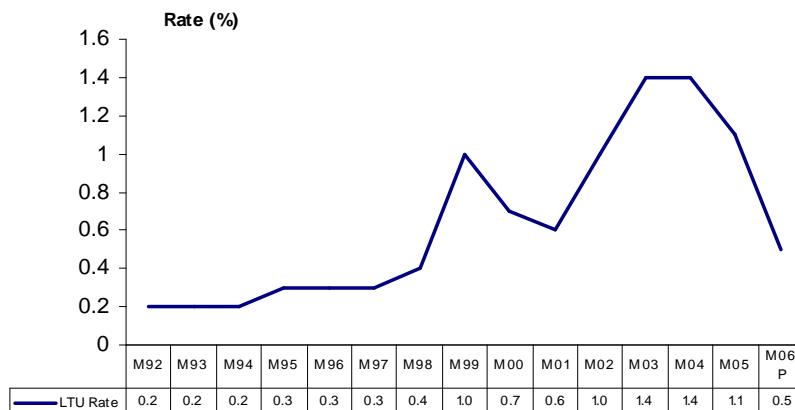
Unemployment Rate Going Down (Seasonally Adjusted)



p: preliminary

Source: Labour Force Survey, Manpower Research and Statistics Department, MOM, except data for June 2000 and June 2005 which are obtained from the Population Census and General Household Survey conducted by Department of Statistics, MTI respectively.

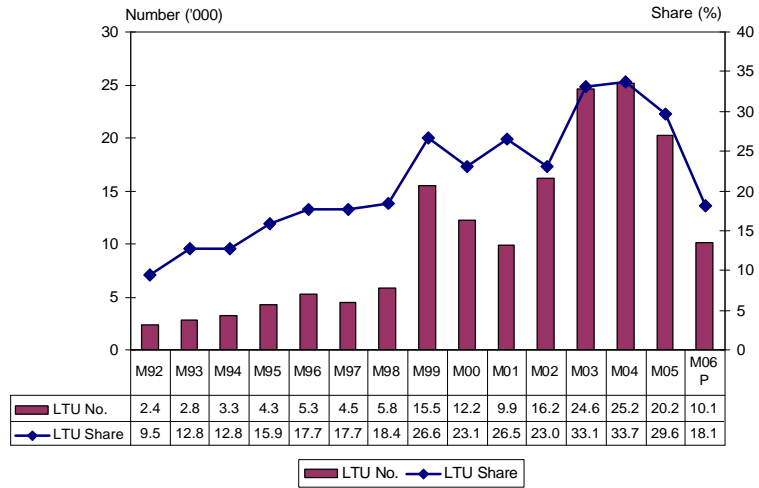
Resident Long-Term Unemployment Rate Higher than Decade Ago (Non-Seasonally Adjusted)



p: preliminary

Source: Manpower Research and Statistics Department, MOM

Similarly for Number & Share of Long-Term Unemployed



p: preliminary

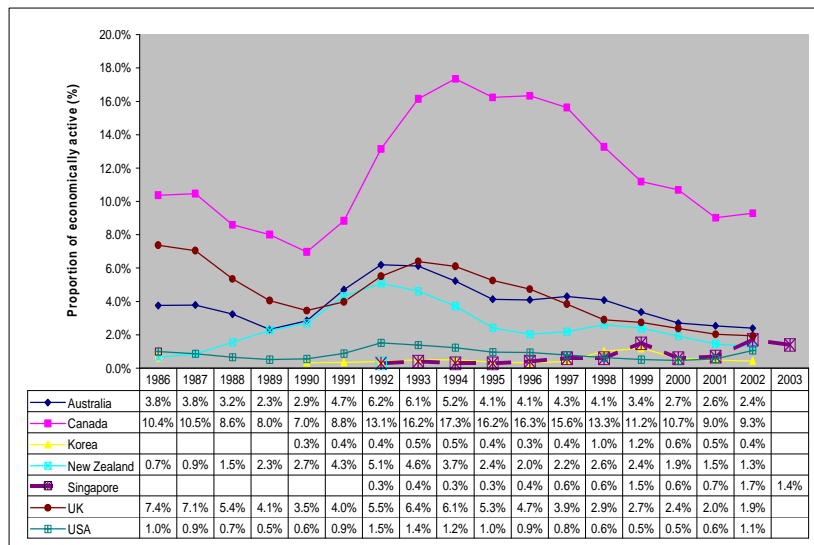
Source: Manpower Research and Statistics Department, MOM

Challenges

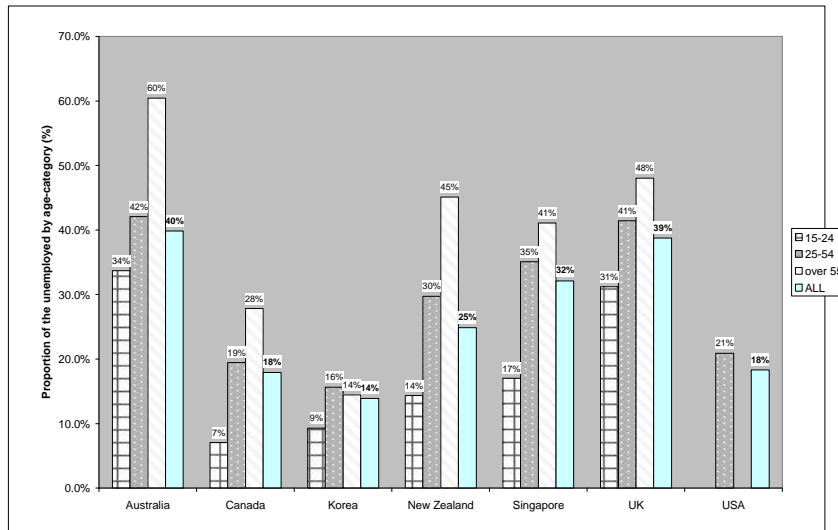
Structural Unemployment

- Proxy for structural unemployment: long-term unemployment
- Rationale: Belief that skills deteriorate over time (Ashenfelter & Card, 1999), implying that employers tend to hire someone with a shorter unemployment duration; consequently, the longer a person is unemployed, the lower is his chance of finding a job

Long-Term Unemployment Rate: Singapore vs. OECD countries

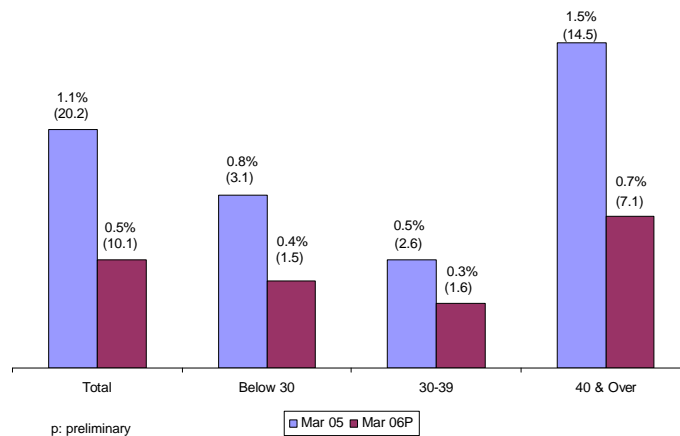


Incidence of Long-Term Unemployment



Extent & Likelihood of Resident Long-Term Unemployment

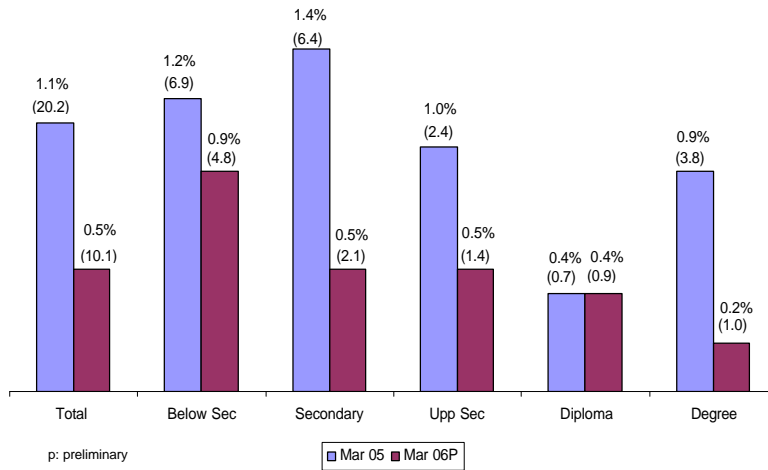
Resident LTU Rate (%) and Number ('000) by Age



Source: Manpower Research and Statistics Department, MOM

Extent & Likelihood of Resident Long-Term Unemployment

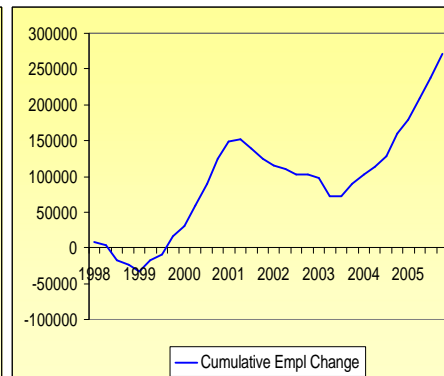
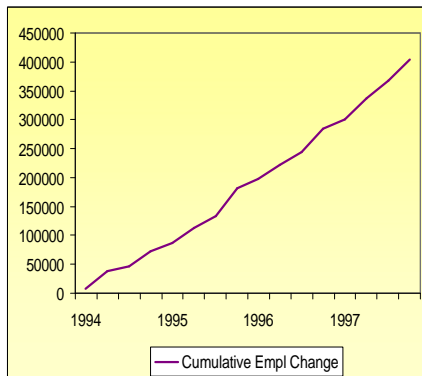
Resident LTU Rate (%) and Number ('000) by Education



Source: Manpower Research and Statistics Department, MOM

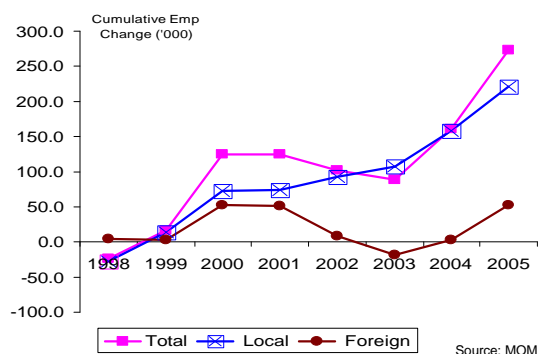
Economy Now More Volatile

1994-97 Stable and growing employment 1998-2005 Volatile economy & labour market



Source: Manpower Research and Statistics Department, MOM

Structural Unemployment



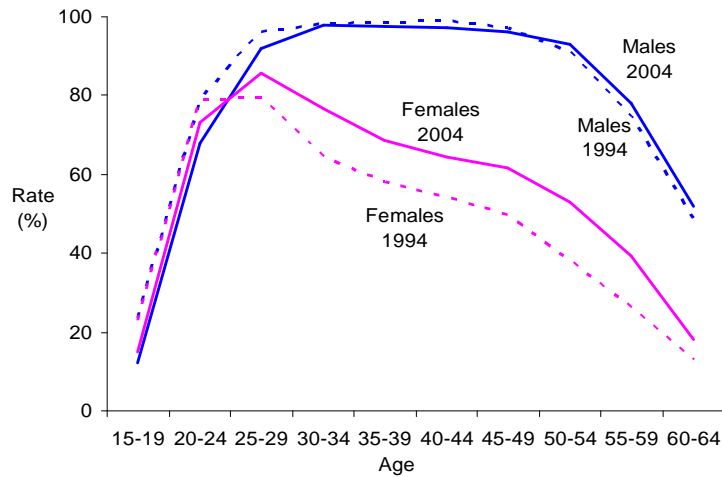
- Economic growth has translated into jobs for Singaporeans
- Based on medium-term GDP growth of 3-5% p.a., and projected resident labour force growth (local workers + unemployed), there will be enough jobs for Singaporeans in the future
- Key is relevance / match of locals' skills to needs of more volatile job market

Aging Population, Aging Labour Force

Age Group	June 1994		June 2004		Change	
	Number	%	Number	%	Number	% p.a.
Total	1,693,100	100.0	2,183,300	100.0	490,200	2.6
15-24	299,100	17.1	263,700	12.1	-35,400	-1.3
25-29	272,300	16.1	294,200	13.5	21,900	0.8
30-39	529,100	31.3	603,600	27.6	74,400	1.3
40-49	369,400	21.8	590,900	27.1	221,500	4.8
50-59	164,800	9.7	344,500	15.8	179,700	7.7
60 & Above	58,300	3.4	86,400	4.0	28,100	4.0

Source: Manpower Research and Statistics Department, MOM

Labour Force Participation Rates of Older Workers Low but Rising



Source: Manpower Research and Statistics Department, MOM

Further Aging of Labour Force and Slowdown in Local Labour Force Growth

- Proportion of workers aged 50 & above in labour force projected to increase from 22% in 2004 to 29% in 2015
- Net increase of about 44,000 workers joining local workforce from now till 2010 will slow down to 24,000 per year due to falling fertility and aging of baby boomers
local labour force growth will slow
- To sustain econ growth and demand for workers, older workers likely to stay in labour force longer – concerns about impact on cost competitiveness and productivity

Educational Profile of Labour Force Improving at Same Time

Age Group	June 1994		June 2004	
	Number	%	Number	%
Total	1,693,100	100.0	2,183,300	100.0
No Formal	266,000	15.7	296,200	13.6
Primary / Lower Sec	442,900	26.2	397,500	18.2
Secondary	513,200	30.3	556,900	25.5
Upper Secondary	207,400	12.2	249,800	11.4
Diploma	97,700	5.8	236,300	10.8
Degree	165,900	9.8	446,700	20.5

Source: Manpower Research and Statistics Department, MOM

Case Study (2): Effects of Age & Education Composition on Productivity Growth

- Recent study by SCAPE on effects of changing age and education composition of workers on productivity growth
- Change in quality of workers by age & education is measured using quality index. Growth rate in labour quality (d^*) given by:

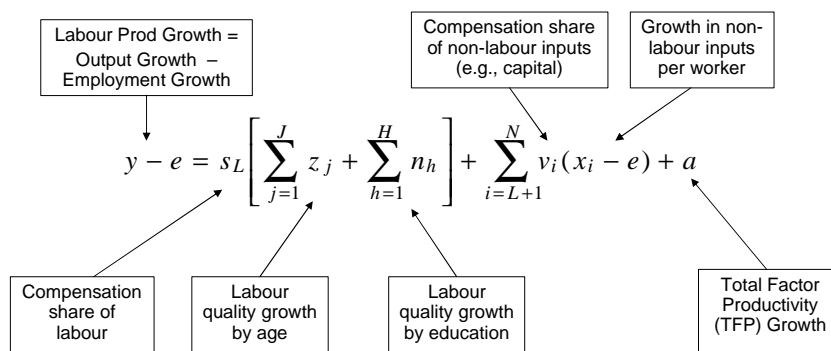
$$d^* = \sum (s_i - b_i)x_i = \sum q_i x_i$$

where s is compensation share (proxy for marginal product), b is employment share, and x is employment growth of labour input i

- Separate indices by age and education characteristics constructed

Effects of Age & Education Composition on Productivity Growth

- Using growth accounting framework, labour productivity growth given by:



Effects of Age & Education Composition on Productivity Growth: Results

Contribution of Labour Quality by Age to Productivity Growth (%)						
	15-29	30-39	40-44	45-54	55 & over	Total
1984-1997	0.090	0.108	0.077	0.052	-0.013	0.315
1998-2004	0.003	0.004	0.011	0.016	-0.028	0.006
1984-2004	0.061	0.073	0.055	0.040	-0.018	0.212
Contribution of Labour Quality by Education to Productivity Growth(%)						
	No Formal	Primary or Lower	Sec	Post-Sec/ Diploma	Degree	Total
1984-1997	-0.007	-0.038	-0.008	0.151	0.450	0.549
1998-2004	-0.004	0.052	0.007	0.055	0.356	0.466
1984-2004	-0.006	-0.008	-0.003	0.119	0.418	0.521

Effects of Age & Education Composition on Productivity Growth: Results

- Growth growth in labour quality by age declining rapidly, caused by aging of labour force and faster depreciation of technology-specific skills
- Of concern is the rising negative impact of workers in 55 & above age group on productivity growth, as it is a fast growing group
- Education still found to be key driver of labour quality improvements and productivity growth, with degree holders contributing the most

Effects of Age & Education Composition on Productivity Growth: Results

- Interestingly, improvements seen in quality contribution of less educated workers, possibly due to success of training programmes to enhance productivity and employability
- In contrast, quality contribution of better educated workers declined over time, signalling that even these workers could see their human capital eroded during periods of econ volatility
- In conclusion, more should be done to improve labour quality growth through education and/or arrest the fall in growth rate of labour quality by age. Otherwise, labour productivity growth could decline in the years ahead, thus adversely affecting our economic competitiveness and growth.

Responses: Recent Labour Market Policies

Enabling Locals for Jobs

- Singapore Workforce Development Agency (WDA) set up in Sep 2003 to drive workforce development initiatives
- Many training programmes put in place to enhance productivity and employability
 - Most programmes targeted primarily at less educated, older workers (e.g., Skills Redevelopment Programme, place and train programmes for certain industries)
 - A few targeted at better educated workers (e.g., strategic manpower conversion programmes)

Helping Vulnerable Workers

- Greater job and income security for less skilled, low wage workers vulnerable to structural unemployment
- Through workfare:
 - Reward older, low income workers with workfare bonus
 - Employment assistance
 - Job re-creation programme to expand job opportunities
 - Equip workers with generic basic skills like IT literacy, Workplace literacy and numeracy

Enhance Employability of Older Workers

- In view of aging population and labour force, Tripartite Committee recommended following key measures:
 - Expand employment opportunities for older workers (e.g., through ADVANTAGE! scheme)
 - Enhance their cost competitiveness (e.g., accelerate wage re-structuring)
 - Raise their skills and productivity
 - Shape positive perceptions towards older workers

Wage Restructuring for Competitiveness & Jobs



Job redesign wage level by sector/company
 wage structure HR/training/career

Introduction of 'S' Pass

- Meet demand of industries for mid-level specialist manpower
- Introduce greater flexibility and responsiveness into foreign manpower framework

Thank You

Glossary: Economic Terms & Concepts

- **Economically Active Population or Labour Force:** Refers to persons aged 15 & over who were either employed or unemployed during the survey reference period.
 - **Economically Inactive Population:** Refers to persons aged 15 & over who were not working, did not have a job to return to, and were not actively looking for a job during the reference period.
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Glossary: Economic Terms & Concepts

- **Employed Persons:** Refers to persons aged 15 & over who, during the reference period:
 - Worked for 1 hr or more either for pay, profit or family gains; or
 - Had a job or business to return to but were temporarily absent because of illness, breakdown of machinery at workplace, labour management dispute or other reasons.

- **Unemployed Persons:** Refers to persons aged 15 & over who did not work but were available for work and were actively looking for a job during the reference period.



Glossary: Economic Terms & Concepts

- **Unemployment Rate:** Defined as percentage of unemployed persons to total economically active persons aged 15 & over (or labour force).

- **Long-Term Unemployed:** Refers to persons who have been unemployed for 25 weeks or more.

- **Long-Term Unemployment Rate:** Defined as percentage of long-term unemployed persons to total economically active persons aged 15 & over.

Glossary: Economic Terms & Concepts

- **Age-Sex Labour Force Participation Rate:**
Defined as percentage of economically active persons to total population in same age group and sex.

