SINGAPORE

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Asia Macro Views

Singapore Economy: The New and The Dual[1]

Key points

- **We see two faces to the current economic expansion: a new and a dual. The *new economy* thesis argues that Singapore may be entering a Renaissance period of above trend secular growth, lasting for a few good years. The *dual economy* thesis highlights that despite rosy headline growth, there are divergent growth patterns persisting between different businesses, income groups and even within asset classes, particularly residential property.**
- **The *new economy* is a result of: [1] enhanced competitiveness arising from an aggressive tax and CPF restructuring; [2] more liberal immigration policy; [3] more diversified economy with new growth drivers; and [4] a pro-growth approach. Strong job growth and emergence of new growth drivers tapping on rising global affluence, the mobile talent pool and intra-Asian trade are tangible evidence.**
- **The *dual economy* is driven by globalization, where the impact is disproportionately amplified for a small open economy. External demand has been the key growth driver while domestic demand has been sluggish. Wages across different income groups are diverging, with falls seen in lower 30% segment of households. Prices of luxury property are surging, while mass residential property lags.**
- **Economic restructuring over the last few years may have also disproportionately compressed the wages of the middle class and partly explain the dualism. The negative impact from the aggressive CPF cuts outweighs the gains from personal income tax cuts.**
- **Embracing globalization has generated significant economic gains for Singapore, with policies favouring low income taxes, foreign talent and global capital making higher growth possible. Pressures from globalization, particularly a widening income gap, are being dealt with via fiscal policies, education and an enhanced social safety net.**

Singapore Economy: The New and the Dual

There appears to be two faces to Singapore's current economic expansion: a new and a dual. The *new economy* thesis argues that Singapore is undergoing some form of renaissance, with sustained and higher growth than the typical speed limit likely over the medium term. The *dual economy* thesis highlights that despite rosy headline growth, there appears to be divergent growth patterns persisting between different businesses, income groups and even within certain asset classes, particularly residential property.[2] The two features need not necessarily be inconsistent, and on the contrary, they may be part and parcel of globalization.

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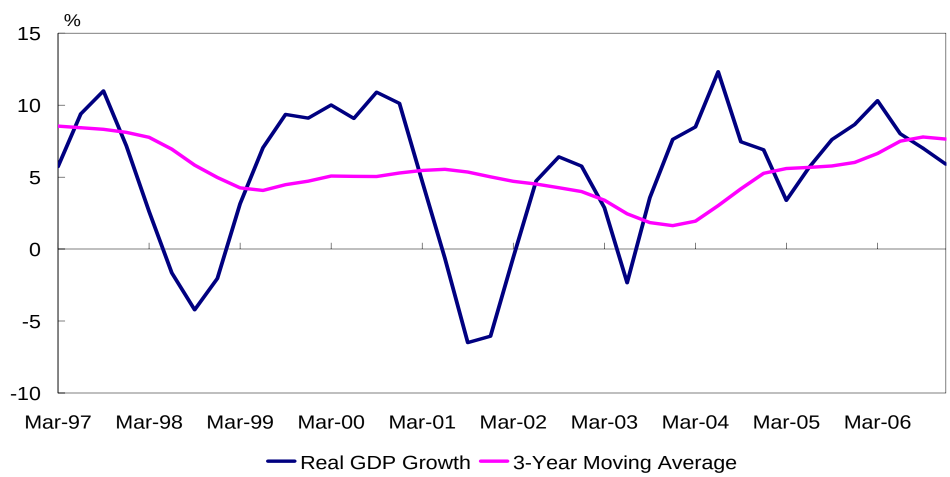
[1] Paper to be in published in *Singapore Perspectives 2007: A New Singapore*, Institute of Policy Studies.

[2] Hak Bin Chua and Jit Soon Lim, *Singapore: A Dual Economy?* Citigroup Asia Macro Views, 25 July 2006.

I. The New Economy

The conviction about a *new economy* comes from robust economic expansion over the last few years, since the SARS crisis, with GDP growth averaging 7.6% over 2004-06. Growth going forward will likely come in above the 3-5% range, what was previously regarded as the long-term growth speed limit for a mature economy. The government has reiterated its confidence by forecasting a GDP growth range of 4-6% in 2007, a departure from the last three years where the initial official forecast started at 3-5%.

Chart 1: GDP Growth Has Been Trending Up Since the 2003 SARS Crisis: Renaissance or Luck?



Source: CEIC Data Company Limited.

Luck may have certainly been a factor, given the relatively benign global environment over the last few years since 2003. But there are nevertheless structural developments supporting the new economy thesis. The relative out-performance of the Singapore economy against its regional peers suggests more fundamental forces at work, some of which are policy induced. We believe the new economy is a result of [1] enhanced competitiveness arising from an aggressive tax and CPF restructuring; [2] more liberal immigration policy; [3] more diversified economy with new growth drivers; and [4] a pro-growth approach.

[1] Enhanced Competitiveness from Tax and CPF Restructuring

Tax and CPF restructuring may have increased economic competitiveness, unleashing new growth drivers and wider domestic investment opportunities. Aggressive tax and CPF cuts from 2001 have significantly reduced costs for employers. Corporate tax rates have been cut from 26% to 20% over 2001-06 (see Figure 2). Prime Minister Lee has indicated that, alongside a further GST increase, more income tax cuts could be possible going forward.[3] Employer CPF contributions have also been cut, with the contribution rate cut by 3 percentage points to 13% from 16% (for workers above 55 years old) and the salary ceiling gradually reduced from S$6,000 to S$4,500 over three years (see Figure 3).

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[3] Prime Minister Lee Hsien Loong, Parliament Speech, November 2006. See also Hak Bin Chua, *Tax Restructuring: Chapter 2?* Citigroup Singapore Market Weekly, 20 November 2006.

Figure 2. The Grand Tax Restructuring: More to Come?

Year of Assessment	Corporate Tax Rate	Personal Tax Rate	GST
1997-2000	26%	Top Rate 28%	3% (since 1 April 1994)
2001	25.5%	Top Rate 28%	3%
2002	24.5%	Top Rate 26%	3%
2003	22%	Top Rate 22%	4%
2004	22%	Top Rate 22%	5%
2005	20%	Top Rate 22%	5%
2006	20%	Top Rate 21%	5%
2007	Towards 18%?	Top Rate 20%	Towards 7%

Source: www.iras.gov.sg; Citigroup estimates. Hak Bin Chua, Tax Restructuring: Chapter 2? Citigroup Singapore Market Weekly, 20 November 2006.

Figure 3. CPF Restructuring, 2003-06

	Major CPF Policy Changes to Employer Contributions
2003	On 1 October, employer's CPF contribution rate was cut by 3 percentage points to 13% from 16% previously (for workers above 55 years old)
2004	On 1 January, the CPF salary ceiling was lowered to S$5,500 from $$6,000
2005	On 1 January, the CPF salary ceiling was lowered to S$5,000 from S$5,500; the CPF employer contribution rates for older workers aged 50-55 were also reduced from 11% to 9%
2006	On 1 January, the CPF salary ceiling was lowered to S$4,500 from S$5,000; the CPF employer contribution rates for older workers aged 50-55 were reduced from 9% to 7%.

Source: www.cpf.gov.sg. See Hak Bin Chua, Singapore: Restructuring and an Upper Middle-Class Squeeze, Citigroup Asia Macro Views, 4 August 2006.

The verdict on the economic restructuring is probably best reflected in the strong job growth figures and rising foreign investment over the last few years. Job creation has gradually risen from a contraction of 12,950 in 2003 to growth of 71,400 in 2004 and 113,300 in 2005. For the first nine months of 2006, job growth at 123,000 had already beaten the whole of 2005. The overall unemployment rate slid back from a high of 4.8% in September 2003 to 2.7% in September 2006.

Such strong job growth figures are impressive and may not have been possible without the generous tax and CPF cuts, which helped to lift corporate profitability and attract fresh investment. Net manufacturing investment commitments recovered from S$7.5bn in 2003 to S$8.3bn in 2004 and S$8.5bn in 2005. For the first 9 months of 2006, net manufacturing investment commitments were holding up at about the same levels, at about S$6bn. Figures on the number of newly registered companies are probably more representative, as they include services. Newly registered companies rose to 19,501 in 2005 and 17,153 in 2004 from a low point of 13,544 in 2003. The level in 2006 should come in slightly above the 2005 level and be almost double the 2000-02 levels. About 90% of the new companies are in services.

[2] More Liberal Immigration Policy

A liberal immigration policy, even more relaxed than during the early 1990s boom, is increasing the influx of foreign talent, making higher potential growth possible. Permanent residents, for example, grew 8.7% over 2000-05, ten times the growth rate of citizens. The government is studying its population policies, and more relaxation may be in store to increase the citizenship take-up rate. The number of new citizenships granted in 2005, at 12,900, was almost double the rate of previous years. Preliminary figures for 2006 and government policy direction suggest that this trend will continue.

Figure 4. Demographic Trends, 1990 to 2005

	Number ('000)			Per Cent of Population			Average Annual Growth (%)		
	2005	2000	1990	2005	2000	1990	1990-2005	2000-2005	1990-2000
Resident Population	3,554	3,263	2,736	81.7	81.2	89.8	1.8	1.7	1.8
Citizens	3,113	2,973	2,623	71.5	74.0	86.1	1.1	0.9	1.3
Permanent Residents	441	290	112	10.1	7.2	3.7	9.6	8.7	10.0
Non-Resident Population	798	755	311	18.3	18.8	10.2	6.5	1.1	9.3
Total Population	**4,351**	**4, 018**	**3,047**	**100.0**	**100.0**	**100.0**	**2.4**	**1.6**	**2.8**
Foreign Population	1,239	1,045	423	28.5	26.0	13.9	7.4	3.5	9.5

Source: Singapore Department of Statistics, Demographic Trends, General Household Survey 2005; Koh Ai Tee et al., Singapore Economy in the 21st Century: Issues and Strategies, 2002. Full time series for permanent residents and citizens are not available. Citigroup estimates. Hak Bin Chua, Population Policy: A Matter of Life and Death, Citigroup Asia Macro Views, 21 September 2006.

Figure 5. New Citizens in Singapore: Sharp Jump in 2005 and 2006

Year	Number of Citizenships Granted	Fertility Rate
2001	6,500	1.41
2002	7,600	1.37
2003	6,800	1.25
2004	7,600	1.24
2005	12,900	1.24
2006 Jan - June	6,800	…

Source: New Straits Times, 24 August 2006; Singapore Department of Statistics, Population Trends 2005.

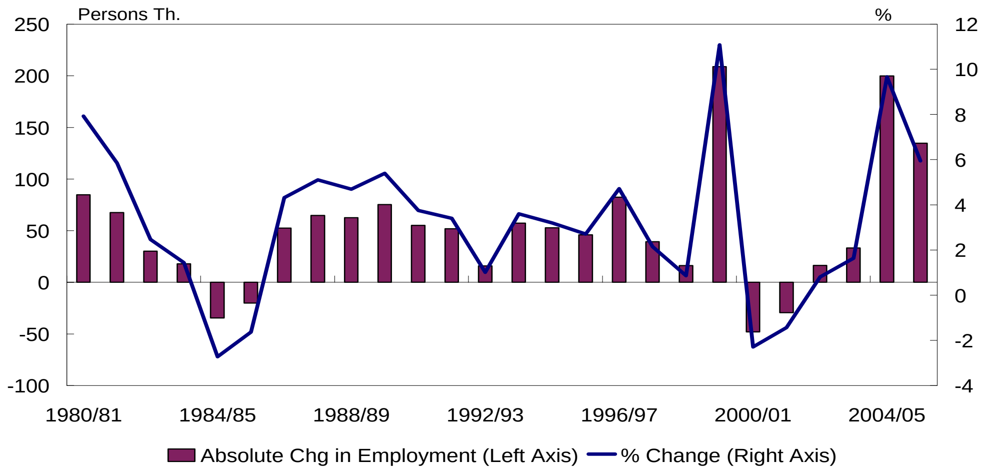
The more relaxed immigration policy has made the current economic boom possible, as a large fraction of the strong job demand was satisfied by foreign workers. Labor force growth at current rates is significantly higher and about double the pace even compared to the boom during the early 1990s.[4] Labor force growth is currently running at about 6%. About half of the newly created jobs are going to non-residents.

The government will have to balance overly aggressive immigration targets against concerns about job security and low wage growth among the lower income resident households.[5] Liberalization will, therefore, likely be gradual and calibrated. A successful population policy would have a material impact on growth, property and businesses where domestic critical mass matters. It could also stall the erosion on growth coming from a low fertility rate and an ageing population. Greater differentiation in the policy treatment of citizens, permanent residents and foreigners is also expected, which would increase the incentive for taking up citizenship.

4 See Hak Bin Chua, Citigroup Asia Macro Views, Singapore: Comparing the Current Boom to the Early 90s - Sustainable or Bust in the Making? 7 November 2006.

5 For fuller discussion, see Hak Bin Chua, Citigroup Asia Macro Views, Singapore's Population Policy: A Matter of Life and Death, 21 September 2006.

Figure 6. Current Boom Seeing Strong Increases in Jobs and Foreign Workers



Source: CEIC Data Company Limited.

[3] More Diversified Economy and New Growth Drivers

Globalization and government policies have created new growth drivers, particularly in the areas of financial services (private banking, wealth management), biomedical (pharmaceuticals), luxury-end property and tourism (integrated resorts). Multiple growth drivers increase the likelihood of sustained growth and reduce the risk from any single-engine failure. Diversification from electronics, in particular, would reduce the vulnerability to volatile tech cycles. Electronics as a share of GDP has fallen to about 9.4% in 2005 from about 12.3% in 2000, with biomedical increasing its share to about 4.8% of GDP (see Figure 7). Transport engineering has doubled its share to 2.6% of GDP. Services have also steadily risen to about 63.1% of GDP in 2005 from about 61.2% in 2000.

Figure 7: Diversification from Electronics

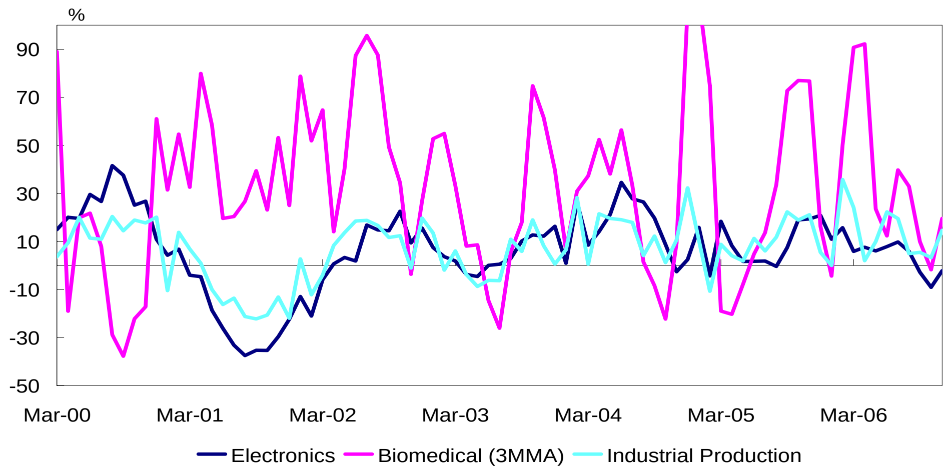
Percentage of GDP	2005	2000	1995
Goods Producing Industries	**31.1**	**33.1**	**32.6**
Manufacturing	26.1	25.8	25.2
Electronics	9.4	12.3	12.0
Biomedical	4.8	…	…
Chemical	3.7	4.1	2.4
Transport Engineering	2.6	1.3	1.6
Construction	3.4	5.6	5.7
Utilities	1.5	1.6	1.5
Services Producing Industries	**63.1**	**61.2**	**61.5**
Wholesale & Retail Trade	15.8	12.8	14.3
Business Services	12.6	13.7	13.3
Transport & Communications	11.8	11.5	10.8
Financial Services	10.7	10.8	11.0
Hotels & Restaurants	1.8	2.1	2.4
Other Service Industries	10.4	10.2	9.5

Source: CEIC Data Company Limited.

Notes: Percentage may not sum to 100 percent due to the need to include ownership of dwellings (imputed) and exclude financial intermediation services indirectly measured.

Manufacturing has become noticeably less correlated with the tech cycle in recent years with the growing importance of the biomedical sector (see Figure 8). The correlation between industrial and electronics output was, for example, a tight 0.86 in the period 2000-02. That correlation dropped to only 0.36 in 2004-06.[6] Manufacturing, for example, in the current tech slowdown, has been holding up relatively well because of strong pharmaceutical growth. Diversification away from electronics may mean that the Singapore economy will be less vulnerable to volatile tech swings in the future.

Figure 8: Manufacturing Becoming Less Correlated with the Tech Cycle in Recent Years



Source: CEIC Data Company Limited.

Services should also play an increasingly important role in diversifying and driving the economy going forward. We believe tourism, in particular, will be a key growth driver, particularly from 2010. The two integrated resorts – Marina Bay Sands and Resorts World at Sentosa – should help double tourist arrivals to 17m and triple tourism receipts to S$30bn by 2015. We expect these targets are well within reach and may well be exceeded, judging by Macau's experience (see Figure 9). Universal Studios alone should attract 5mn visitors annually while Resorts World could achieve 10mn. On top of this is the draw of Marina Bay Sands, which is targeting the lucrative convention and exhibition market. Tourism's contribution to GDP declined from about 6.1% of GDP in 1993 to 3% in 2002, according to government estimates. But the sector should turn around smartly, with tourism climbing back up to about 5% of GDP in 2015, by our estimates.[7]

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[6] 2006 figures only up to November, the latest available month.

[7] Hak Bin Chua, Integrated Resorts: Will Singapore See A Macau-Type Boom? Citigroup Singapore Market Weekly, 11 Dec 2006.

Figure 9. Tourist Arrivals in Macau Now Double That of Singapore Post-2001 Liberalization ('000)

Source: DSEC, CEIC Data Company Limited, Citigroup estimates for 2006. Hak Bin Chua, Integrated Resorts: Will Singapore See a Macau-Type Boom? Citigroup Singapore Market Weekly, 11 December 2006.

[4] New Philosophy: Growing "As Fast As We Can"

"I think that when conditions are good and the sun is shining, we should go for it, as fast as we can as much as we can. Get the growth, put it under our belt, put it aside a little bit, so when the thunderstorms come again, we will be ready."

Prime Minister Lee Hsien Loong, National Day Rally Speech, 20 August 2006

We interpret the growing "as fast as we can" philosophy as being more accommodative in terms of policy and key resources, particularly toward foreign labor, land and investment projects.[8] This will likely imply higher GDP growth over the boom cycle. The shift toward an aggressive pro-growth attitude may be because of the economic volatility experienced since 2000, with two sharp downturns, in 2001 (tech bust) and 2003 (SARS). The economy appeared to have borne the brunt of the downswings when external conditions were ugly – but may not have capitalized on the good times as strongly when conditions improved.

The government appears to be more willing to capitalize on the current boom, being more aggressive in releasing land sites and locking in investment projects, which will help cushion the impact from any sudden downturn. Commercial land sites, for example, have soared after a long dry spell of seven years (see Figure 10). As such projects and investments take several years to materialize, growth from such commitments will generally be secured over several years, which would help cushion the impact from any subsequent downturn.

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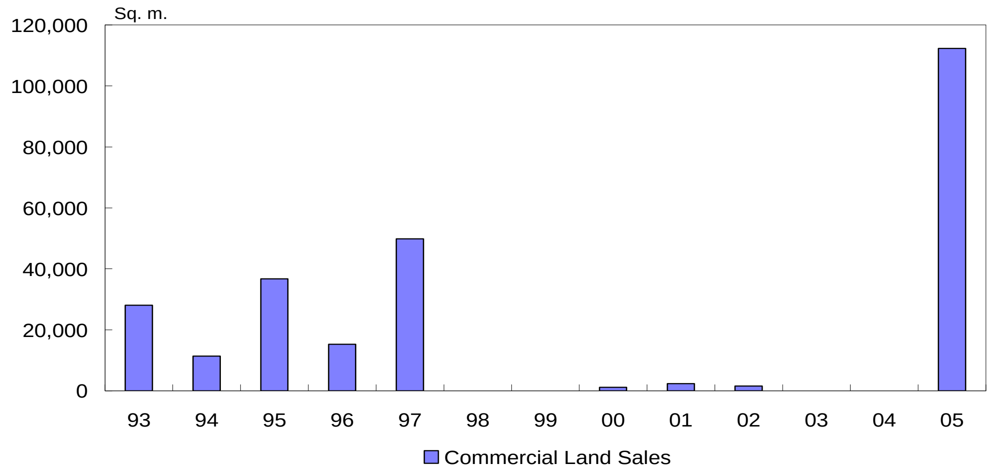
[8] See Hak Bin Chua, *Growing "As Fast As We Can"*, Citigroup Singapore Market Weekly, 13 November 2006.

Figure 10. Soaring Commercial Land Sales after a Long Dry Spell (square meter)



Source: CEIC Data Company Limited, Urban Development Authority.

II. The Dual Economy

The *dual economy* thesis highlights that despite rosy headline growth, there appears to be two-parts to the economy, moving on different frequencies.[9] Businesses catering to the global market are witnessing more robust growth, while those serving the domestic market are seeing more sluggish growth. Divergent growth patterns between different income groups, businesses and even within certain asset classes, particularly property, have become quite stark. Globalization and policies on tax, CPF and immigration – while necessary to increase competitiveness – may have also accentuated these divergent forces.

External demand has been the key growth driver over the last few years, with domestic demand remaining relatively sluggish. Exports as a share of GDP have surged as a result (see Figure 11). This suggests that the changes could be more structural – driven by policies capitalizing on globalization – than just cyclical in nature. This contrasts quite noticeably with the experience of the early 1990s boom when domestic demand played a much more significant role. The sharp rise in exports has, in particular, been driven by rapid growth in new drivers such as pharmaceuticals and offshore & marine transport.

Private consumption has been growing at less than 3% despite headline GDP growth of about 8% (see Figure 12). Wages across different income segments have been diverging; a recent household survey showed that the bottom 30% income percentile saw incomes fall over the period 2000-05. Wages of the highest income segment in contrast saw larger gains (see Figure 15). Owners of capital are seeing a windfall, while workers are seeing nominal wages barely keeping up with inflation.

[9] See Hak Bin Chua and Jit Soon Lim, Citigroup Asia Macro Views: *Singapore: A Dual Economy?* 25 July 2006.

The residential property market has been seeing a boom in the luxury-end, but the mass residential market remains soft (Figure 15). The banking sector has been seeing a boom in offshore lending and private banking, but domestic SGD lending, particularly consumer lending, remains sluggish (Figure 14). Consumer loan growth was growing at about 1.5% in October, with mortgages expanding at 2.1%. Construction, despite emerging from a seven-year drought, has barely been growing, versus a boom in marine and aviation transport, reflecting strong regional opportunities.

Figure 11. Exports as a Percentage of GDP Have Surged over the Last Five Years

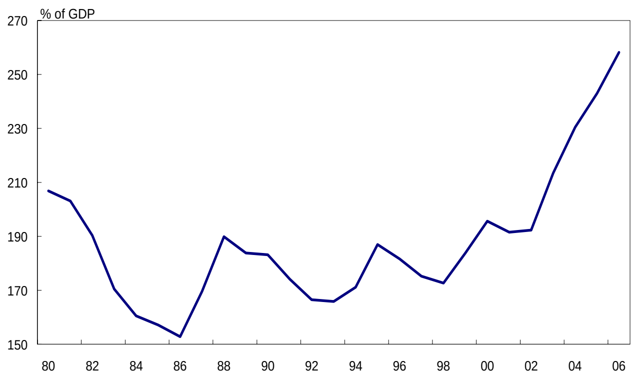


Figure 12. Consumption Has Been Remarkably Sluggish Despite Rosy Headline GDP Growth

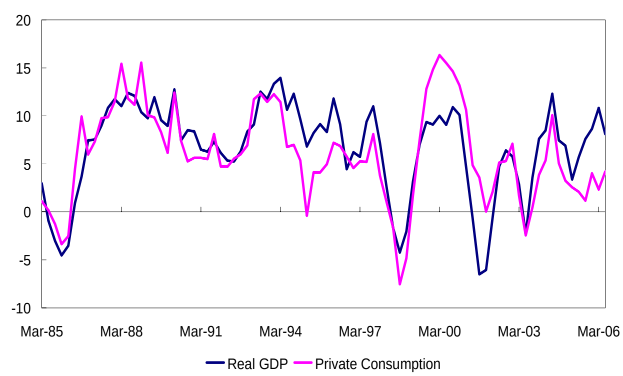


Figure 14. Divergence between Offshore ACU and Domestic SGD Lending (% YoY Change)

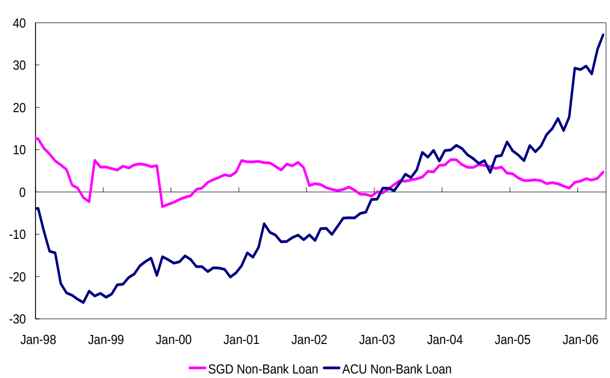
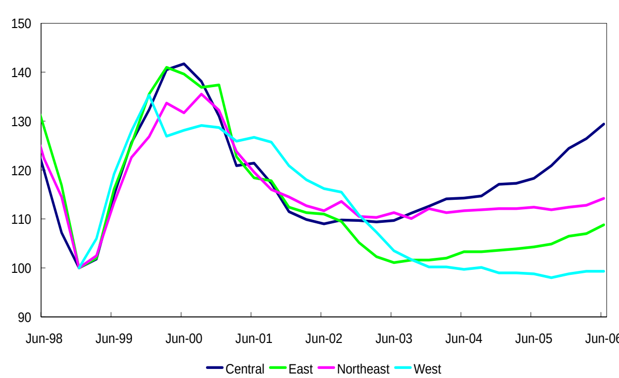


Figure 15. Diverging Property Price Indices Across Regions, with Strong Price Gains in the Central Region



Source: CEIC Data Company Limited, Citigroup estimates.

Embracing globalization has had disproportionate effects on different income groups, particularly in a small open economy where the impact is amplified. Such trends favor the higher income and foreign segment groups – those in the "global periphery" – benefiting from the regional boom. The lower income groups have to face greater competition because of globalization and liberalization, particularly with the emergence and opening up of China and India.

Figure 13. Average Monthly Household Income from Work by Decile among All Resident Households

	Average Household Income (S$)			Average Annual Chg (%)
	2000	2004	2005	
1st – 10tth	90	…	…	…
11th – 20th	1,470	1,170	1,180	-4.3
21st – 30th	2,250	2,140	2,190	-0.5
31st – 40th	2.950	2,890	2,990	0.3
41st – 50th	3,660	3,670	3,850	1.0
51st – 60th	4,470	4,600	4,840	1.6
61st – 70th	5,390	5,510	5,890	1.8
71st – 80th	6,520	6,820	7,260	2.2
81st – 90th	8,270	8,960	9,300	2.4
91st – 100th	14,360	15,960	16,480	2.8
Total	**4,940**	**5,170**	**5,400**	**1.8**

Source: Singapore Department of Statistics, Key Findings of the General Household Survey 2005, June 2006.

But globalization may be only part of the reason for the dualism. Economic restructuring over the last few years may have also disproportionately compressed the wages of the middle class.[10] The negative impact from the CPF cuts outweighed the gains from the personal income tax cuts for this segment. The high-income segment, on the other hand, benefited from the restructuring as the income tax cuts dominated. The middle-class squeeze may partly help explain the emergence of a dual economy.

The middle-income group has been squeezed by CPF cuts, with the impact outweighing the impact from tax cuts (see Figure 16). We estimate the cumulative impact on average wages from the CPF cuts over 2003-06 to be negative 3.6% and from income tax cuts over 2002-07 to be positive 0.8%. The overall net impact on average wages is, therefore, negative 2.8%, a non-trivial sum. The impact profile over the adjustment period and across income groups was moreover uneven.

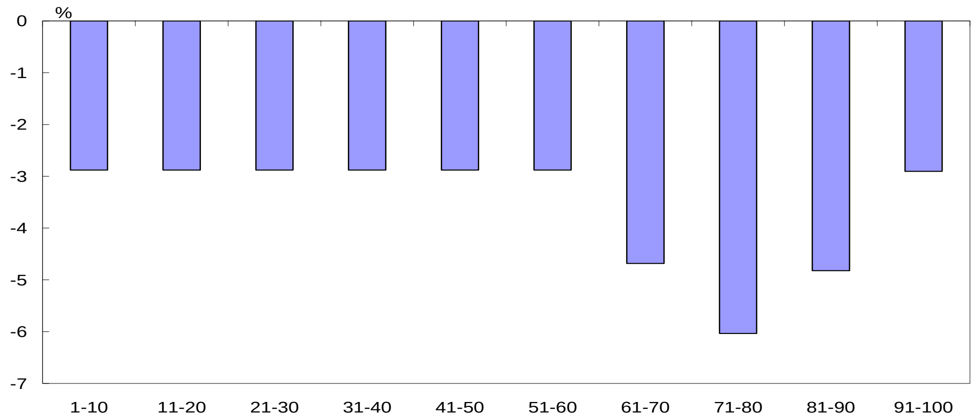
The negative impact was largest for the middle class. The upper middle-class squeeze is largely because of the greater negative impact from lower CPF salary ceiling limits; relatively larger fall in the CPF tax relief; and smaller percentage income gains from tax cuts relative to the top bracket segment. This upper middle-class segment represents HDB upgraders and may help explain the sluggish upgrading demand for mass residential private property.

The proposed 1-2% CPF increase in 2007 will help to *partly* negate the brunt of this aggressive restructuring and provide relief to the middle-class segment. Fiscal transfers in the past have not really cushioned the impact on the middle class from globalization and restructuring, as these measures have been directed at mainly the lower income class. A study by the Monetary Authority of Singapore estimates that special transfers in the FY06 budget would increase real consumption growth by 0.48 percentage points for one- to four-room HDB households, 0.11 percentage points for five-room, executive and HUDC households, and 0.02 percentage points for private households.[11]

[10] See Hak Bin Chua, Citigroup Asia Macro Views: *Singapore – Restructuring and an Upper Middle-Class Squeeze,* 4 August 2006.

[11] Monetary Authority of Singapore, *Macroeconomic Review*, April 2006, Table 3.13: Impact of Selected Special Transfers in FY2006, pgs 66.

Figure 16. An Upper Middle-Class Squeeze (Cumulative % Impact on Wages from Both CPF and Tax Changes across Income Decile Groups, 2001-07)



Source: Citigroup estimates. For fuller discussion, see Hak Bin Chua, Singapore: Restructuring and an Upper Middle-Class Squeeze, Citigroup Asia Macro Views, 4 August 2006.

Conclusion

Embracing globalization has generated huge economic gains for Singapore. Policies favoring lower income taxes, foreign talent and global capital have made higher potential growth possible over the medium term, above what was previously regarded as the speed limit for a mature economy. New growth drivers have emerged, tapping on rising Asian affluence, intra-Asian trade, global production networks, and a mobile global talent pool.

But globalization brings with it fresh challenges. That pressure is amplified in a small open economy where the impact has been most acute on the lower-income group. Several other Asian governments have not chosen the more liberal strategy precisely because of such repercussions, with some closing the door on foreign workers or capital for fear of competition and pressure on the local population. Such protectionist policies, unfortunately, only hurt growth in the longer term and slow down innovation and change, in our view. Singapore has chosen to deal with the emerging widening income gaps with appropriate fiscal policies, education and an enhanced social safety net. So far, the results on growth are clearly showing, with a fiscal windfall to cope with the pressures from globalization.

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