

## Hong Kong's Gini coefficient compared with other economies

### Introduction

The Gini coefficient compiled by the Census and Statistics Department (C&SD) in 2006 based on original income stood at 0.533. Normally, a Gini coefficient below 0.2 indicates equitable income distribution, 0.2-0.3 fairly equitable, 0.4 the international inequality threshold alert line, 0.4-0.5 fairly inequitable, and above 0.5 considerable disparity. By this standard, Hong Kong's figure would appear rather high. This article examines some factors of Hong Kong's income disparity, and compares Gini coefficients across economies in light of their per capita output, stage of development in terms of the size of services sector as a percentage share of GDP, and tax burden. It also discusses the difficulty of cross-sectional comparison of Gini coefficients due to different measurements, and alternatively compares the change of Gini coefficient across time for selected economies.

### **Gini coefficients are not strictly comparable across economies due to different adjustments for income redistribution effects, household size and composition**

The comparisons in this note make use of officially reported Gini coefficient data, except for those specified in the footnotes. However, economies define and adjust income differently when compiling the Gini coefficient, which makes direct comparison problematic. One major difference is in the use of gross versus disposable income. Gini coefficient based on gross income is a raw measure of the extent of disparity due to the original income households receive, while that based on disposable income takes into account the redistributive effect of taxation and social transfer, and so is generally lower than the gross income measure.

Another difference is in the adjustment for household size and composition. Some Gini measures try to filter the effect of demographic changes, as the Gini coefficient is sensitive to the two ends of the spectrum and accounts for income only but not wealth. For example, excluding one-person households or retired households with very low or zero income will make the Gini coefficient look more favourable. This is most relevant to advanced economies with a rising number of nuclear families or an aging population. Economies adopting the exclusion approach include Singapore (which excludes retiree households) and Japan (which has more sophisticated exclusions). Other economies, notably Europe, adjust for the number of household members to arrive at the per capita income, or give weightings to emphasize or de-emphasize certain household members (e.g. the UK's McClements scale and Germany's OECD scale assign different weights to the first adult, subsequent adults and children of different ages). These adjustments have the effect of equalising income and lowering the Gini coefficient, compared with using the raw "original" income.

The variety of Gini measures provide different angles of understanding income disparity, and comparing one against another can gauge the effect of social transfer and demographic changes on income distribution. The problem is, economies do not report all these at the same time, which makes cross-sectional comparison difficult. *Table 1* lists the definitions of income and household adjustments by selected economies. The commonly reported official measures are in bold.

**Table 1 : Definitions of income and household for Gini measures across economies**

	Definitions of income	Gini index	Description
HK (2006)	<b>Original household income</b>	0.533	
	Post-tax household income	0.521	
	Post-tax post-social transfer household income	0.475	
	Per capita original household income	0.502	
	Per capita post-tax household income	0.488	
	Per capita post-tax post-social transfer household income	0.427	
US (2004)	<b>Money income</b>	0.450	Income before deductions for taxes and other expenses; includes government cash transfers and excludes capital gains and noncash benefits
	Market income	0.496	Money income except government cash transfers; includes imputed realized capital gains and losses, and imputed rate of return on home equity; subtracts imputed work expenses
	Post-social insurance income	0.449	Money income except government means-tested cash transfers; includes imputed realized capital gains and losses, and imputed rate of return on home equity; subtracts imputed work expenses
	Disposable income	0.400	Money income including the value of noncash transfers, imputed realized capital gains and losses, imputed rate of return on home equity; subtracts imputed work expenses and taxes; reflects the net impact of government transfers and taxes on market income
UK (2005/06)	Original income (before taxes and benefits)	0.52	Equivalised income; includes income from wages and salaries, self-employment income, income from occupational pensions and investment income
	Gross income	0.37	Equivalised income; includes all original income plus cash benefits provided by the state
	<b>Disposable income</b>	0.34	Gross income less direct taxes; equivalised
	Post-tax income	0.37	Disposable income less payment of indirect taxes; equivalised
	Final income	NA	Post-tax income plus benefits in kind received from the state
Germany (2005)	<b>Equivalised income</b>	0.28	Adjusted for household size and composition by the OECD equivalence scale (compared with UK McClements scale: smaller equivalised income for one-person households, widens inequality for retired households and reduces that for non-retired ones, widens gap between bottom and top deciles)
Japan (1999)	Market income (Comprehensive Survey)	0.41	Comprehensive Survey of Living Conditions of the People on Health and Welfare: excludes households headed by a person under age 17; separate measures for working-age and elderly populations; adjusted for household size
	Disposable income (Comprehensive Survey)	0.314	
	Market income (Redistribution Survey)	0.472	Survey on the Redistribution of Income: excludes persons with income three times larger than standard deviation; not adjusted for household size
	Disposable income (Redistribution Survey)	0.381	
(2004)	<b>Household income</b>	0.308	Excludes one-person households
Singapore (2009)	<b>Original income</b>	0.478	Among <i>employed</i> households, average household income from work <i>per household member</i> ; i.e. excludes households with no income earner (e.g. retiree households)
	Disposable income	0.453	Adjusted for government benefits and taxes
Korea (2008)	Market income (all households)	0.348	Pre-tax income of all households including one-person and farm households; in use after 2006
	<b>Market income (nationwide households)</b>	0.331	All households excluding one-person and farm households; in use after 2003
	<b>Market income (urban households)</b>	0.325	Urban wage earners households, excluding one-person and farm households
	Disposable income (all households)	0.316	After tax deductions
	Disposable income (nationwide households)	0.301	After tax deductions
	Disposable income (urban households)	0.298	After tax deductions
		2	
Taiwan (2003)	<b>Disposable income</b>	0.343	By ten equal divisions of household groups for 1964-1974, and by ungrouped households for 1976 onwards

The table highlights how difficult it is to compare the Gini coefficient across economies given there are so many combinations of approaches to measuring those. In fact, income used in compiling the Gini coefficient consists of several components – wages, capital gains, social security benefits, cash or noncash, means- or non-means-tested transfer – and different economies may include one and exclude another, which further complicates any comparison. Even as we try to distill the effects of income redistribution and household composition by considering these separately, there are still caveats in that the adjustments are not comparable. Notably, excluding the economically inactive households seems to reduce the Gini coefficient more compared with the per capita measure, as illustrated by London and Tokyo whose Gini coefficients are artificially low.

**Hong Kong’s Gini coefficient, while on the high side, is not the highest among comparable advanced or newly industrialized city economies**

To make the data more comparable, we separate the Gini coefficients into two groups – one based on overall household income and the other on standardised income (per capita or adjusted for household composition through certain exclusions). The pre- and post-tax and social transfer Gini coefficients for selected economies are listed in **Table 2**. Hong Kong’s Gini coefficient, while on the high side, is not the highest among comparable advanced or newly industrialized city economies. On a pre-redistribution and household adjustment basis, the Gini coefficient in Hong Kong was 0.533, lower than New York City (0.542), Washington DC (0.540), and Los Angeles (0.538), though slightly higher than San Francisco (0.514) and Shenzhen (0.49). On a post-redistribution and household adjustment basis, Singapore has a higher Gini coefficient (0.453) even after excluding retiree households. It should be noted that Hong Kong’s post-adjustment Gini coefficient only accounts for household size but still includes retiree households, tycoons as well as employees, and hence is not strictly comparable to those of Singapore, Tokyo and London.

**Table 2 : Pre- and post-tax and transfer Gini coefficients for selected economies**

**(a) Gini coefficients compiled based on overall household income**

<u>Economies</u>	<u>Year</u>	<u>Pre-tax and social transfer</u>	<u>Post-tax and social transfer</u>	<u>% change</u>
<i>(Big economies)</i>				
US	2004	0.496	0.400	-19%
China	2007	0.458	NA	NA
Korea	2008	0.348	0.316	-9%
Taiwan	2003	NA	0.343	NA
<i>(City or state economies)</i>				
New York City	2008	0.542	NA	NA
Washington DC	2008	0.540	NA	NA
Los Angeles	2008	0.538	NA	NA
<b>Hong Kong</b>	<b>2006</b>	<b>0.533</b>	<b>0.475</b>	<b>-11%</b>
San Francisco	2008	0.514	NA	NA
New York State	2008	0.503	NA	NA
Shenzhen	2005	0.49	0.36	-27%
California	2008	0.473	NA	NA
New Jersey	2008	0.462	NA	NA
Guangdong Province	2007	0.422	NA	NA
Singapore	--	NA	NA	NA

**(b) With household adjustments (per capita, weightings or exclusions)**

<u>Economies</u>	<u>Year</u>	<u>Pre-tax and social transfer</u>	<u>Post-tax and social transfer</u>	<u>% change</u>	<u>Remarks</u>
<i>(Big economies)</i>					
UK	2006	0.52	0.34	-35%	Equivalised* (McClements scale)
Japan	2005	0.44	0.32	-27%	Equivalised* (OECD scale)
Korea	2008	0.331	0.301	-9%	Excludes one-person and farm households
Germany	2005	0.51	0.30	-41%	Equivalised* (OECD scale)
<i>(City or state economies)</i>					
Singapore	2009	0.478	0.453	-5%	Per capita; employed households only
<b>Hong Kong</b>	<b>2006</b>	<b>0.502</b>	<b>0.427</b>	<b>-15%</b>	<b>Per capita</b>
London	2005	NA	0.324	NA	London employees only
Seoul	2003	0.41	NA	NA	Per capita
Tokyo	2003	0.33	NA	NA	Workers' households

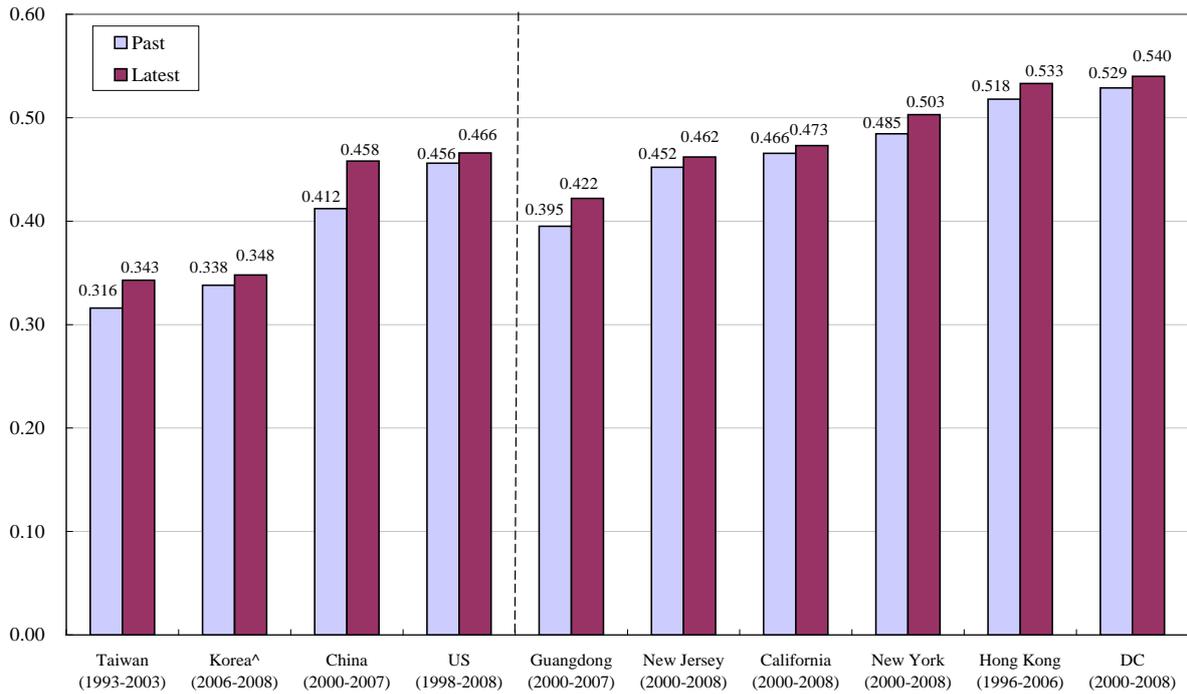
*Gini data for Germany and Japan are sourced from OECD; for Seoul from Kim, E. and Kim, K. (2003); for Tokyo and pre-tax Gini for Shenzhen from UN Habitat (2008) State of the World's Cities.*

*(\*) Standardised to account for the fact that households of differing size or composition will require different incomes to achieve the same standard of living, i.e. per capita concept adjusted for household composition.*

**Most economies have seen their Gini coefficients increase over time**

Why is Hong Kong's Gini coefficient so high? From *Chart 1*, the Gini coefficient, whether adjusted for household composition or not, tends to rise over time for most economies, except for Germany and London. This suggests that rising income disparity is not a phenomenon unique to Hong Kong, and the income gap will tend to widen as economic development advances. The differences over roughly a decade ago are similar in magnitude, at around 0.01-0.03 percentage point, while China saw a larger increase of 0.05 percentage point. Conceivably, fast-growing economies will tend to see a sharper rise in the Gini coefficient while undergoing rapid development, as some people may enjoy the fruits of economic development first. On the other hand, the decline of the Gini coefficient in Germany and London may be partly obscured by adjustments to the Gini measure (equivalised and employees only), but it may also be explained by the strong welfare tradition and labour unions in the European economies.

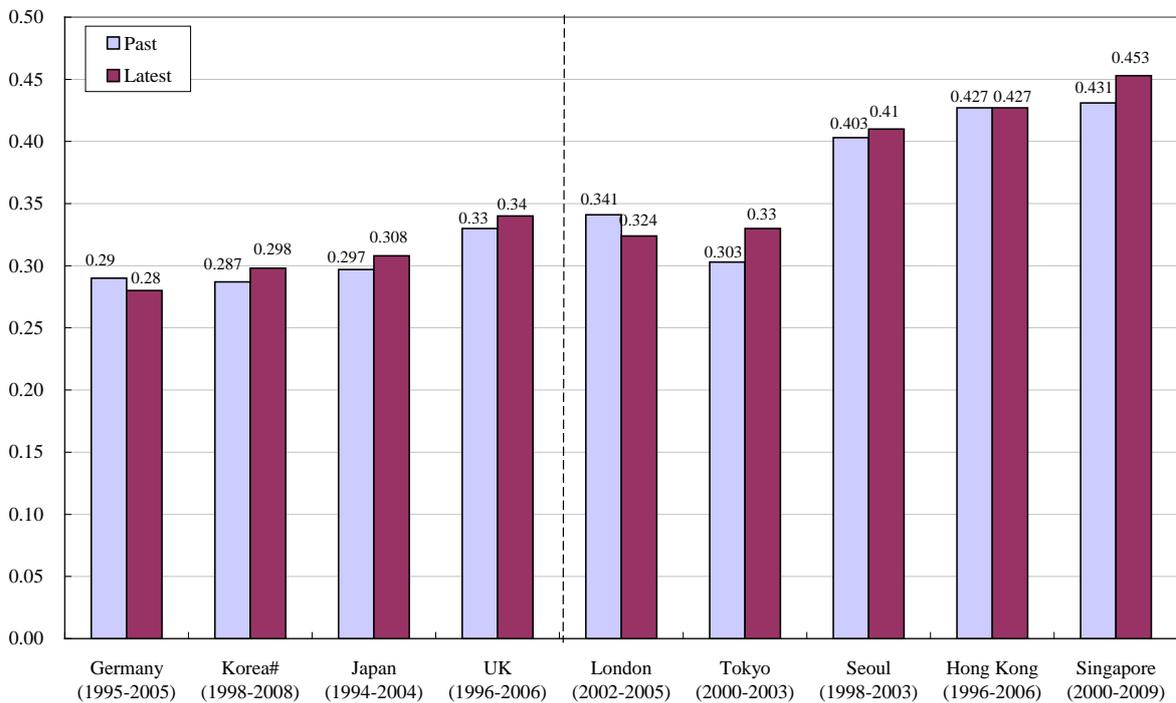
**Chart 1 : Rising income disparity is a common phenomenon  
(a) Gini coefficients compiled based on overall household income\***



(\* ) All are pre-tax and transfer Gini measures except for Taiwan.

(^ ) All households market income Gini figure for Korea, data available from 2006 only.

**(b) Gini coefficients based on standardised income adjusted for household size and composition<sup>@</sup>**



(@ ) All are post-tax and transfer Gini measures except for Tokyo and Seoul which are not specified.

(#) The urban households Gini data are used for Korea for longer time series.

Data are from national sources, and for Germany from Eurofound; for Tokyo from UN University (2000) and UN Habitat (2008); for Seoul from Kim, E. and Kim, K. (2003).

## **The increase of Hong Kong's Gini coefficient may be attributed to demographic changes, business cycle factors and economic restructuring**

Apart from the global trend of rising income gap over time, for Hong Kong specifically, the increase of the Gini coefficient may be attributed to three main factors – demographic changes, business cycle factors, and economic restructuring.

### *(I) Demographic changes*

In Hong Kong, the Gini coefficient based on original household income increased from 0.518 in 1996 to 0.533 in 2006. Adjusted for taxation only, the increase between 1996 and 2006 narrowed to 0.13. Netting out further the effect of social transfer, the Gini coefficient rose from 0.466 to 0.475, only a 0.009 increase over the same period. This suggests that income redistribution is very effective in reducing the income gap in Hong Kong. If the post-tax post-social transfer Gini coefficient is further adjusted for household size to arrive at the per capita measure, the Gini coefficient actually remained unchanged between 1996 and 2006, at 0.427, implying that the increase of the post-tax and social transfer Gini coefficient was mainly attributed to demographic changes, i.e. an aging population and a corresponding decrease in household size.

As discussed earlier on, Hong Kong's adjusted Gini coefficient measure only filters out the effect of change in household size, but does not distinguish between employed and retired households, unlike many other advanced economies, e.g. Singapore (employed households only), Japan and Korea (excluding one-person households, many of which being elderly ones), Europe and the UK (equivalisation). Such adjustment is logical, considering the Gini coefficient as a relevant gauge of in-work poverty should not be distorted by non-working households receiving little or no income. The prevalent adjustment practice of other economies also suggests that this limitation of the Gini coefficient is recognised worldwide and needs to be remedied in order to distill out the distortion from retiree households, especially in view of the aging issue commonly faced by advanced economies nowadays.

C&SD has compiled an alternative set of Gini coefficient data based on monthly household income from work of employed households only, and the picture is very different (**Table 3**). Understandably, the Gini coefficient based on working income of employed households was significantly lower than that compiled from all households under different income concepts in all the survey years. Notably, the Gini coefficient based on employed households was lower in 2006 compared with 1996 under all income concepts, while netting the effect of falling household size, it decreased gradually from 1996 to 2001 to 2006 on a per capita basis, indicating a narrowing income gap among employed households over the period. Moreover, the Gini coefficient based on employed households' original income was lower than the all households' per capita original income measure in 2001 and 2006, confirming our earlier observation that including only employed households tends to produce a more favourable Gini coefficient than adjusting for household size, again pointing to the growing effect from non-employed households in recent years.

**Table 3 : Hong Kong's Gini coefficient (GC) compiled based on all households versus employed households only across time**

	GC based on monthly household income from all domestic households			GC based on monthly household income from work <sup>(1)</sup> of employed households <sup>(2)</sup>		
	1996	2001	2006	1996	2001	2006
Based on original household income	0.518	0.525	0.533	0.514	0.489	0.498
Based on post-tax household income	0.508	0.515	0.521	0.455	0.443	0.446
Based on post-tax post-social transfer household income	0.466	0.47	0.475	0.415	0.402	0.405
Based on per capita original household income	0.493	0.491	0.502	0.548	0.529	0.484
Based on per capita post-tax post-social transfer household income	0.427	0.421	0.427	0.402	0.389	0.378

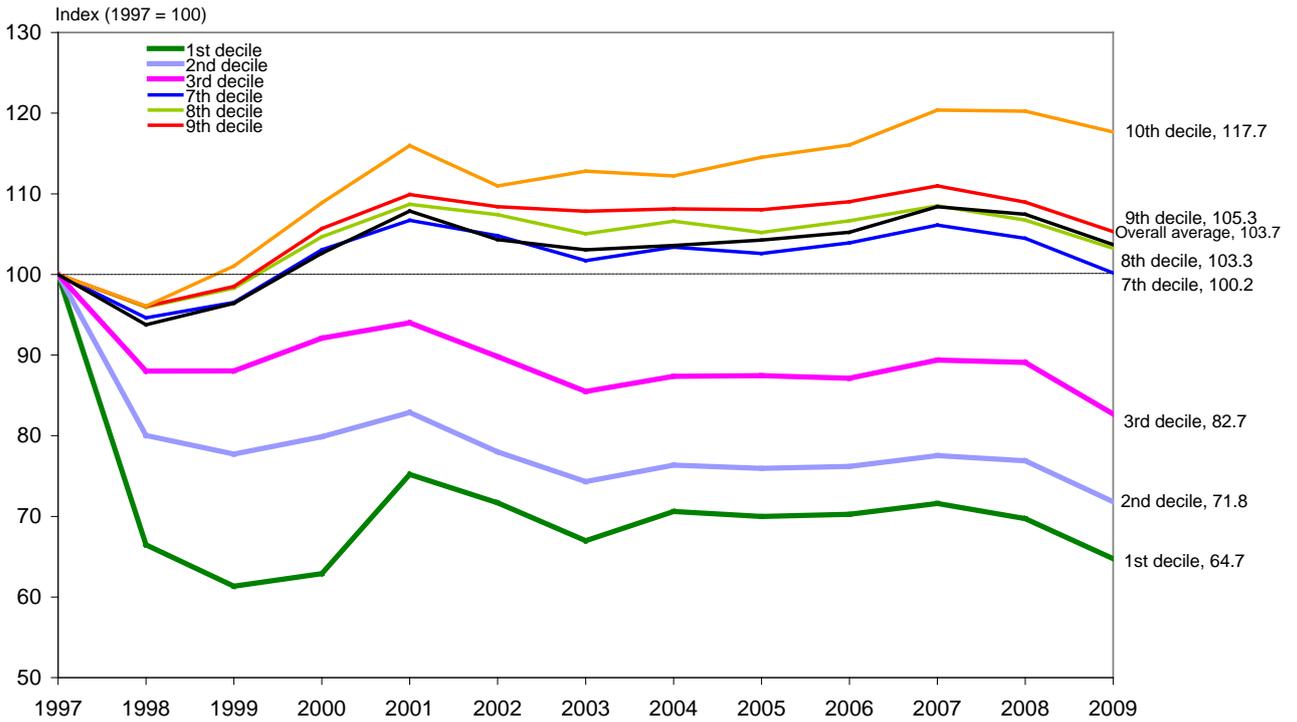
Notes: (1) Monthly household income from work refers to the sum of main and secondary earning of working persons (excluding domestic helpers) in households.

(2) Employed households refer to households consisting of at least one employed person (excluding foreign domestic helpers).

The effect of demographic changes on income disparity is even more apparent in *Chart 2*. From *Chart 2a*, it is apparent that the average monthly household income disparity widened from 1997 to 2009, as incomes for the bottom deciles fell while those for the top ones rose. However, if we look at average monthly employment earnings of full-time employees only, average employment earnings actually improved across decile groups from 1997 to 2009, although the extent of increase is larger for the higher decile groups (*Chart 2b*). The difference, again, is due to household composition change. It can be seen from *Chart 3* that between 1997 and 2009, the portion of elderly and economically inactive households among the bottom three decile groups surged by 18 percentage points on average, whereas the top income decile groups were predominantly economically active households, whose portion even increased over time. Overall, the portion of elderly and economically inactive households rose from 1997 to 2009 by roughly 4 percentage points.

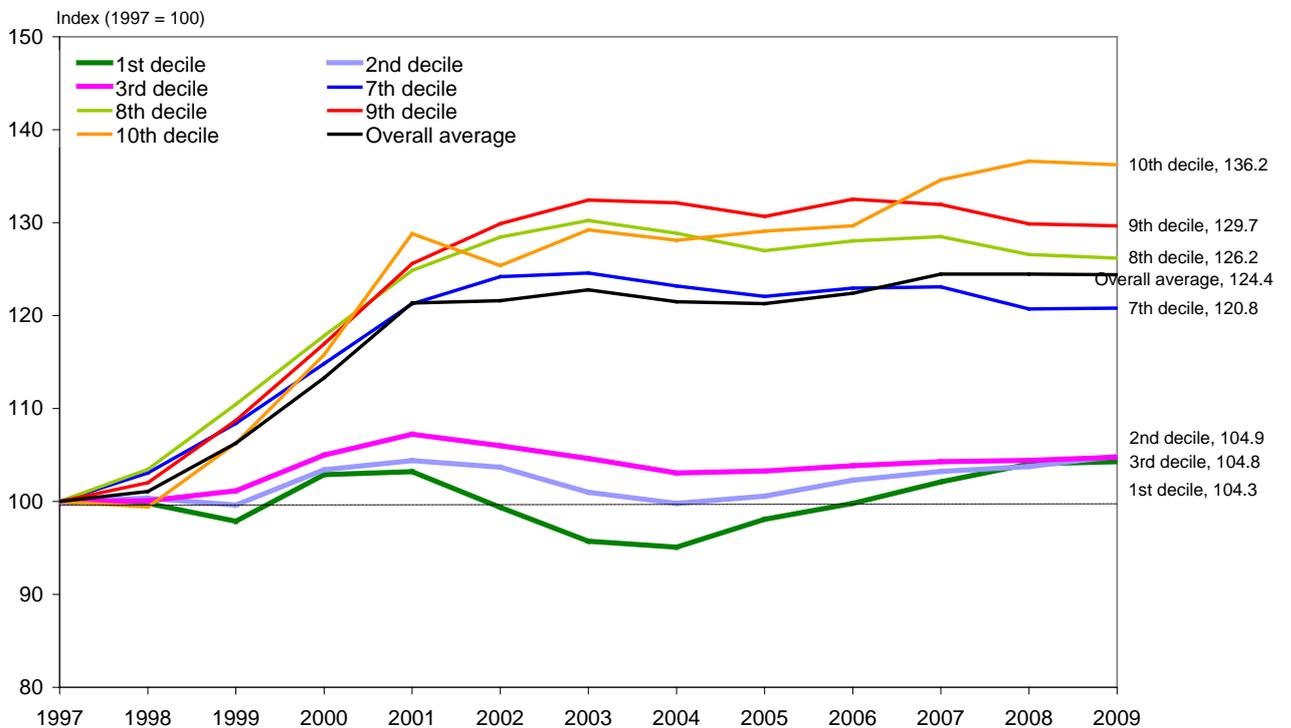
In fact, the increase in low-income households over the past decade or so was due in large part to a surge in elderly and economically inactive households receiving little or no income earnings. To illustrate, among households in the lowest income decile, elderly households and non-elderly economically inactive households took up 70.3% in 1997; the proportion increased to 79.9% in 2009 (*Table 4*).

**Chart 2 : (a) Average monthly household income by decile in real terms, 1997-2009**



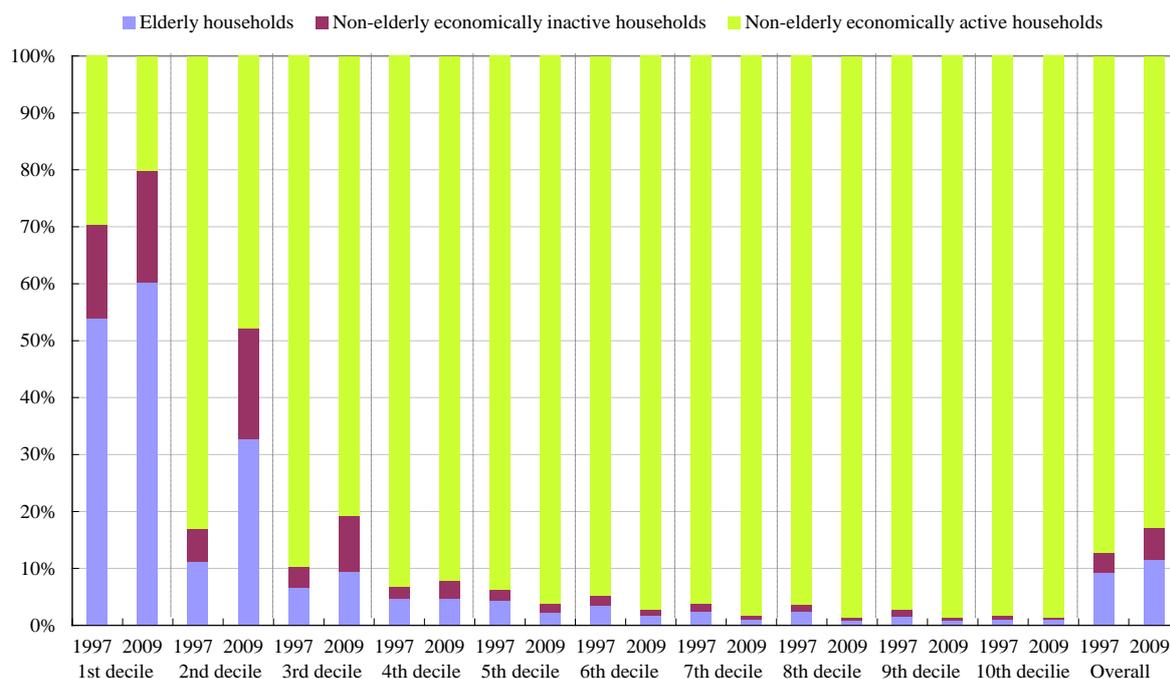
Notes: (1) Excluding foreign domestic helpers; (2) 1st-5th deciles are deflated by CPI(A); 6th-8th deciles by CPI(B); 9th-10th deciles by CPI(C); overall average by CCPI. Source: GHS, C&SD

**(b) Average monthly employment earnings of full-time employees by decile in real terms, 1997-2009**



Notes: (1) Excluding foreign domestic helpers; (2) 1st - 5th deciles are deflated by CPI(A); 6th-8th deciles by CPI(B); 9th-10th deciles by CPI(C); overall average by CCPI. Source: GHS, C&SD

**Chart 3 : Household composition change by decile, between 1997 and 2009**



**Table 4 : Economically active/inactive and elderly households in the lowest decile**

	Number of elderly households	Number of Non-elderly households		Elderly households + non-elderly economically inactive households	Total number of households	% of elderly households + non-elderly economically inactive households
		Economically inactive	Economically active			
	( a )	( b )	( c )	( d )= ( a ) + ( b )	( e )=( a )+( b )+( c )	( f )=( d )/( e )
1997	103661	31565	57057	135226	192283	70.3%
2000	122444	36489	44772	158933	203705	78.0%
2003	117864	33245	60296	151109	211405	71.5%
2006	133231	43550	45305	176781	222086	79.6%
2007	136269	46032	42410	182301	224711	81.1%
2008	136785	49580	41378	186365	227742	81.8%
2009	139056	45698	46405	184754	231160	79.9%

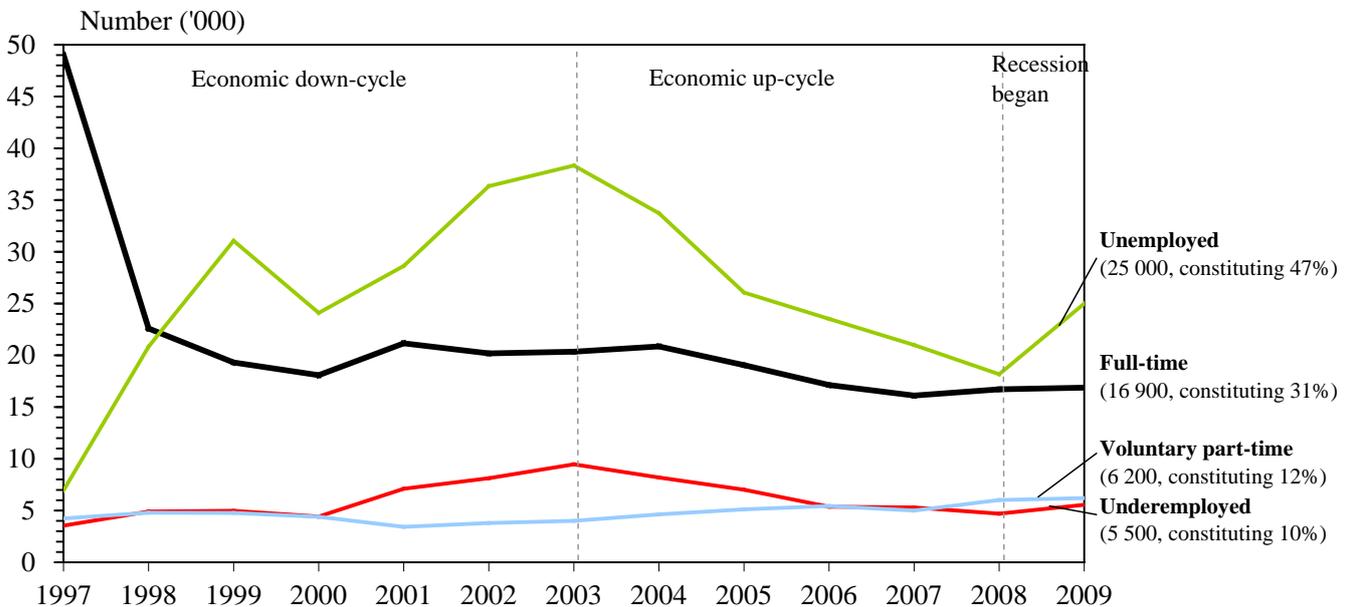
It is not difficult to understand the rising income gap, in light of the differential change in household composition across decile groups over time. It also highlights how ignoring household composition and merely adjusting for household size in compiling the Gini coefficient is insufficient and will likely distort the true income disparity picture.

(II) Business cycle factors

From **Chart 2**, both the average monthly household income and employment earnings roughly follow the ups and downs of the economy, dipping visibly in the aftermath of the Asian Financial Crisis (AFC) in 1997-1998, the global economic downturn in 2001 and Severe Acute Respiratory Syndrome (SARS) in 2003, and more recently the global financial crisis in 2008-2009. In fact, business cycle is another relevant factor affecting income disparity, firstly as more people may lose their jobs and fall into the low-income group in a downturn and also as those with work suffer from the differential impact of recession on earnings.

For the non-elderly economically active households in the bottom decile, the main reason they fall into the low-income group is unemployment and underemployment. Specifically, amongst the lowest decile households in 2009, 47% were unemployed and 10% were underemployed. As can be seen from **Chart 4**, the number of unemployed and underemployed in these low-income households follows closely the economic cycle, rising generally in the six years after 1997 during a down-cycle (AFC, global downturn and SARS), and improving on an up-cycle in the ensuing five years after mid-2003. Many people in the grassroots were able to climb out of the low-income group and the number of low-income economically active households earning less than HK\$4,000 a month fell markedly. The economic upturn between mid-2003 and mid-2008 created nearly 130,000 jobs for low-skilled workers and brought down the number of unemployed in these low-income households by 63%. The number of unemployed in the bottom decile rose again from 2008 to 2009 with the onset of recession caused by the global financial crisis.

**Chart 4 : Composition of economically active persons in the first decile of households**



Economic recession also takes a toll on earnings income among the full-time employed, especially for those who are older, less educated and lesser skilled. As a result, the low-income group is often the most vulnerable to pay reduction. From *Chart 2*, the monthly employment earnings of full time employees in real terms dropped more visibly for the lowest three decile groups during the recession periods. The earnings of these people recovered during the upturn in 2004-2008, basically returning to their 1997 peaks by around 2006 and were around 5% higher by 2009. This suggests that economic growth is the primary defence against earnings decline and falling into the poverty trap. And in the era of globalisation where jobs and capital can migrate, skill and knowledge upgrading is very important in ensuring that our workforce can enjoy the fruits of economic prosperity.

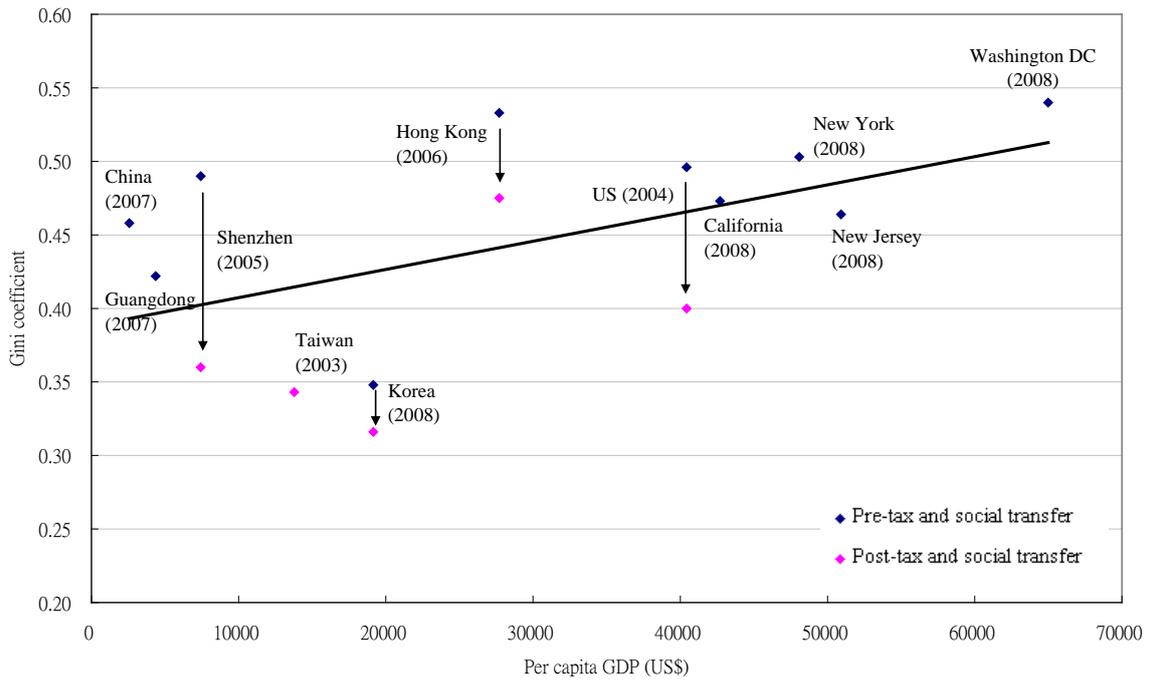
### *(III) Economic restructuring*

Rising income disparity may also be explained by a change in economic structure. Here, an international comparison may be useful in understanding how the income gap may change in relation to certain economic structures or features. Specifically, it is found that the Gini coefficient tends to be higher for high output and service-oriented city economies. In the case of Hong Kong, the gradual shift towards a high value-added, knowledge-based and service-oriented economy and sustained increase in productivity over time point to a tendency of widening income gap. To align with the adjustment approach of most other economies under comparison, the per capita employed households Gini measures are used as Hong Kong's standardised income in the following comparisons.

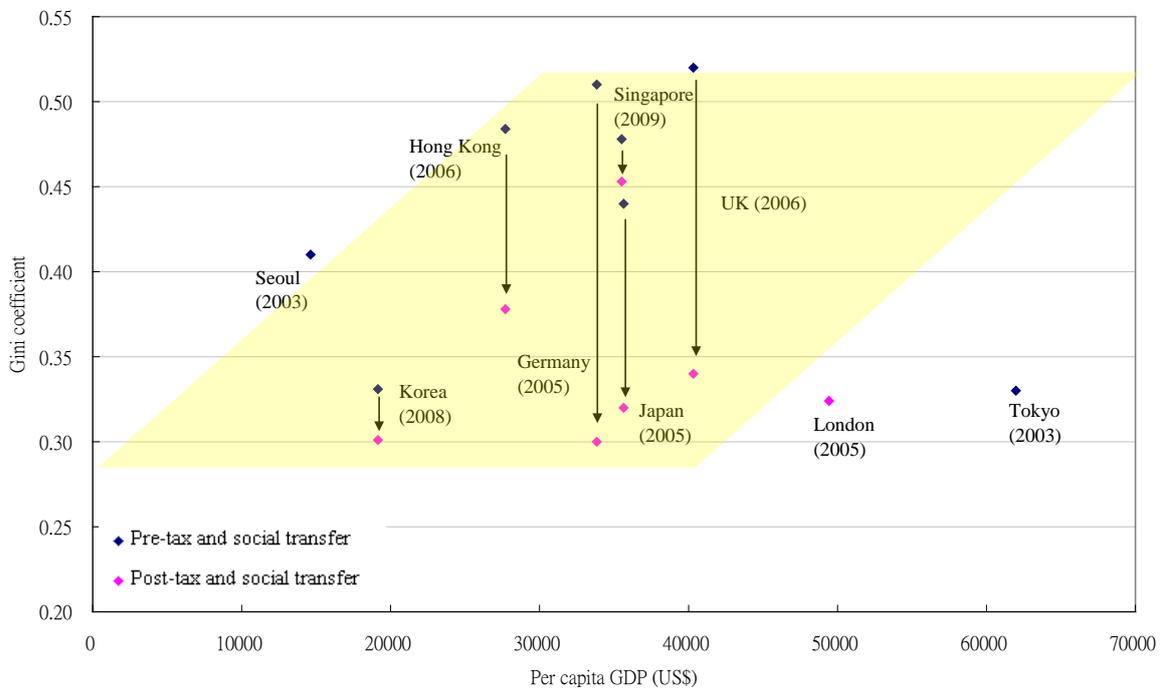
#### **Gini coefficient tends to be higher for high income and city economies**

From *Table 2*, it can be seen that city economies tend to have higher Gini coefficients. For example, Washington DC, New York City, Los Angeles and San Francisco all have higher Gini coefficients than the US; and Shenzhen has a higher Gini coefficient than China. Also, from *Chart 5*, economies with high per capita GDP tend to have higher Gini coefficients. Conceivably, advanced economies with higher per capita output are more oriented towards high value-added sectors, which may lead to a bifurcation of labour skills and greater income disparity. London and Tokyo are outliers since their Gini coefficients are artificially depressed due to the use of exclusion or equivalisation.

**Chart 5 : Gini coefficient tends to be higher for economies with high per capita GDP**  
**(a) Gini coefficients compiled based on overall household income**



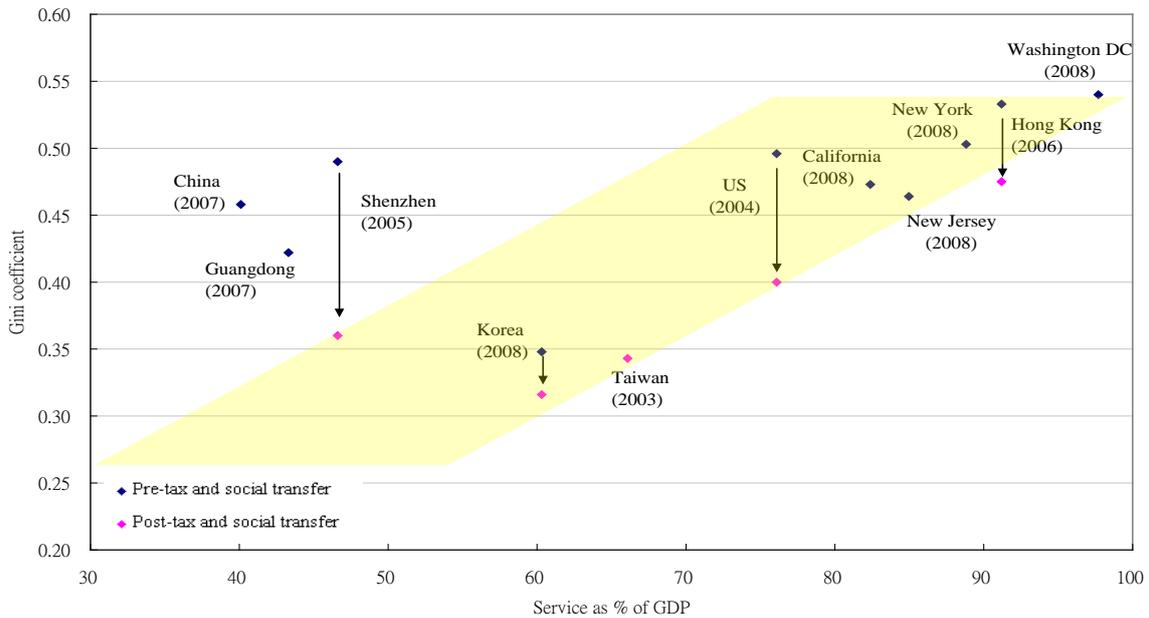
**(b) Gini coefficients compiled based on standardised income adjusted for household size and composition**



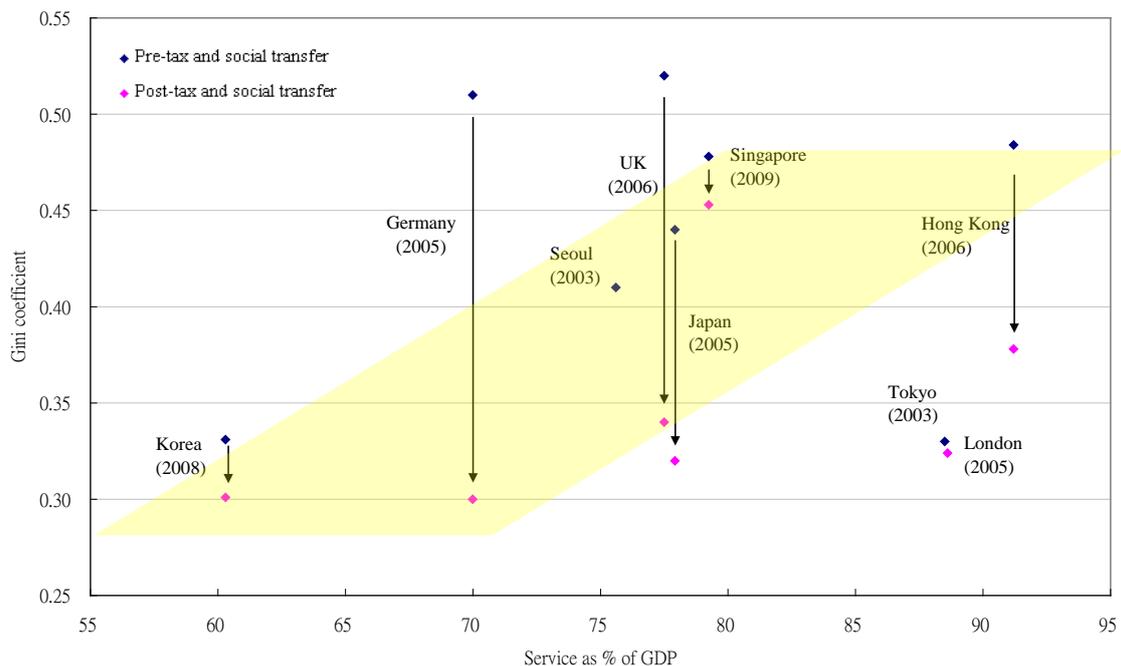
## Gini coefficient tends to be higher for service-oriented economies

**Chart 6**, which plots the relationship between the Gini coefficient and GDP share in services, seems to suggest a post-industrial stage of development is associated with greater income disparity, conceivably due to the knowledge-intensive nature of the service industries. This rings an echo of Inglehart’s World Values Survey that a post-industrial society is likely to see a shift of values towards post-modern ones that call for equality and happiness. It also tallies with the observation that high income economies tend to have greater income disparity, since a large service sector is usually associated with higher per capita income, due to the high value-added nature of the service industries.

**Chart 6 : Gini coefficient tends to be higher for economies with higher GDP share in services**  
**(a) Gini coefficients compiled based on overall household income**



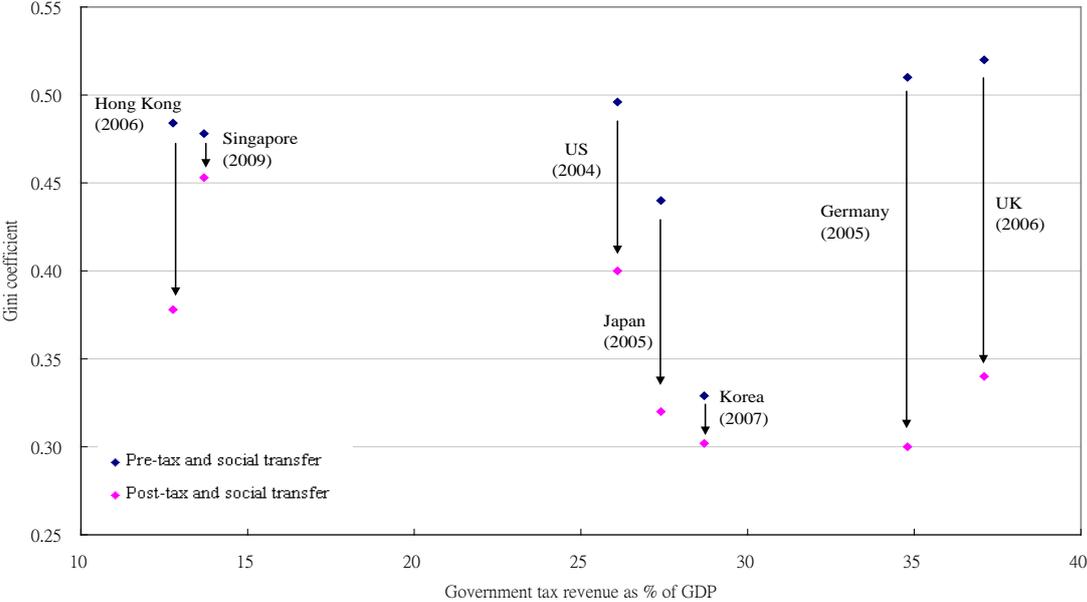
**(b) Gini coefficients compiled based on standardised income adjusted for household size and composition**



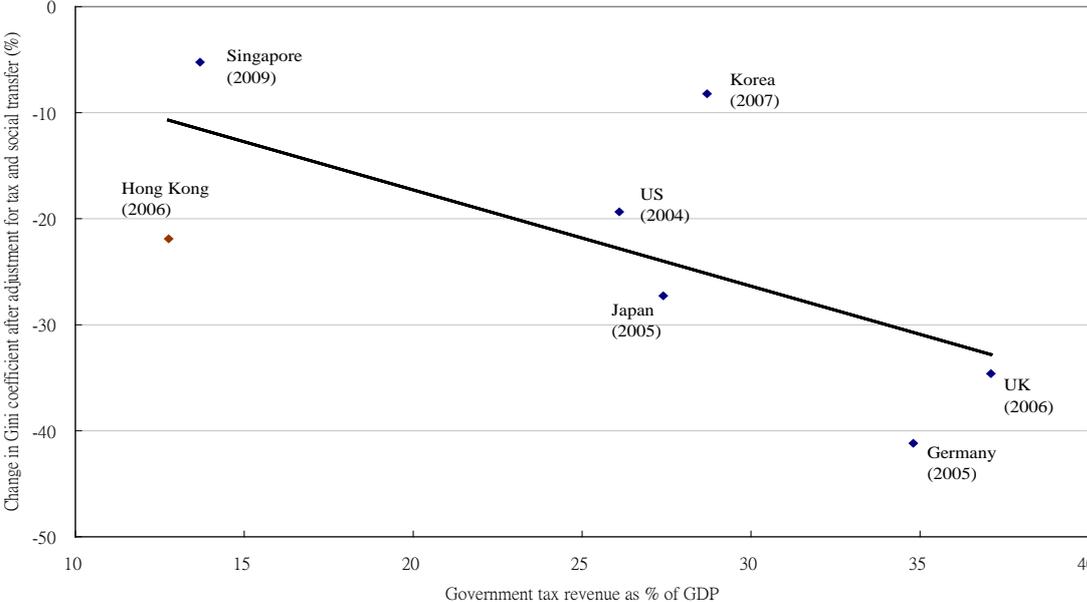
**Social redistribution can bridge the income gap, but at a cost of greater tax burden**

To see the effect of income redistribution, the Gini coefficients are plotted against the tax burden (*Chart 7*). Although there is limitation in cross-sectional comparison due to the use of different Gini definitions, it still points to one clear message, i.e. income redistribution is an effective tool in reducing income disparity, but the cost is higher tax burden, as illustrated by the US, the UK and Germany, which see a very large reduction in their Gini coefficients after tax and transfer, but very high tax burden as well (total government tax revenue at 25-40% of GDP). This suggests a trade-off between equity and efficiency, and involves policy choice in choosing one over the other.

**Chart 7(a) Income redistribution and social transfer can lower Gini coefficient significantly, but this would generally imply higher tax burden on households and corporates\***



**(b) The higher the tax burden, the greater the equalising effect and the sharper fall in the Gini coefficient after adjustment**



(\* ) Gini coefficients are adjusted for household composition except for the US. Government tax revenue data are sourced from OECD for US, UK, Germany, Japan and Korea; from official sources for Hong Kong and Singapore.

## **Income distribution is but one criterion for M-shaped society; education and training plays a key role in enhancing social mobility**

The above seems to point to a greater income disparity with economic advancement (higher per capita income; larger service sector). Does this imply that economic development will lead to “M-shaped” societies? According to Dr. Kenichi Ohmea, who proposed the idea of an M-shaped society, there are other indicators than income distribution to gauge the extent or existence of M-shaped societies. These include a rising number of temporary workers, a wider income divergence across industries, and weakening upward income mobility. Hong Kong’s case will not fit into an M-shaped society by these standards, according to a study by the C&SD in 2006<sup>1</sup>. Specifically, between 1996 and 2006, Hong Kong saw an uptrend in the number of part-time workers mainly due to female workers who voluntarily choose to work part-time to support their family; the difference between the highest and lowest median real employment income narrowed across the major economic sectors; and labour earnings were generally upwardly mobile.

A further study by the University of Hong Kong points out that upward earnings mobility actually improved in the more recent years<sup>2</sup>. Between 1998 and 2008, more than half of workers experienced earnings mobility, with 33% moving to a higher earnings quintile and only 20% moving down. The study also finds that intergenerational poverty is not as high as perceived. Among those children whose fathers were in the lowest earnings quintile group, 82% of sons and 74% of daughters managed to move up the earnings ladder. Finally, education, training and retraining is found to be an effective defence against downward earnings mobility. Between 1998 and 2008, 24% of men with a primary or below education moved down the earnings ladder, compared to only 10% for those with degree or above education; the result for women is similar. It is fair to note that a higher education does not necessarily translate into higher upward mobility, since people with more education tend to reach the top earnings quintile more quickly, after which they may not be able to advance much further. Education is also a gateway to associate professional occupations and the primary route by which children can acquire new skills and break out of their parents' occupational mould.

### **Concluding remarks**

While Hong Kong’s Gini coefficient appears rather high at first glance, the Gini coefficient should not be taken at face value since it is subject to a host of adjustments which makes direct comparison across economies problematic. The major sources of difference are adjustments for income redistribution, household size and composition. We attempted to filter out these effects by considering the different measures separately, and found that the Gini coefficient tends to be higher for city economies, and for high income, service-based economies.

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<sup>1</sup> C&SD 2006 *Population By-census, Thematic Report: Household Income Distribution in HK, Appendix B: Has Hong Kong Developed into an “M-shaped Society”?*

<sup>2</sup> James P. Vere (2009) *Special Topic Enquiry on Earnings Mobility*.

In the case of Hong Kong, the relatively high Gini coefficient may be attributed to demographic changes (specifically, an aging population and decreasing household size), business cycle factors (unemployment and impact on earnings), and economic restructuring (shift towards a service-oriented, high value-added and knowledge-based economy, and generally widening trend with economic advancement over time). To further filter out the distortion from household composition change, and using a more relevant gauge of in-work income disparity that focuses on employed households only, Hong Kong actually saw a narrowing of income gap among employed households between 1996 and 2006.

*Three-pronged approach to fighting poverty: income redistribution, education and training, and economic development*

These major causes of income disparity point to some directions in alleviating poverty and mitigating the income gap. For the demographic factor, a social safety net may be provided to the elderly and to those in need. It is found that taxation and social transfer can significantly reduce the Gini coefficient, suggesting that income redistribution is very effective in bridging the income gap, albeit at a cost of heavier tax burden. In fact, the Government devotes more than one third of recurrent public expenditure to wealth, housing, and social welfare to improve the livelihood of people and improve the social fabric. Income redistribution is also relevant during economic downturns, when the Government acts as automatic stabiliser and provides counter-cyclical relief measures in the short term to help the vulnerable group tide over difficult times.

To address the impact on income disparity due to economic restructuring, education, training and retraining is a useful tool in enhancing upward social mobility and reducing intergenerational poverty, as it can better equip our labour force to counter the bifurcation of skills brought about by economic advancement. Indeed, the Government attaches great importance to education and training in improving the employability and safeguarding the income of our labour force in the medium term. Education takes up the largest share of recurrent public expenditure, amounting to over 20%. Last but not least, the best way to alleviate poverty is to promote economic growth and development, as this is the key to creating employment and securing income.

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