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# Home prices and inequality: Singapore versus other 'global superstar cities'

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# Home prices and inequality: Singapore versus other 'global superstar cities'

The bottom half here own a quarter of gross housing wealth, a more equal distribution than in other cities with higher-than-average house price growth

By Phang Sock Yong



In the Economist Intelligence Unit's Global City Competitiveness Index, Singapore is ranked third in global competitiveness, and the most globally competitive in Asia.

THE topics "superstar cities", "inequality" and "housing policy" are often discussed separately.

I will focus on the area where they overlap - in particular, how housing policy has been used to mitigate inequality in the context of Singapore, a global superstar city.

The Global City concept originates from the work of sociologist Saskia Sassen, which dates back to the 1980s. In an age of globalisation, division of labour is international in scope and production activities are distributed across the world. A global city is a significant point where the internationally oriented financial and producer services that make the global economy run choose to agglomerate.

In the Economist Intelligence Unit's Global City Competitiveness Index, Singapore is ranked third in global competitiveness after New York and London, and the most globally competitive in Asia. The fourth position is shared by Paris and Hong Kong, and Tokyo is ranked sixth.

#### Superstar cities

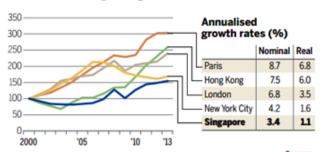
THE term "superstar cities" is a more recent concept and is the title of a study of United States cities by urban economists Joseph Gyourko, Christopher Mayer and Todd Sinai. Their paper notes the considerable differences in long- run house price appreciation rates across US metropolitan areas and towns after World War II.

These differences led to an ever-widening gap in housing prices between the most expensive metropolitan areas and the average ones. They define locations that experience persistently higher-than-average house price growth as "superstar cities".

From the housing price appreciation perspective, Tokyo is a global city but is not a superstar city.

Chart 1 shows the housing price trends in the top five global cities, namely, New York, London, Singapore, Paris and Hong Kong. The superstar prize goes to Paris, and Singapore comes in last among the top five global cities.

Chart 1: House price growth rates 2000 - 2013



Compiled from data from S&P/Case-Shiller Home Price Index and government websites (Hong Kong Government Rating and Valuation Department, France's National Institute for Statistics and Economic Studies, UK Office for National Statistics, Singapore Urban Redevelopment Authority)

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Besides having higher than average house price growth, global superstar cities also have higher levels of economic inequality. Income inequality has been increasing in most of the developed countries in the past few decades.

Singapore's Gini coefficient for resident households last year after taxes and transfers was 0.412, which is higher that most of the high-income OECD countries. But comparing Singapore's Gini coefficient with country-level Gini coefficients may not be entirely appropriate.

National inequality measures mask considerable variations across cities within the same country. Studies have shown that within the same country, income inequality can be expected to increase with the size of the city.

A larger city size increases productivity as more skilled people are attracted to the location, and higher urban productivity further incentivises migration from rural areas, smaller cities and across borders. The global superstar cities New York and London have income Gini coefficients (after taxes and transfers) in the 0.4 to 0.5 range. Singapore's Gini coefficient is comparable to other cities of similar size and lower than the Gini coefficients of New York, London and Hong Kong (see Chart 2).

Chart 2: Household incomes Gini coefficients

After taxes and transfers

Global City (2011)	Gini coefficient		
NY Metropolitan Area	0.475		
Greater London Area	0.436		
Hong Kong**	0.430		
Singapore (2014)*	0.412		
Paris-Ile-de-France	0.372		

Country	Gini coefficient
United States	0.389
United Kingdom	0.338
China (2012)	0.474
Singapore (2014)*	0.412
France	0.303

NOTES:

\*Singapore – resident employed households \*\*Hong Kong – excluding foreign domestic helpers

Sources:

EUROMONITOR FOR 2011 CITY DATA; OECD FOR 2010 COUNTRY DATA; GOVERNMENT WEBSITES ST GRAPHICS

#### **Thomas Piketty**

POST-2014, it is impossible to discuss economic inequality without referring to Thomas Piketty's book, Capital In The Twenty- First Century, which won numerous awards last year. Piketty highlights rising income inequality as a major problem, focusing on the increasing share enjoyed by the top 1 per cent and top 10 per cent.

My estimates for income shares for the top five global cities show Singapore's income distribution to be less equal than Paris', but more equal than those of London, Hong Kong and New York City (see Chart 3).

Chart 3: The higher inequality of global superstar cities

	Paris 2009 (ag)	Singapore* 2014 (be)		HK** 2011 (ag)	NYC 2009 (bg)	US 2009 (bg)
Top 10%	25%	28%	28%	39%	57%	43%
Next 40%	50%	49%	53%	42%	33%	44%
Bottom 50%	25%	23%	18%	19%	10%	13%
NOTES: Paris Singapore London HK (household incomes) NYC and the LIS (total income						

NOTES: Paris, Singapore, London, HK (household incomes), NYC and the US (total income from tax returns).

SHARES ESTIMATED FROM DATA IN SINGAPORE DEPARTMENT OF STATISTICS, KEY
HOUSEHOLD INCOME TRENDS, 2014; HONG KONG CENSUS AND STATISTICS
DEPARTMENT (2012), 2011 POPULATION CENSUS - THEMATIC REPORT HOUSEHOLD
INCOME DISTRIBUTION IN HONG KONG; NEW YORK CITY COMPTROLLER (2012), INCOME
INEQUALITY IN NEW YORK CITY; THESEIRA M (2014), CHANGING INCOME AND SPENDING
BEHAVIOURS OF LONDON HOUSEHOLDS; GUYON N (2012), SPATIAL SEGREGATION OF
INCOMES IN FRANCE IN THE 2000'S
ST GRAPHICS

Piketty's greater concern, however, is with the distribution of wealth - that capital or wealth ownership is much more concentrated than the distribution of income from work. His data for the US indicates that the top decile own 72 per cent of America's wealth, while the bottom half's claim is just 2 per cent.

In most European countries, the richest 10 per cent own around 60 per cent of national wealth, the poorest 50 per cent invariably own less than 5 per cent. In his view, it is this unequal ownership of capital that is a prime driver of income disparities.

Piketty also includes in his book his view of capital ownership distribution in an "ideal society". To quote Piketty: "To my knowledge, no society has ever existed in which ownership of capital can reasonably be described as 'mildly' inegalitarian, by which I mean a distribution in which the poorest half of society would own a significant share (say one-fifth to one-quarter) of total wealth... Of course, how one might go about establishing such an 'ideal society' - assuming that such low inequality of wealth is indeed a desirable goal - remains to be seen."

Not only is present capital ownership very unequal, but Piketty also expects the inequality to increase over time as the rate of return on capital - generally 4 to 5 per cent - has throughout history been greater than the global growth rate, except during the second half of the 20th century.

This inequality results in redistribution of income towards holders of capital and increasing inequality of wealth. Adding to this force for divergence is the rise of super-salaries of corporate chief executive officers, which, according to Piketty, is determined more by social and political norms rather than economic forces.

To regain control of capitalism without giving up its benefits, he advocates more progressive income taxes with the top marginal tax rate of 80 per cent for incomes above US\$500,000 (S\$682,000) to US\$1 million, and a utopian idea - a global capital tax ranging from 0.1 per cent to 10 per cent on the total wealth to restrain the growing power of inherited wealth.

a = after tax, b = before tax; g = gross income, e = employment income.

<sup>\*</sup>Singapore – resident employed households

<sup>\*\*</sup>Hong Kong - excluding foreign domestic helpers

#### From Piketty to George

PIKETTY adopts a very broad definition of capital and does not treat land or real estate assets differently from other forms of capital. As Singaporeans know only too well, land does deserve special treatment, and should be treated as distinct from globally mobile capital for policy purposes - especially in a land-constrained global superstar city.

The ideas of another economist, Henry George, who proposed a quite different utopian idea over a century ago, are more relevant in the context of superstar cities. George's 1879 book, Progress And Poverty, was a bestseller on both sides of the Atlantic in the 1890s. In his time, the rapid development of cities in 19th-century America caused substantial increases in land prices. This had large wealth and income redistribution effects as landowners and land speculators enjoyed huge windfalls. These windfalls, in turn, fuelled expectations for future price increases, resulting in speculative bubbles.

The crash that inevitably followed would wipe out vast amounts of asset values - creating another set of winners and losers which may not necessarily match the first set of winners and losers. Unlike Marx, George held nothing against the capitalists. Instead, his remedy was that any increase in land rents should be shared by society rather than fall into private hands. ("We must make land common property"). To effect this, he advocated a 100 per cent land value tax on the annual value of unimproved land held as private property.

What this meant was that buildings and other improvements (the product of the efforts of capital and labour) would not be included in the tax base. The proposed tax was called the single tax as, in his view, it would be sufficient to support all levels of government, thus permitting all other taxes on labour, capital and production to be abolished.

Prominent fans of George have included personalities as diverse as Leo Tolstoy, Winston Churchill, Sun Yat Sen, Milton Friedman, and Joseph E. Stiglitz. Modern-day Georgists advocate partial land value capture taxes as a less extreme form of George's land tax.

The few jurisdictions that have implemented site value taxation separate the property tax base into an unimproved land value component and improvements, and tax property owners at a higher rate on the unimproved land value. In the urban transport sector, land value capture through a betterment tax is often proposed as a means of funding the cost of expensive transport infrastructure such as urban rail transit.

Singapore's housing wealth redistribution framework can be interpreted as containing elements of George's land value capture tax and Piketty's progressive wealth tax, in addition to other significant and innovative institutions and policies.



Republic's housing kept affordable

As a global superstar city as well as a nation state, Singapore has harnessed the entire spectrum of land and housing policies to keep housing prices affordable. Its house price to income ratio of five is the lowest among the global superstar cities.

#### 1960s: Framework for housing provision

SOON after independence, the Land Acquisition Act was passed in 1966, which gave the state broad powers to acquire land. In 1973, the concept of a statutory date was introduced, which fixed compensation values for land acquired at the statutory date, Nov 30, 1973. State land as a proportion of total land grew from 44 per cent to 76 per cent by 1985 and is currently around 90 per cent. A significant portion of the increase is from land reclamation as about 20 per cent of Singa- pore's land is reclaimed land.

Subsequent amendments to the Act changed the statutory date for purposes of valuation for compensation. In 2007, the use of historical statutory date was removed by Parliament, and compensation has since been pegged to full market value.

The Land Acquisition Act was one of three important pieces of legislation passed in the 1960s when the foundations of Singapore's policies for urban transformation were being laid.

The other two important components of these foundations (created by the respective legislation) were the Housing and Development Board (HDB) in 1960, and the expansion of the role of the Central Provident Fund (CPF) to include housing finance in 1968.

Through a carefully structured housing system which was established by 1968, land resources and domestic savings were channelled into the HDB home ownership sector. The HDB played an important role in resettlement, land use planning as well as the development of new towns with comprehensive public amenities.

As the economy grew, its primary role in the construction of high-rise HDB housing and making home ownership affordable helped to ensure that the benefits of economic growth were widely distributed and shared. By 1990, 87 per cent of the resident population were already housed by the HDB, and the home ownership rate had increased to 88 per cent. The property-owning democracy was not a mere utopian ideal but had, instead, become a reality.

#### 1990s: Growth in value of HDB housing assets

IN THE 1990s, the focus took on a qualitative shift instead; in particular, it shifted to enabling upgrading to larger and better-quality flats, the deregulation of the HDB resale market, including opening the market to permanent residents, increased housing loans for HDB resale flats, physical upgrading of HDB flats and neighbourhoods, as well as the introduction of CPF housing grants.

These policies contributed, in part, to the rapid increase of HDB flat values in the early half of the 1990s. HDB resale price increases were higher than private housing price increases in the 1990s.

The wealth-share effects of these differential price movements show up clearly in the household sector balance sheets. From zero share of housing wealth in 1965, HDB households' share of gross housing wealth exceeded 50 per cent at the peak of the housing boom, and increased further to 60 per cent during the Asian financial crisis. In the past decade, the share has been about 50-50. Despite the volatility of asset prices and values, by 2005, 85 per cent of the resident population (HDB households) enjoyed a share of about 50 per cent of the gross housing wealth.

#### From 2005: Housing wealth redistribution

SINCE 2009, under the Lease Buyback Scheme, elderly home owners residing in three-room (or smaller) HDB flats have been able to monetise their HDB assets for the purpose of retirement financing. Last August, Prime Minister Lee Hsien Loong expanded the scheme to include HDB four-room flats.

Using the same illustration, an HDB four-room flat, bought for about \$24,200 in 1980, lived in for 34 years, is now worth \$450,000. It can be retained for the next 30 years, and the HDB this year buys back the 35 years of the end lease for \$190,000 to help the elderly household finance retirement. This is the provision of a retirement safety net for elderly households based on their ownership of a four-room or smaller flat - at significant interest rate risk and house price depreciation risk for up to 30 years for the HDB.

Why, then, is there the need to "cool" the housing market in recent years? There are at least four reasons.

First, I use the George Effect to refer to the "unearned increments" that accrue to property owners and those who were "lucky" based on when they entered and exited the market, as well as to speculators and investors who contribute to market exuberance and bubbles.

Second, the persistence of house price appreciation that exceeds wage growth in the longer term could also lead to the entrenchment of what I call the Piketty effect - growing inequalities in incomes and wealth from inheritance flows and a growing rentier class.

Third, the house price level is a key economic variable that affects the lives, happiness and wealth of Singapore households. It should not become a variable that is determined by the actions of foreign speculators, global liquidity and the agendas and monetary policies of foreign governments.

Fourth, it is now widely accepted that housing bubbles can pose a threat to financial and macroeconomic stability. The numerous housing market cooling measures that have been introduced after the global financial crisis in Singapore as well as in numerous other countries are also known as prudential regulations.

Micro-prudential supervision aims to ensure the resilience of individual financial institutions to shocks and include regulatory standards on bank capital adequacy, leverage ratios and liquidity.

Macro-prudential regulations of the housing sector aim at increasing the resilience of the financial system as a whole and include caps on loan-to-value ratios, total debt service to income ratios, as well as stamp duties to curb speculation by the cash rich.

I would like to include another category of prudential regulation - social-prudential regulations which ensure the resilience of society and the country as a whole. This category of housing regulations includes affordable home ownership policies, as well as the integration of various income groups and races in the same housing estates.

The housing tax regime has been made more progressive, with higher transaction taxes for foreigners and investors, and owners of higher value properties paying higher property tax rates. (Stamp duties, however, can reduce transaction volumes and lead to potential sellers withholding supply. At the appropriate time, it would be good to gradually reduce these and replace them with property tax increases which should aim to have a similar effect on house price appreciation.)

In what can be described as a retreat from the market, new HDB flats are now offered at affordable prices that are "delinked" from market prices. Taxing wealthy property owners and investors at a higher rate and simultaneously subsiding entry into home ownership for lower-income households have created a housing tax and subsidy code that is highly progressive and more complex than the income tax code. At the point of purchase, the range is from 15 per cent additional buyer's stamp duty for foreigners, to price subsidies for HDB two-room flats that can be as high as 50 per cent (based on the difference between resale and new flat prices).

In addition to the price discount for each household purchasing an HDB flat, the effective housing subsidy is further carefully calibrated through a system of differential housing grants (from \$0 to \$80,000) based on a host of criteria. Housing wealth redistribution has become much more targeted, nuanced and fairer in approach.

#### Comparison across cities

AS A global superstar city as well as a nation state, Singapore has harnessed the entire spectrum of land and housing policies to keep housing prices affordable. Singapore's house price to income ratio of five is the lowest among the global superstar cities, with Hong Kong's ratio at 17 (see Charts 4 and 5).

# Chart 4: Housing affordability and home ownership

	Median house price (S\$)	Median household income (S\$)	Price to income ratio	Home ownership rate	Social rental housing
Hong Kong	\$853,750	\$50,100	17	51%	30%
Paris	\$606,000	\$62,400	9.7	48%	25%
London	\$793,100	\$93,700	8.5	48%	24%
New York City	\$554,580	\$90,600	6.1	32%	5%
Singapore	\$405,000	\$80,900	5	91%	4%

Sources: DEMOGRAPHIA INTERNATIONAL HOUSING AFFORDABILITY SURVEY 2015: GOVERNMENT WEBSITES ST GRAPHICS

Chart 5: Income inequality and housing affordability



#### Chart 6: Capital ownership

Piketty's ideal society realised in Singapore's gross housing wealth distribution

	Medium-high inequality (Europe 2010)	Medium inequality (Scandinavia 1970s-1980s)	Low inequality (never observed: ideal society)	Gross housing Wealth (Singapore 2014)
Top 10%	60%	50%	30%	35%
Next 40%	35%	40%	45%	40%
Bottom 50%	5%	10%	25%	25%
Corresponding Gini coefficient	0.67	0.58	0.33	0.36

Sources: THOMAS PIKETTY (2014), CAPITAL IN THE TWENTY-FIRST CENTURY, HARVARD UNIVERSITY PRESS, P.248; SINGAPORE SHARES ESTIMATED FROM HOUSING MARKET TRANSACTION DATA AND SINGAPORE DEPARTMENT OF STATISTICS DATA ON HOUSEHOLD SECTOR BALANCE SHEET 2014 AND KEY HOUSEHOLD TRENDS 2014

ST GRAPHICS

Singapore's resident home ownership rate of 91 per cent is also an outlier, with Hong Kong, Paris and London relying on social rental housing to meet the housing needs of lower-income households. New York City has a small public-housing sector but relies on rent vouchers as well as rent control regulation of nearly half of its private rental housing stock.

Based on my estimates, the low inequality that has been achieved in the distribution of Singapore's gross housing asset comes close to capital distribution in Piketty's "ideal society". The bottom 50 per cent owns one quarter of the gross housing wealth (see Chart 6).

If the data for overall household wealth distribution were available, the overall wealth distribution would probably approximate the Scandinavian wealth distribution in the 1970s and 1980s.

This aspect of housing achievement has been arrived at through astute political decisions, an effective and non-corrupt government, and the hard work of government agencies such as the HDB and Urban Redevelopment Authority.

In particular, I would like to conclude with a personal tribute to our founding Prime Minister, the late Mr Lee Kuan Yew, for his visionary leadership of Singapore during its first critical decades. We are all deeply saddened by his passing.

The writer is Celia Moh Professor and Professor of Economics, Singapore Management University. This article is a summary of a lecture delivered on March 23 at SMU.