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#### Do Singaporeans Spend too Much on Housing?

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#### Do Singaporeans spend too much on housing?

Summary of a presentation by Professor Phang Sock Yong Singapore Management University 10 May 2013 Institute of Policy Studies

#### A. Introduction

According to a 2011 IMF study, Singapore's level of government intervention in housing finance is the highest in the developed world (Slide 3). This level of intervention in housing finance has correspondingly produced the highest level of homeownership amongst advanced countries. This housing outcome is the result of our very unique HDB-CPF housing framework – an institutional framework that was established in the 1960s during the formative period of our country's history (Slides 4 and 5). Singapore was, at that particular point in time, faced with a situation of chronic housing shortage, low homeownership rates and an underdeveloped housing mortgage sector due to the high risks involved in lending for low income housing (Slide 6).

Over the decades, the set of policies and institutions to mobilize resources for the housing sector produced excellent results in terms of improvements in the quantity and quality of the housing stock, rapid increase in savings, lending for home mortgages, as well as in the homeownership rate. Today, five decades on, the challenges we face are very different. However, the housing framework inherited from the 1960s remain little changed and a review is certainly timely.

#### **B.** The Empirical Evidence

To answer the question "Do Singaporeans spend too much on housing?", we consider the demand for housing for consumption, for investment, and for speculation. While rental housing constitutes consumption demand for tenants and investment demand for landlords, homeownership combines components of both consumption and investment (Slide 7).

Data from the 2010 Population Census **do not** indicate that Singaporeans are enjoying excessive housing space – at least not for households in the HDB sector (Slide 8). In

particular, 4 percent of households in the HDB sector are likely to be living in overcrowded homes. While it is possible that up to 9% of one and two person resident households could be living in flats that are bigger than what they may need, the census data is only for residents and do not include foreigners (either domestic workers or tenants) that could be residing in the same unit. Using **total** population rather than resident population figures, the average number of persons per housing unit has, in fact, increased from 3.5 persons from ten years ago to 4.0 persons in recent years (Slide 9).

The concerns about "overspending on housing" thus do not pertain to excessive housing space consumption but, instead, to concerns over housing prices rising at a rate much faster than incomes (Slides 10 and 11). Rising home prices benefit homeowners, investors and speculators while simultaneously causing housing stress for households who are waiting to purchase their first home (this was especially the case when BTO prices were linked to market prices). These trends also raise concerns over the risk to the financial sector and the economy should a housing bubble develop and burst.

The upward trend in housing prices has made housing a most attractive investment asset as compared to other asset classes (Slide 12). This is due, in part, to the scarcity of land in Singapore. In the past two decades, based on price indices, the returns on both private housing and HDB resale flat sectors have out-performed the STI on a risk adjusted basis (Slides 13 and 14). Leverage in real estate further magnifies the returns. The superior performance of the HDB sector is based on the resale price index alone and does not include the added benefits of generous subsidies, attractive rental yields (6 to 8%) or imputed income from owner-occupancy.

There is little evidence that current house prices are "bubbly". At the aggregate level, the gap between household sector asset value and net worth has not widened; private housing price increases are also well supported by rent increases (Slides 15 and 16). Although housing assets comprise 50% of the household sector portfolio, this is below the historical highs attained in the mid-1990s (Slides 17 and 18). At the aggregate level, the mortgage debt to housing asset ratio has actually declined in recent years. These outcomes are the result of careful monitoring by the MAS, caps on CPF withdrawals for housing, and the several rounds of macro-prudential or 'cooling' measures.

However, there remain concerns that the attractiveness of Singapore real estate as an asset class for both Singaporeans and foreigners can have negative consequences for efficiency, equity, innovation and growth (Slides 19 and 20). These concerns are not peculiar to Singapore, nor are they new in the Singapore context (Slides 21 and 22). [I have discussed these issues elsewhere in my earlier articles on "The Singapore Model of Housing and the Welfare State", and "Economic Development and the Distribution of Land Rents in Singapore: A Georgist Implementation".]

#### C. Three sets of housing issues

In today's discussion, three sets of housing issues need to be addressed: affordable rental, affordable homeownership and reducing the speculative and foreign investment demand for housing (Slide 23).

#### i) Affordable rental (Slide 24)

The affordable rental segment of Singapore's housing market has been marginalized by the deliberate and long standing policy bias towards homeownership.

Despite the undoubted benefits which have resulted from homeownership, there will nevertheless always be a segment of Singaporeans who are in need of housing support in the form of subsidized rental housing. For these households, there is a need to establish overcrowding standards, in particular for the welfare of children.

Rather than stand-alone rental blocks, integration of rental units within HDB BTO flats will allow for greater social integration.

The high rental yield for HDB flats is an indication that there is a need to expand the affordable rental sector. Housing Reits (privately managed) could be established to help cater to the rental housing needs of an increasing number of PRs and foreigners in Singapore as well as Singaporean households in transition.

#### ii) Affordable homeownership

For those waiting to purchase their first home, the availability of affordable housing, saving enough to pay for the down-payment, and affordability of mortgage payments remain the primary concerns. There have been many suggestions on how to address the homeownership affordability problem. These include removing the HDB income ceiling, the pricing of BTO flats, making changes to the Executive Condominium Scheme, as well as excluding a segment of future BTOs from the resale market (Slide 25).

Over the past few decades, the policy response during a period of rising house prices has been to expand existing housing subsidy schemes (by raising the income ceiling for subsidized housing) or to introduce new housing schemes (Slide 26). If we inflation-index the previous HDB and EC income ceilings of \$8,000 and \$10,000 from year 2000, the increase of these ceilings to \$10,000 and \$12,000, respectively, in 2011 have not in fact kept up with inflation (Slide 27).

In contrast to other welfare sectors (such as health or education), there is a high degree of historical path dependency in housing policy (Slide 28). Changes to institutions require "formative moments" in history. Housing finance is characterized by long term mortgage

contracts. Housing supply takes a long time to have their full impact. Investment decisions in real estate are made based on long term expectations. For these reasons, changes to rules on housing tenures and rights of exchange and possession are often regarded as a threat to existing owners. The market therefore expects considerable political restraint on changing rules overnight.

In the context of historical path dependency of housing policy in Singapore, income ceilings exist (for good reason) and have only moved up and not down (Slide 29). The pricing of BTO flats have implications for existing prices and serves as the risk-mitigating "cushion" for the rest of the housing market.

I agree that there is a need to review the Executive Condominium (EC) Scheme. In my view, the social, income and racial integration brought about by the HBD sector is one of the most important justification for subsidizing HDB housing. It will be easier to phase out the EC segment if the HDB income ceiling is simultaneously raised to \$12,000. The gap left by the EC can be filled by releasing the land meant for EC for mass market condominiums instead.

Alternative ownership segments already exist in the form of HDB studio housing for the elderly and the lease buyback scheme. Instead of excluding a segment of BTO flats from the resale market, the HDB could consider a shared ownership housing scheme as an alternative housing segment for lower income households. Households would then still be able to enjoy the asset appreciation value from their ownership of the flat.

#### iii) Reducing investment and speculative demand for housing

Many policies have been introduced in recent years to reduce the investment and speculative demand for housing (Slide 30). These include increasing transaction costs (stamp duties) for multiple property owners, loan to value ratio and debt service ratio caps, restrictions on ownership of second property, progressive property tax rates, amongst others. Given the present low interest environment and global wealth in search of low risk asset classes, I am supportive of these measures. However, should more be done?

I propose the Government encourage the establishment of Housing Reits as a more efficient form of housing ownership for property investors. Housing Reits can be used to introduce new rental segments as well as help enhance the efficiency and affordability of the rental sector.

I also propose that the government further tighten regulations on property investment by PRs and foreigners. Although PRs and foreigners are restricted in the market segments they can purchase housing in, their transactions at the high end margin can set prices and move markets (Slides 31 and 32). In this regard, Australia's policy towards foreign investors in their housing sector should be studied carefully as a possible model (Slide 33). I would like to suggest gradual phasing in of policies where PRs, foreign companies and foreigners who

are employed in Singapore are allowed (and only with permission) to purchase housing (in the apartments/condominiums sector) for owner-occupancy only (Slide 34). For existing PRs and foreigners who are multiple property owners, property tax rates for second and subsequent properties could be raised.

#### D. Concluding remarks

In conclusion, Singapore has experienced a situation of increasing housing shortage arising from a rapid increase in the population (Slide 35). As and estimated 200,000 units of new supply will be added to the housing stock in the next few years, the shortage will ease and we can expect prices to stabilize. Housing, though, remains an attractive investment, given the underlying housing framework in place, careful regulation of the sector and the long term plans and prospects for Singapore. It is hoped that the measures proposed above might assist in mitigating the difficulties that have arisen in the meantime.

#### Acknowledgment

I would like to thank Christopher Gee for helping to collect the data and for computing the risk-adjusted returns.

## "Do Singaporeans spend too much on housing?"

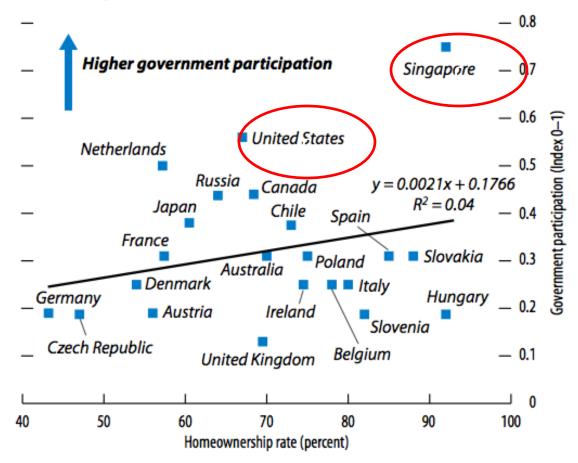
#### Phang Sock Yong Singapore Management University

Closed door discussion 10 May 2013 Institute of Policy Studies Lee Kuan Yew School of Public Policy National University of Singapore

## Outline

- A. HDB-CPF framework time for review?
- B. Housing consumption and investment overspending?
- C. 3 sets of housing issues
  - i) Rental housing
  - ii) Homeownership affordability
  - iii) Investment and speculative demand

#### Figure 3.4. Homeownership Rate and Government Participation in Housing Finance



Sources: European Mortgage Federation; Australian Bureau of Statistics; Japan, Ministry of Internal Affairs and Communications, Statistics Bureau; Singapore, Department of Statistics; U.S. Census Bureau; and IMF staff estimates.

Source: IMF (2011). Global Financial Stability Report, page 128.



#### Housing and Development Board 1960

- Town Planning
- Builds and sells housing
- Offers mortgage loans
  - 30 years
  - 90% LTV
  - interest rate 2.6%

#### Land Acquisition Act 1966

 Government can acquire land for any public, residential, commercial or industrial purpose

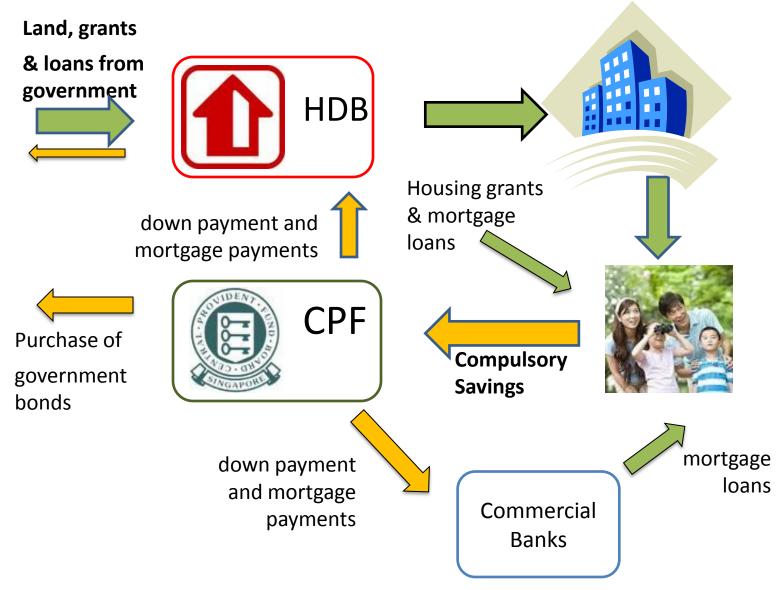


#### **Central Provident Fund**

 1968: Members can withdraw compulsory savings for housing finance

#### **Mobilization of Resources for Housing 1960s**

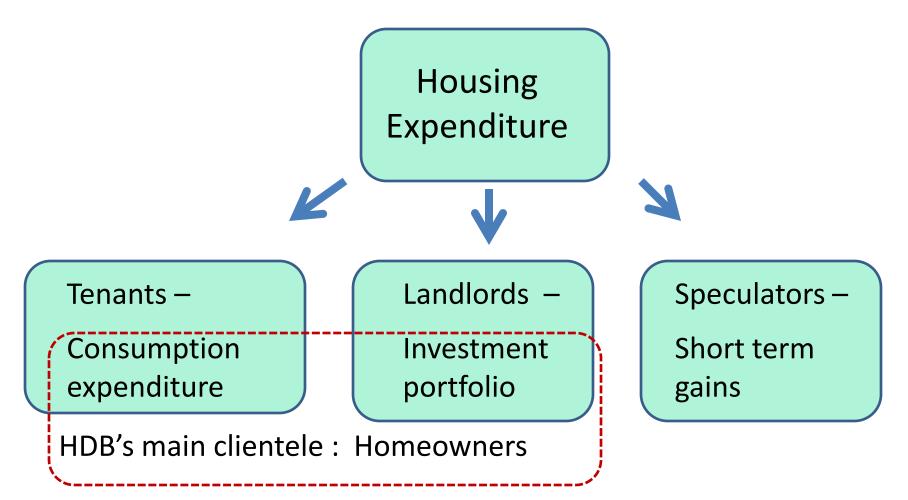
#### **The HDB-CPF Framework**



## Time for review?

1970	2013
• 29% homeownership	• 89% homeownership rate
rate	<ul> <li>"Spending too much on</li> </ul>
Chronic housing	housing?"
shortage	<ul> <li>Lenders competing for</li> </ul>
High risk in lending for	housing mortgage business
housing	Housing policies for
Housing policies for	homeownership affordability, asset appreciation and
welfare, social and political stability	retirement financing

## B. Consumption, Investment, & Speculative Demand



## No over-consumption of housing space

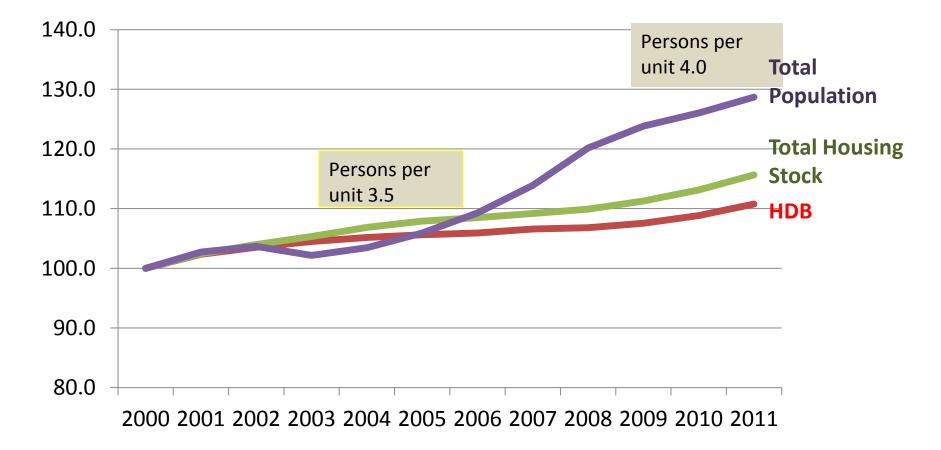
2010 Median household size 2.942; median household space per person 34 sq m20003.231 sq m

#### 2010 Resident Households by Dwelling Type and Household size

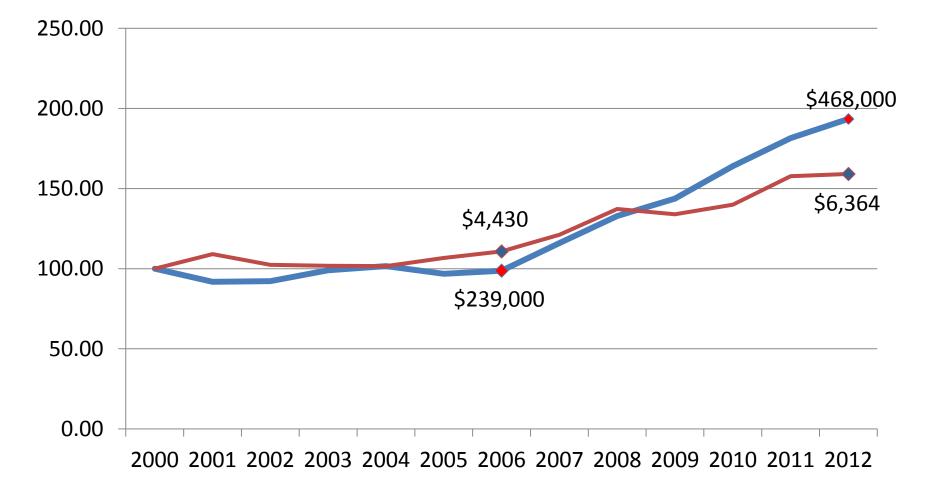
									_
	Size Sq m	Total	1 person	2	3	4	5	<u>&gt;</u> 6	
Total		1,145,920	139,876	215,005	231,351	263,944	167,993	127,751	
HDB Flats		943,859	114,380	182,680	196,816	220,309	132,998	96,677	
1- &	30								
2-Rm	45	52,275	20,711	17,489	7,135	3,785	1,902	1,253	
3-Rm	75	229,718	49,713	60,077	52,836	39,874	17,693	9,526	5
4-Rm	100	365,423	27,894	62,665	79,954	96,836	57,299	40,775	
5-Rm & Exec	123	293,336	15,018	41,878	56,303	79,406	55,808	44,923	

Over-consumption? Investment demand? Subletting? Empty nest? 9% of HDB hh Over-crowding? 4% of HDB hh

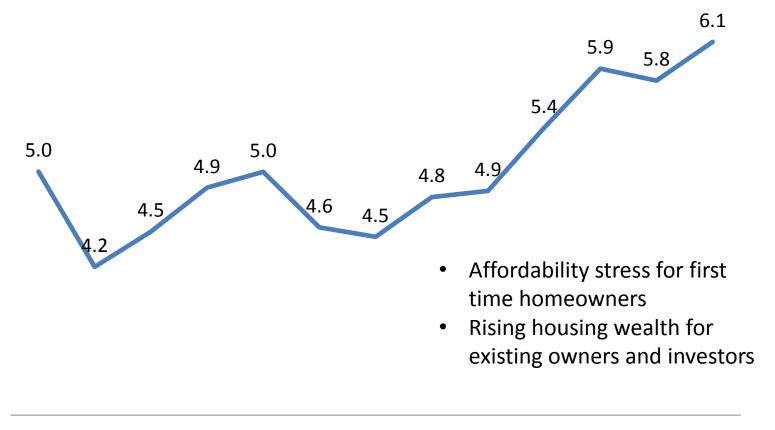
# Under-supply problem – increase in persons per unit?



## Median resident household incomes & median HDB 4-room flat resale prices



## Median 4-rm HDB resale price to median resident household income ratio



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

## **Investment demand for housing**

- Attractive risk adjusted returns for HDB resale and private housing > STI returns
- Minimal risk for HDB BTO new flats
- Enhanced by rental income and imputed rents on owner-occupancy
- Insurance value of HDB flats
- Low interest environment & easy access to mortgage loans
- Hedge against inflation
- Magnified by leverage
- Appreciation of S\$

### Risk-Adjusted Return Ratio (nominal)

		Average Nominal Return*	Standard Deviation	Risk-Adjusted Return Ratio
	Private housing	12.1	23.2	0.52
1990-1999	HDB resale	15.2	25.9	0.59
	STI	12.2	35.3	0.35
	Private housing	4.1	10.8	0.38
2000-2012	HDB resale	5.1	8.1	0.63
	STI	6.0	29.5	0.20

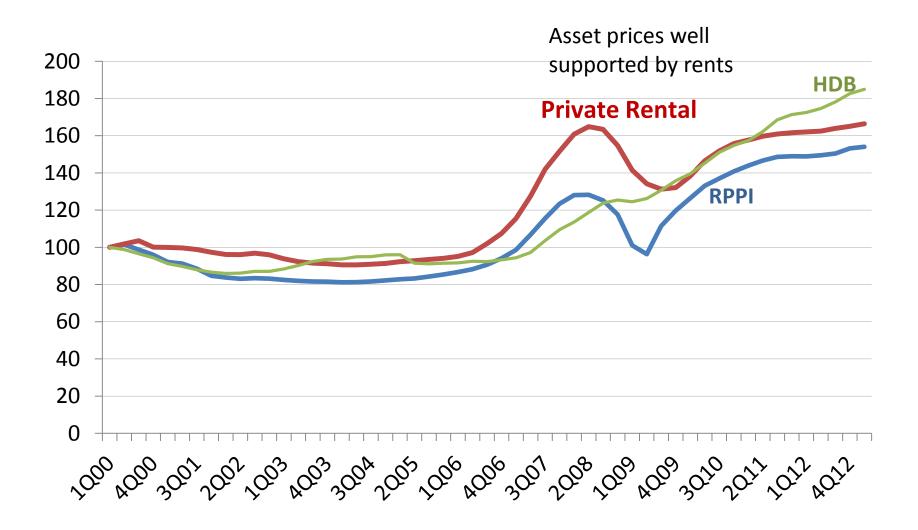
- \* Based on price index only
- + Gross rental income yields for HDB in the range of 6% to 8%

## Risk-Adjusted Return Ratio (real)

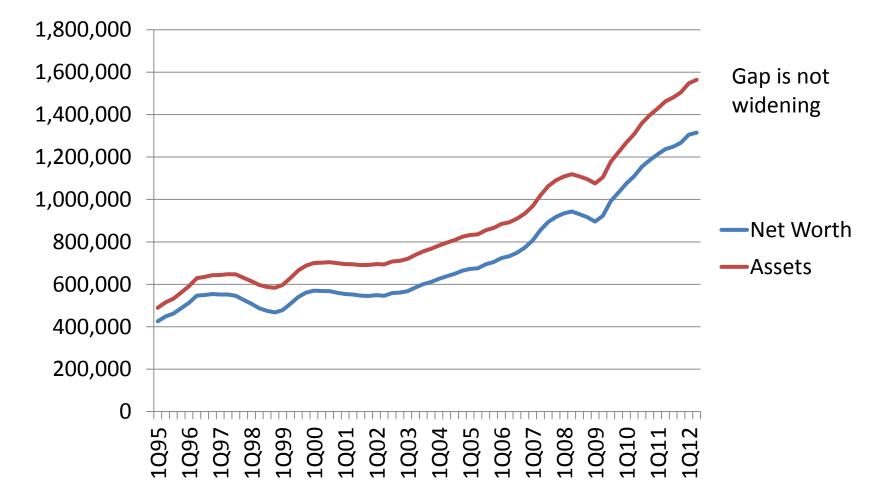
		Average Real Return*	Standard Deviation	Risk-Adjusted Return Ratio
1990-1999	Private housing	10.1	22.7	0.45
	HDB resale	13.3	25.7	0.52
	STI	10.3	35.7	0.29
	Private housing	1.9	10.9	0.18
2000-2012	HDB resale	3.0	7.1	0.42
	STI	3.9	30.5	0.13

\* Based on price index only

## Nominal Price and Rental Indices



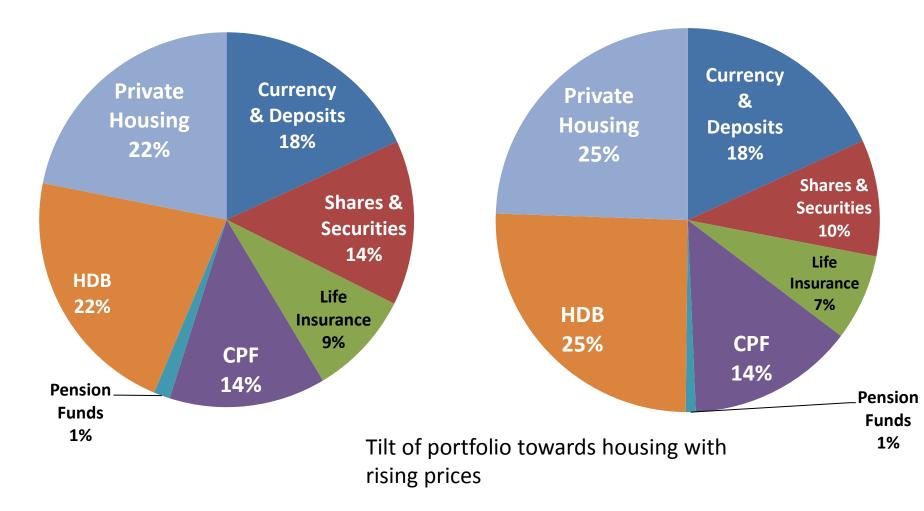
## Household sector balance sheet (\$ million)



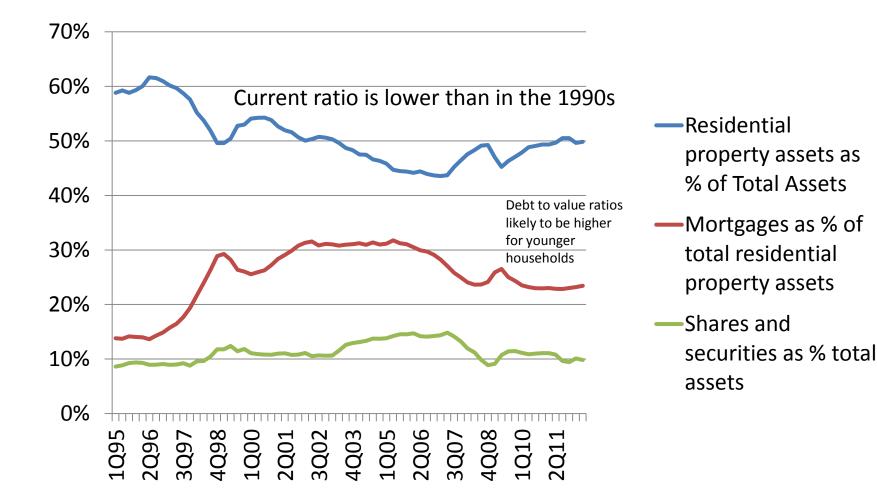
### Household sector assets

Q4, 2006

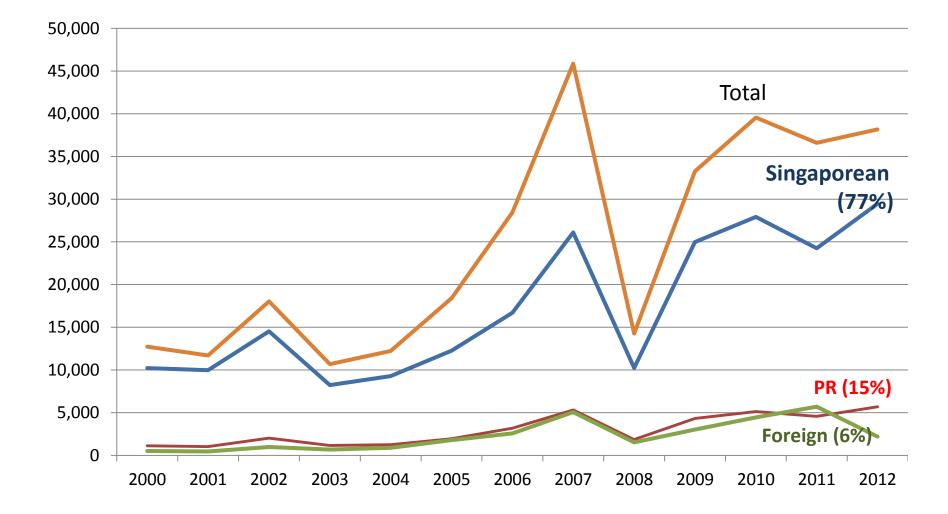
Q2, 2012



### Household sector balance sheet



### **Private Residential Property Transactions**



### Consequences

- No significant wealth effect of housing price increase on consumption (Phang, Lum et.al., Abeysinghe)
- No affordable rental sector
- First-time homeowners face affordability issues in resale market and access issues in BTO market
- Low Total Fertility Rate (Abeysinghe)
- Low Total Factor Productivity (Krugman)
- High rents impact tenant households, SMEs and prices
- Weak retail and domestic corporate sector (Bhaskaran)
- Culture of entitlement to affordable homeownership, asset appreciation, capital gains and multiple property ownership
- Intergenerational inequities not sustainable
- "Much easier to be a landlord" attitude effects on human capital investment, innovation and entrepreneurship
- Over-focus on homeownership subsidies at the expense of social risk pooling to address needs of lifetime poor, longevity and inflation risks (Asher)

### Henry George (1873) on land speculation

"In every progressive community, population gradually increases, and movements succeed one another, bringing about an increase in the value of land. That steady increase leads to speculative activity in which future increases are anticipated. In this manner, land values are carried beyond the point at which, under existing conditions, the accustomed return is expected by wages and capital, an increasing portion of income going to rent. Production begins to decline at this point and this cessation is communicated to an ever-widening scale of industrial activity."

http://www.cooperativeindividualism.org/foulke-roy\_henrygeorge-brought-public-attention-to-land-speculation-1933.html

## From wipeouts to windfalls?

Lim Kim San (1964)

`With a view to securing to the state the increase in value of land brought about by community development and not through the efforts of the land owner, the government has considered various measures including the acquisition of development rights in land, the acquisition of the freehold in land, and the freezing of land prices.'

Homeownership policy

Housing asset appreciation / housing asset value preservation Plot ratio enhancement - enbloc sales

## C. Three sets of housing issues

- I. Affordable rental
- II. Homeownership affordability
- III. Reducing investment and speculative demand for housing

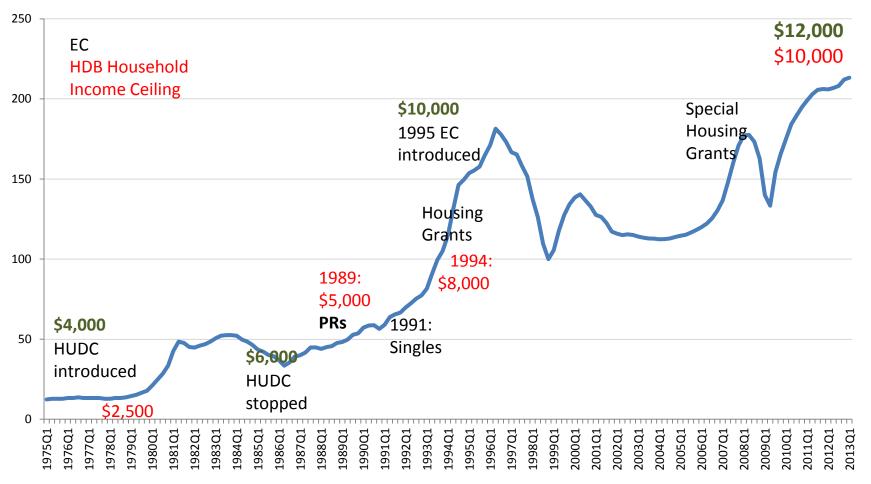
## I. Affordable rental

- Marginalized sector
- Policy of restricting supply
- Establish overcrowding standards for low income households
- Expand affordable rental sector
  - Existing high market rental yields indicative of shortage of affordable rental
  - Consider housing REITs as form of institutional ownership
  - Greater integration of HDB rental units with homeownership units

## II. Homeownership affordability

- Income Ceiling : \$12,000 ?
- Pricing of BTO flats: PIR of 4 ?
- Executive Condominium Scheme ?
- Excluding segment of future BTOs from resale market ?

## Housing affordability and expansion of subsidy schemes



### Inflation-indexed income ceilings

	HDB	EC
Jan-00	\$8,000	\$10,000
Jan-08	\$8,864	\$11,080
Mar-13	\$10,657	\$13,322

The recent adjustment upward to \$10,000 for HDB and \$12,000 for EC have not kept up with inflation. Suggest to raise HDB income ceiling to \$12,000, phase out EC scheme, expand supply of land for condominium housing to fill EC gap

# High degree of historical path dependency in housing policy

Contrast between housing and other welfare sectors:

- Changes to institutions require "formative moment"
- Existence of long term mortgage contracts
- Supply takes a long time to have full impact
- Investment decisions made based on expectations
- Any change in rules on housing tenures and rights of exchange and possession regarded as a threat to existing owners
- Expect considerable political restraint on changing rules overnight

## **Historical path dependency**

- Income Ceiling (only up and not down)
- Supply and pricing of BTO flats (implications for existing homeowners)
- Executive Condominium Scheme (easier to phase out if absorbed into HDB)
- Asset appreciation & retirement financing
- Upgrading subsidies
- Shared ownership housing schemes
- Changing mindsets and expectations

## III. Reducing investment and speculative demand for housing

- Increasing transaction costs (stamp duties)
- Credit restrictions LTV and DSR caps
- Minimum occupancy periods
- Restrictions on ownership of 2<sup>nd</sup> property
- Restrictions on right to rent out property
- Increasing property tax rates

Should more be done?

- Housing REITs for investors
- Further tightening of regulations on PRs and foreigners e.g. restrictions on number of properties owned

#### Singapore's housing market segmentation

1. HDB direct sales & ECs

Subsidized new	→ Eligible citizens
public housing & ECs	

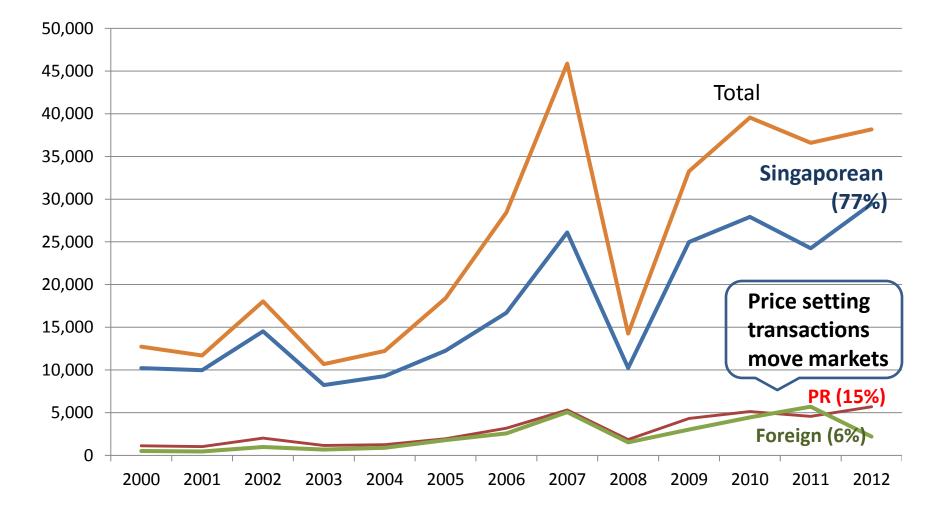
2. HDB secondary market

Markat price recels	Citizens (housing
Market price resale	grant subsidies) &
public housing	PRs

3. Private housing market



### Private Residential Property Transactions – prices set at the margin



### Australia's policy toward foreign buyers

All applications from foreign citizens or companies to buy residential real estate are put before the Foreign Investment Review Board (FIRB).

Permission to purchase will be **refused** if the FIRB feels the purchase is just for the purpose of renting out, or speculation on future value.

Permission is usually **granted for owner-occupancy** for students over 18 (a general limit of \$300,000), long stay retirees and work reasons. ..

Usually, the purchase of two houses per company for stay by employees are permitted.

Property must be sold when these categories of buyers no longer live in Australia.

The purchase of another residence, such as a "weekender" for recreational use, is not approved under any of the above circumstances.

Apartments or townhouses in a proposed development, or in a development which has just been completed but has not yet been occupied or sold, can be sold to foreign investors as long as the developer applies in advance for this to be allowed. ..the property, when built, can be rented out, sold or used by the purchaser. However, foreign interests cannot hold more than half the apartments or townhouses in any one development.

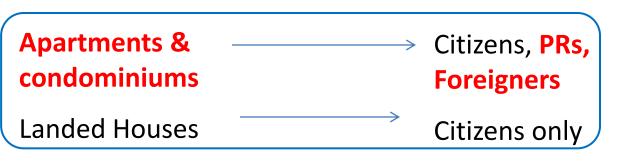
#### **Proposals for further market segmentation**

1. HDB direct sales & ECs

#### 2. HDB secondary market

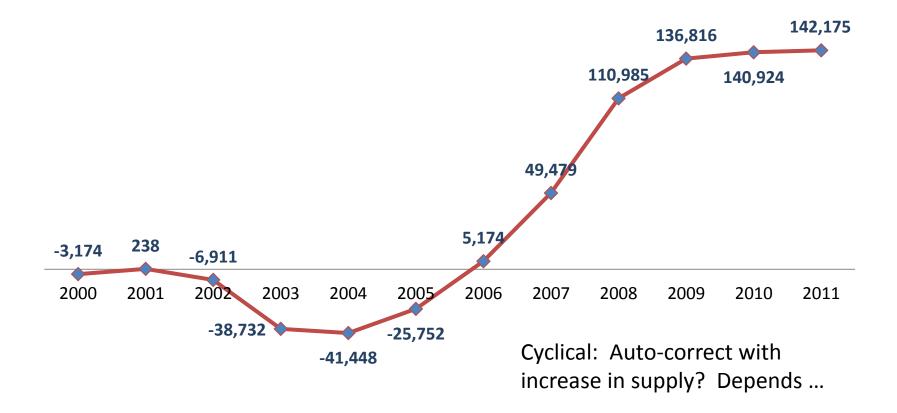
Markat price recale	Citizens (housing	• PRs: owner
Market price resale	grant subsidies)	occupancy
public housing	& PRs	only

3. Private housing market



PRs & foreigners: owner
occupancy only?
Employment
pass foreigners
only?

#### Housing shortage = Gross Population/3.6 – Total Housing Stock



#### Sources for data:

Data websites of:

- Singapore, Department of Statistics
- Singapore Census of Population 2010
- Monetary Authority of Singapore
- Housing and Development Board

Urban Redevelopment Authority REALIS

## The assistance of Christopher Gee is gratefully acknowledged.