

Land Value Capture: Singapore's Experience

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Workshop on Land Value Capture

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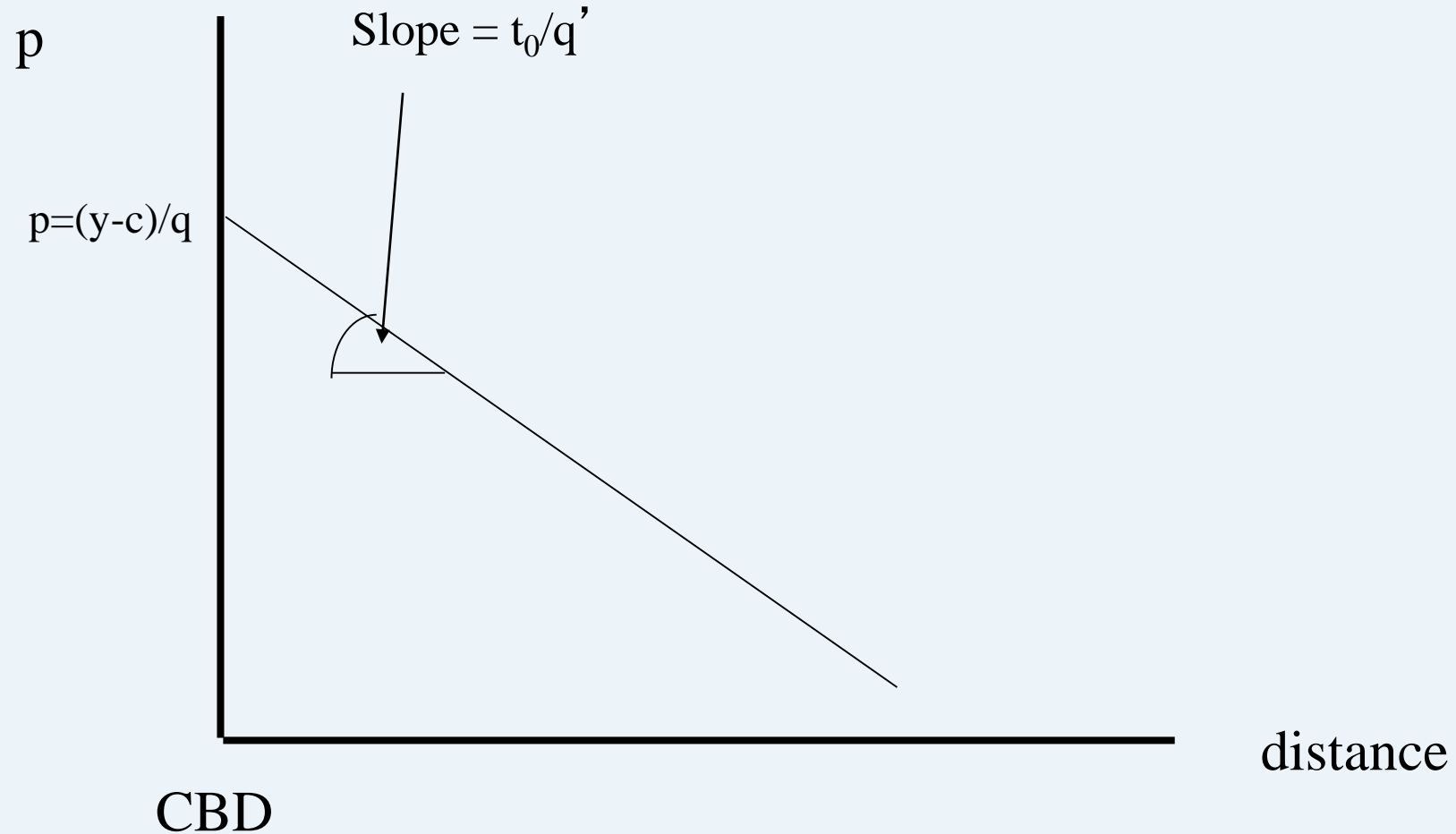
Part 1: Land Value Theory

- Monocentric model of land value and land use
- Who should benefit from land value increments?

Language

- **Price gradient**
 - Price of unit of land relative to distance from center
- **Bid rent function**
 - Maximum rent per unit at time t that a given user would be willing to pay in rent per period
 - Firm's maximum bid rent under profit maximization subject to production function
 - Household's maximum bid rent under utility maximization subject to income

Bid rent curve – fixed q

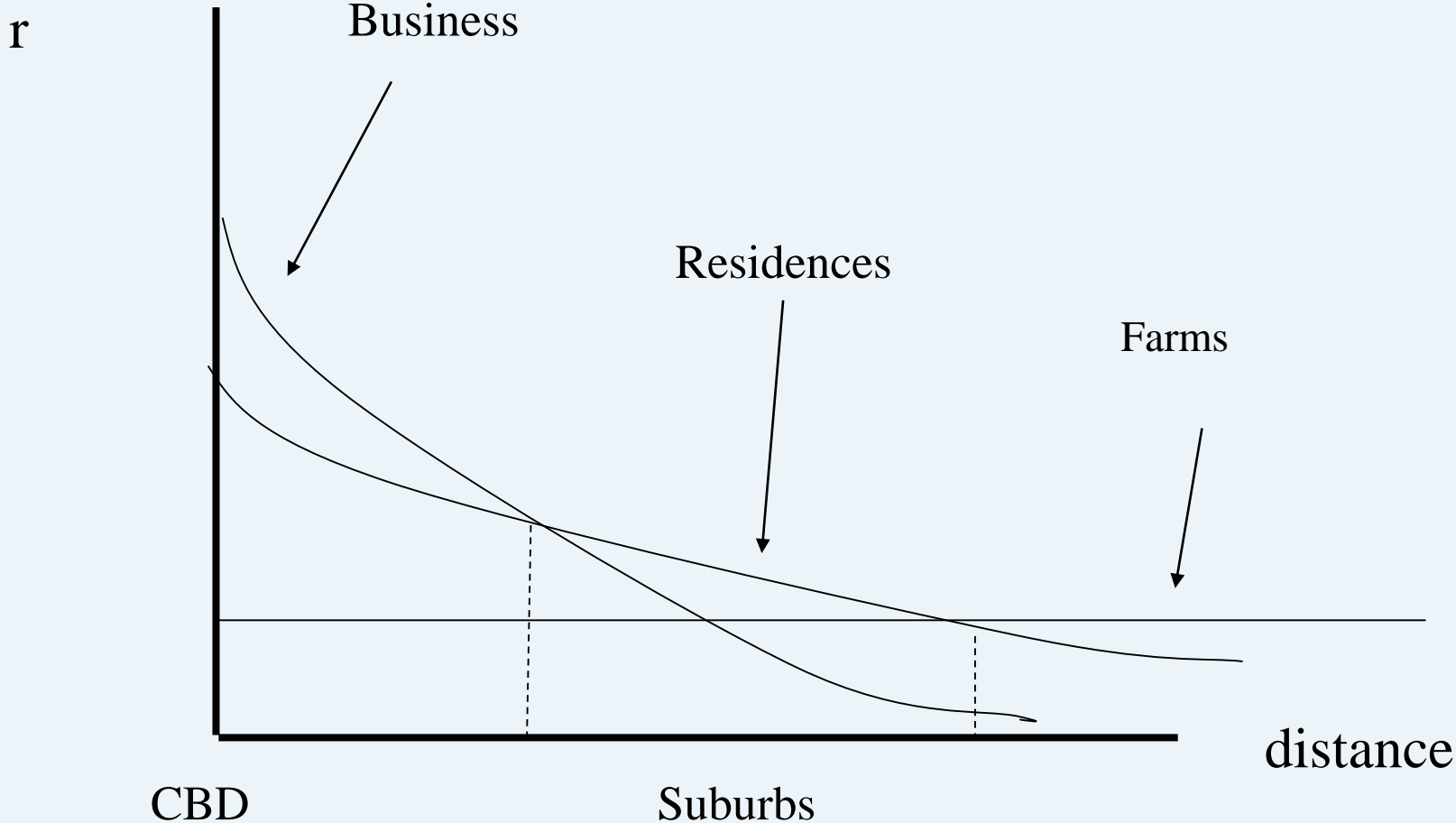


In Monocentric model

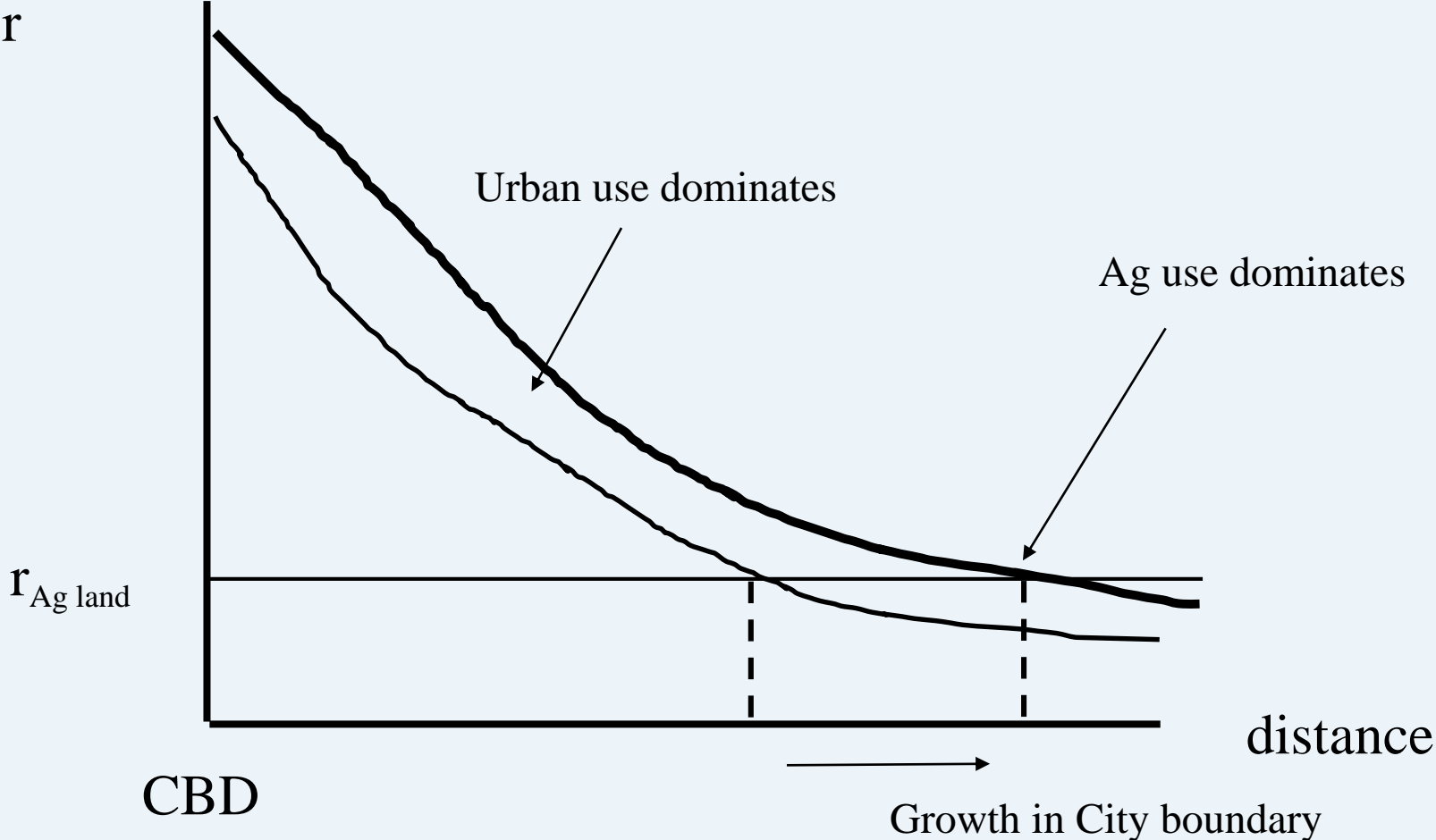
- Near CBD, land is expensive: use lots of capital, little land = condominium towers
- Near urban fringe (edge of city) land is cheap: use little capital, lots of land (1-storey house, big yard)



Firms and residential location

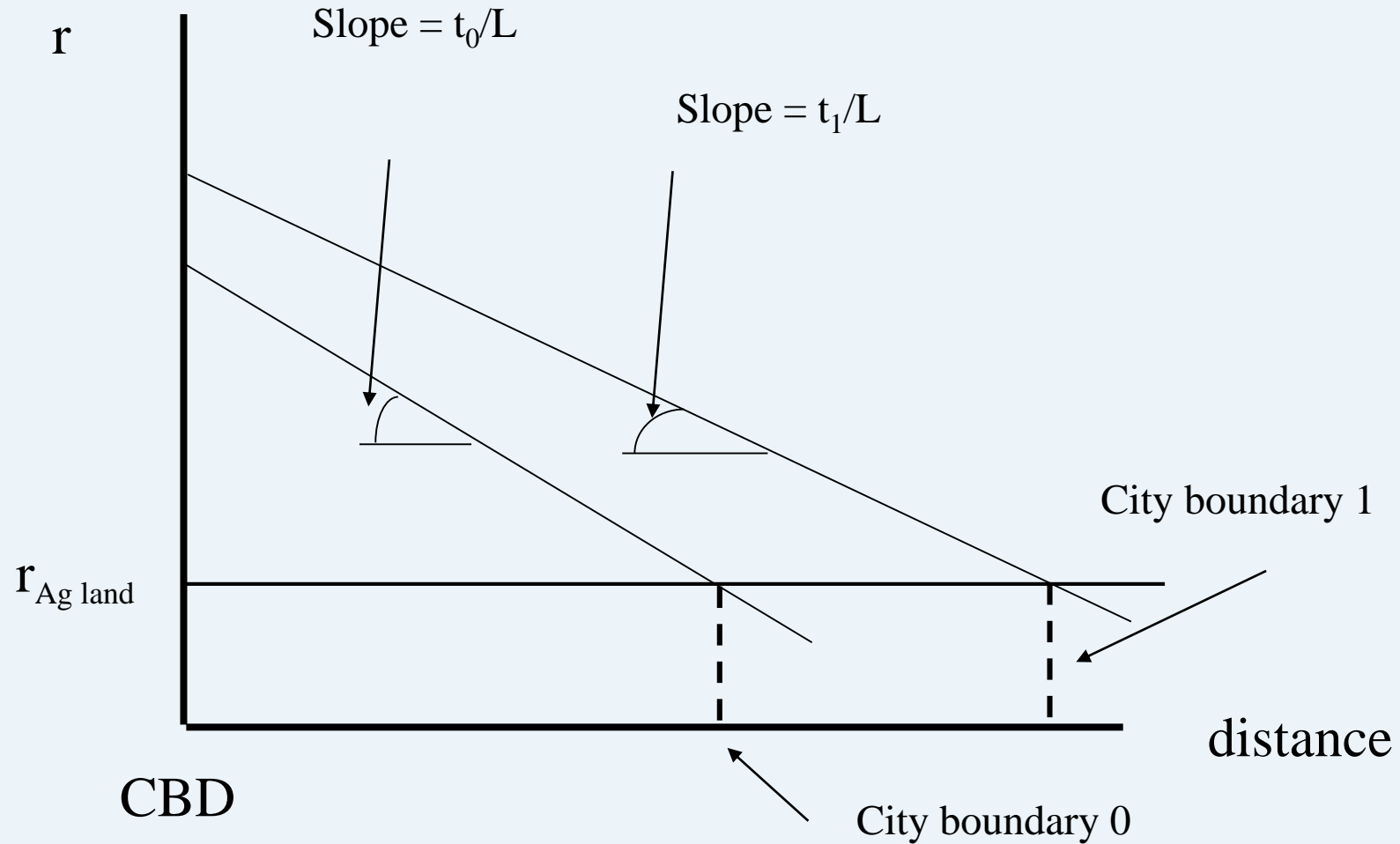


Increases in population, city incomes
Higher bids at all locations



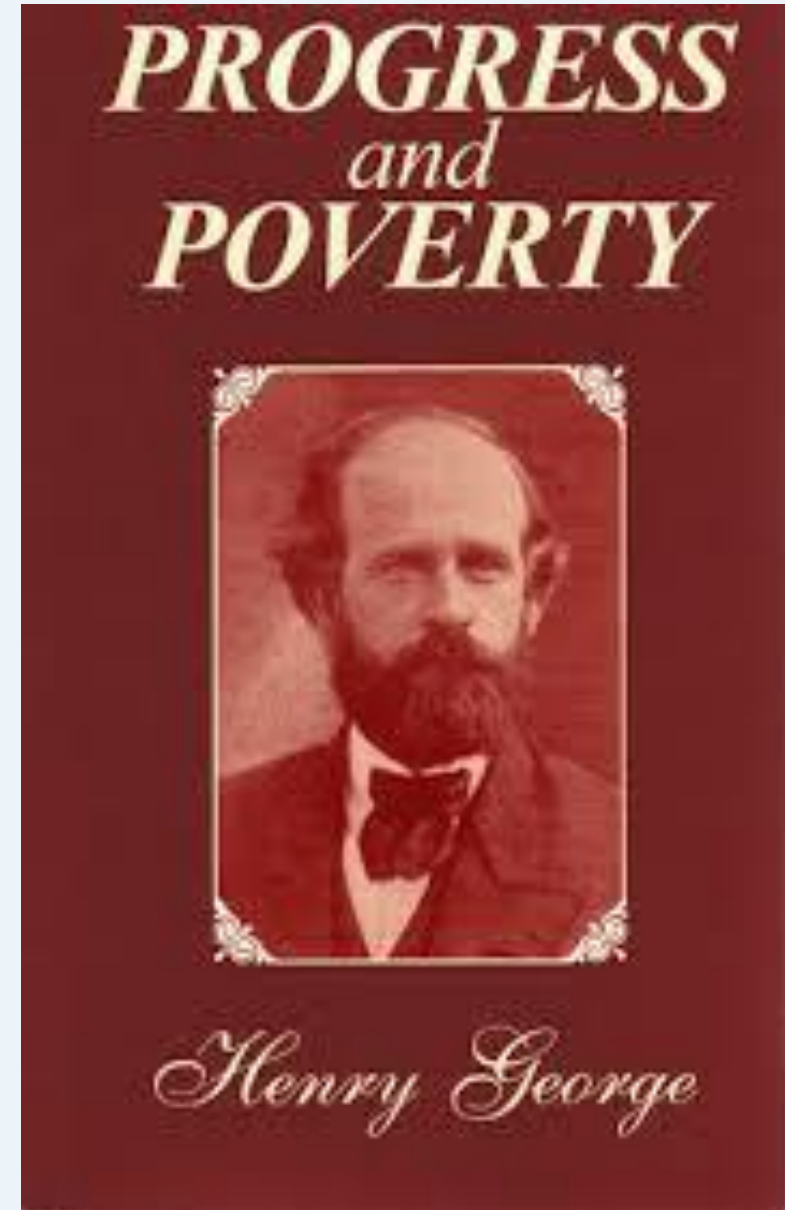
Decline in transport costs

$$t_1 < t_0$$



1890s US Best Seller

- **Henry George (1879).** *Progress and Poverty: An Inquiry into the Cause of Industrial Depressions and of Increase of Want with Increase of Wealth...The Remedy*
- High growth leads to high returns on land that exceeds growth in wages, and returns on capital
- Landowners' "unearned" returns
- Booms, bubbles and bust



George's proposals

- Economic rent of land should be shared by society rather than falling into private hands.
- "We must make land common property."
- Land-value capture
 - Nationalize land and lease it out or
- Very high "Single land tax" on annual value of land
 - Abolish all other taxes on labor and production
 - ***tax on annual site rent of up to 100%***
 - Utopian ideal – not workable

Famous advocates of land tax

- **Milton Friedman: “the least bad tax”**

- “George's land tax impose no excess burden on the economy, and thus stimulate more rapid economic growth.”
- Argues that taxing economic rent derived from land and natural resources is efficient and equitable

- **Sun Yat-sen:**

- Landowner should not enjoy increased price of land as it is "unearned increment“
- “After the land values have been fixed, all increase in land values .. . shall revert to the community. This is because the increase in land values is due to improvements made by society and to the progress of industry and commerce “

- **Winston Churchill:**

- landowners benefit at the taxpayer’s expense
- “Roads are made, streets are made, services are improved, electric light turns night into day, water is brought from reservoirs a hundred miles o in the mountains— and all the while the landlord sits still”

Increasing interest in LVC

- Recession-related decline in local government revenues
- Need for solutions to finance local infrastructure
- Benefits of local infrastructure capitalized in land value increases – benefits landowners
- Inequality

The Economist, August 9, 2018

On firmer ground

The time may be right for
land-value taxes

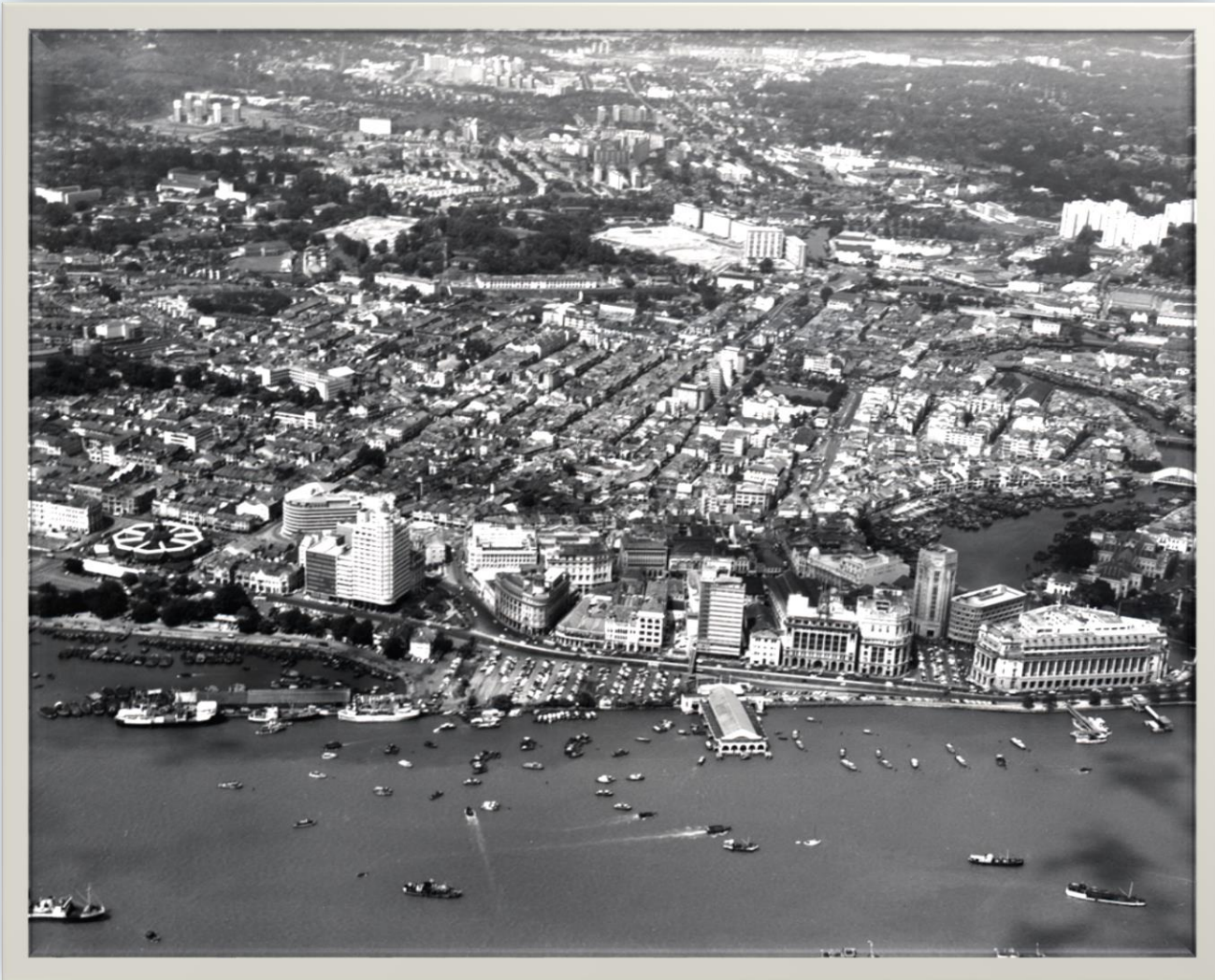
The Economist, Apr 2, 2015

Land-value tax

Why Henry George had a point

Ideal in theory, elusive in practice: the case making landowners pay for the benefits which location gives them

Part 2: LVC policies in Singapore



- Land Acquisition Act
- Planning Act and Development Charge
- Government Land Sales
- Land sales proceeds

Land policy in “the most Georgist place on earth...”

- 1965 Singapore Constitution **omitted right to property**
- 1966 Land Acquisition Act gives state **powers to acquire land** for
 - (a) for any public purpose;
 - (b) by any person, corporation or statutory board, for any work or an undertaking which, in the opinion of the Minister, is of public benefit or of public utility or in the public interest; or
 - (c) for any residential, commercial or industrial purposes.
- Land is 90% state-owned (20% of land is reclaimed land)

Compensation fixed

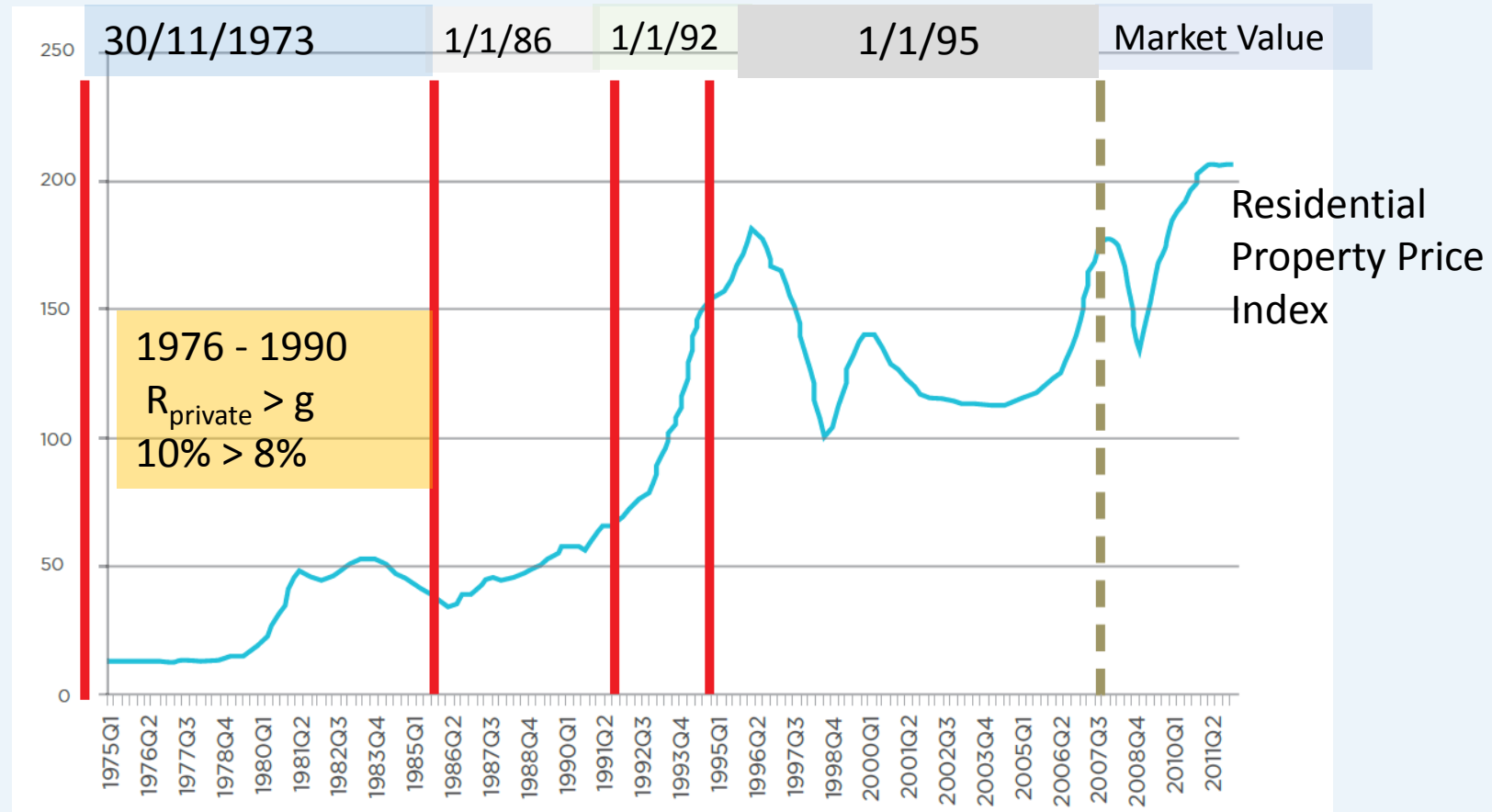
- 1973 amendment - government acquires land at **value on a date fixed at 30 Nov 1973** ... (adjustments over time, at market rates since 2007)
- *“Later, I further amended the law to give the government the power to acquire land for public purposes at its **value on a date fixed at 30 November 1973**. I saw no reason why private landowners should profit from an increase in land value brought about by economic development and the infrastructure paid for with public funds.”*

Lee Kuan Yew (2000)

From Third World to First, p 118-119

Compensation for Acquired Land:

Fixed at statutory date for valuation



Source: Centre for Liveable Cities (2014). *Land Acquisition and Resettlement*.

Urban Redevelopment Authority: Growth-oriented land use planning

- 1958 Master Plan modelled after Greater London Plan of 1944
- 1959 Planning Act provided for Master Plan revision every 5 years,
& exemption of public sector projects
- 1964 Amendment to introduce Development Charge
- 1971 **Concept Plan** to guide long term land use
- 1990 Radical change in Master Plan from passive updating to planners'
proposals to guide comprehensive development
- Concept Plan revised every 10 years
- Master Plan reviewed every 5 years

Development charge (DC)

- Introduced in 1965
 - “Approved planning permission for changes in land use and for increase in land density will cause an increase in the land price benefiting landowners through no additional effort on their part, except that they are fortunate enough to own land near areas developed by the State. Although the government is considering various other measures including the acquisition of development rights in land, the acquisition of the freehold in land, and even the freezing of land prices, the development charge is deemed the most practical and immediate measure that can be implemented.”

Planning (Amendment Bill), Singapore Parliamentary Debates, Nov 2, 1964.

- 1965–1980 Fixed rates
- 1980–1985 70% of land enhancement value
- 1985- July 2007 50% of ...
- From July 2007: 70% of ...

‘With the current buoyant property market... the current 50% DC is inadequate in achieving an equitable sharing of the value enhancement gains between the state and the owner.’

Development Charge Table

- tax that is levied when planning permission is granted to carry out development projects that increase the value of the land.
 - rezoning to a higher value use
 - increasing the plot ratio
- Updated by URA in consultation with Chief Valuer
- Reviewed every 6 months: 1 Mar, 1 Sep
- Prescribed average land rates based on 70% of estimated land values by 9 land use groups in 118 geographical sectors

Development Charge Sector Map & Rates

TABLE OF DEVELOPMENT CHARGE RATES PER SQUARE METRE - SEP 2019

Geographical Sectors	Use Groups								
	A	B1	B2	C	D	E	F	G	H
1	\$14,000	\$3,990	\$11,200	\$15,400	\$840	\$910	\$10	-	\$1
2	\$14,000	\$3,990	\$11,200	\$15,400	\$840	\$910	\$10	-	\$1
3	\$14,000	\$3,990	\$11,200	\$18,200	\$840	\$910	\$10	-	\$1
4	\$14,000	\$3,990	\$11,200	\$16,450	\$840	\$910	\$10	-	\$1



Type your question ...



<https://www.ura.gov.sg/Corporate/Guidelines/Development-Control/Planning-Permission/Folder/DC-Charge-Rates/DC-rates/2019/rates-table/dc-rates1909>

Government Land Sales and PPPs

Government

- Release state lands sales program every 6 months
 - Confirmed list
 - Reserve list
- Regulate land development:
 - Detailed planning
 - Zoning regulations
 - Detailed sales conditions



Private Developer

- Purchase land through auctions
 - Commercial
 - Residential
 - Industrial
- Design and build developments while abiding by planning rules, regulations, and sales conditions



Single-use site



White site – Mixed Use



Fixed price S\$1.2 billion – Best proposal



Two Envelope Tender System (concept and price)



MBFC Master Developer – Large Scale Dev



Master Plan Proposals

Land sales proceeds

“Our Constitutional rules protect our financial assets and land as past reserves. As land sales convert physical assets into financial assets, the proceeds from land sales are rightly fully protected as past reserves as well... Under the Constitution, proceeds from land sales are added to the reserves, which are invested.

From the returns, the government takes up to 50 per cent as the net investment returns contribution (NIRC) to supplement its budgetary needs. The NIRC is now the largest contributor to the annual Budget. If we did not introduce the NIR framework, we would have had to double our personal income tax collection or our GST collection to raise the same amount of revenues. Rules on land sales and the 50 per cent NIRC cap were introduced "so that we do not succumb to the temptation to draw more from our reserves to fund current expenditure or eat into the principal sum.”

Mr Heng Swee Keat, Minister for Finance,
The Straits Times, March 2, 2018

Outcomes: Government Revenue

Government revenue FY2017

Revenue Item	% of Total
Property taxes	4%
Stamp duty (property transactions)	5%
Rental income	1%
Development Charge* (70% of enhancement)	3%
Sales of Land	12%
Motor vehicles taxes and premiums	9%
Investment & Interest Income Contribution	17%
Income Taxes (corporate:17%)	30%
Goods and Services Tax (7%)	10%
Others*	10%

**RESERVES
invested**

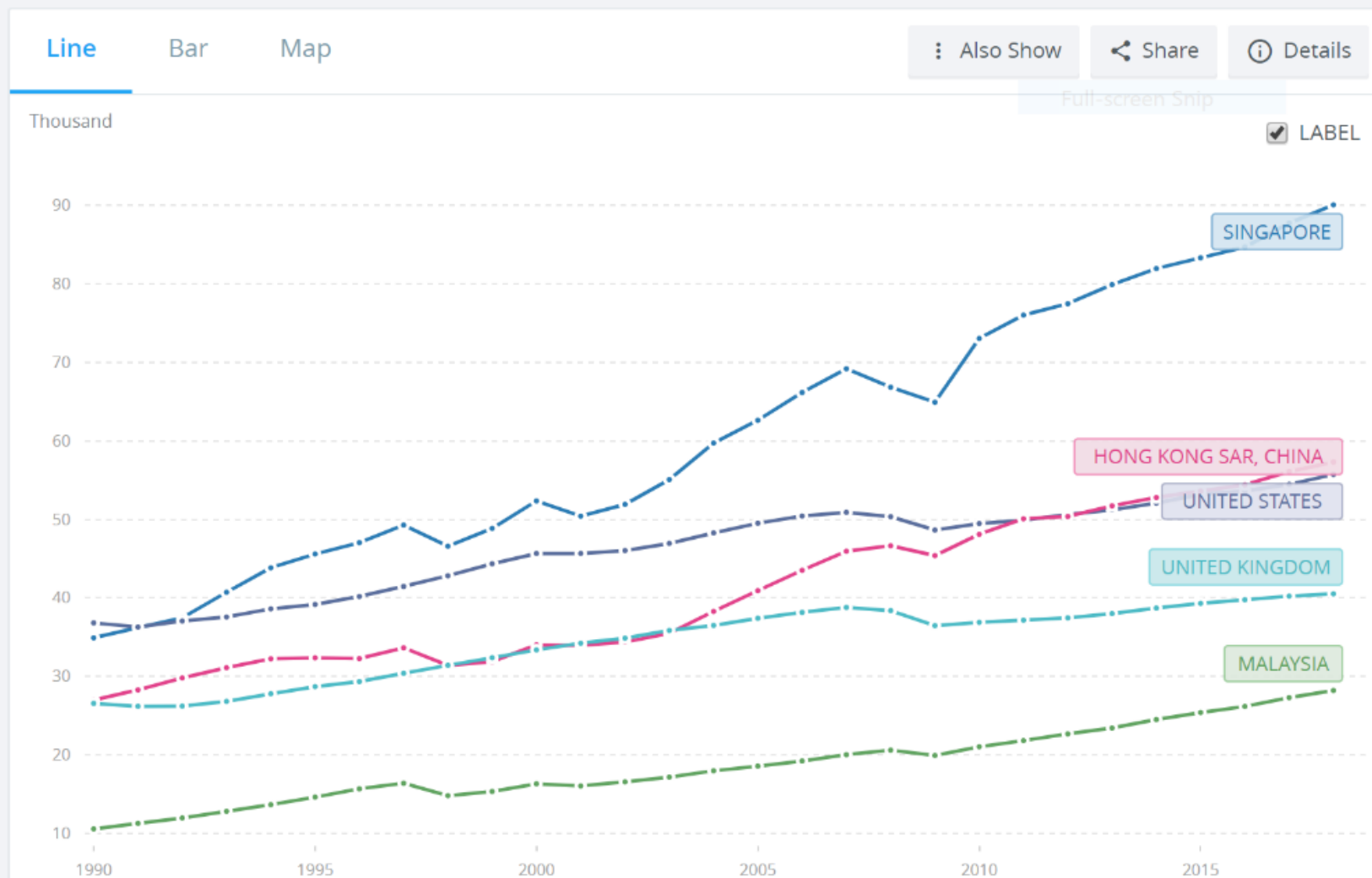


**50%
Revenue
Land-
related**

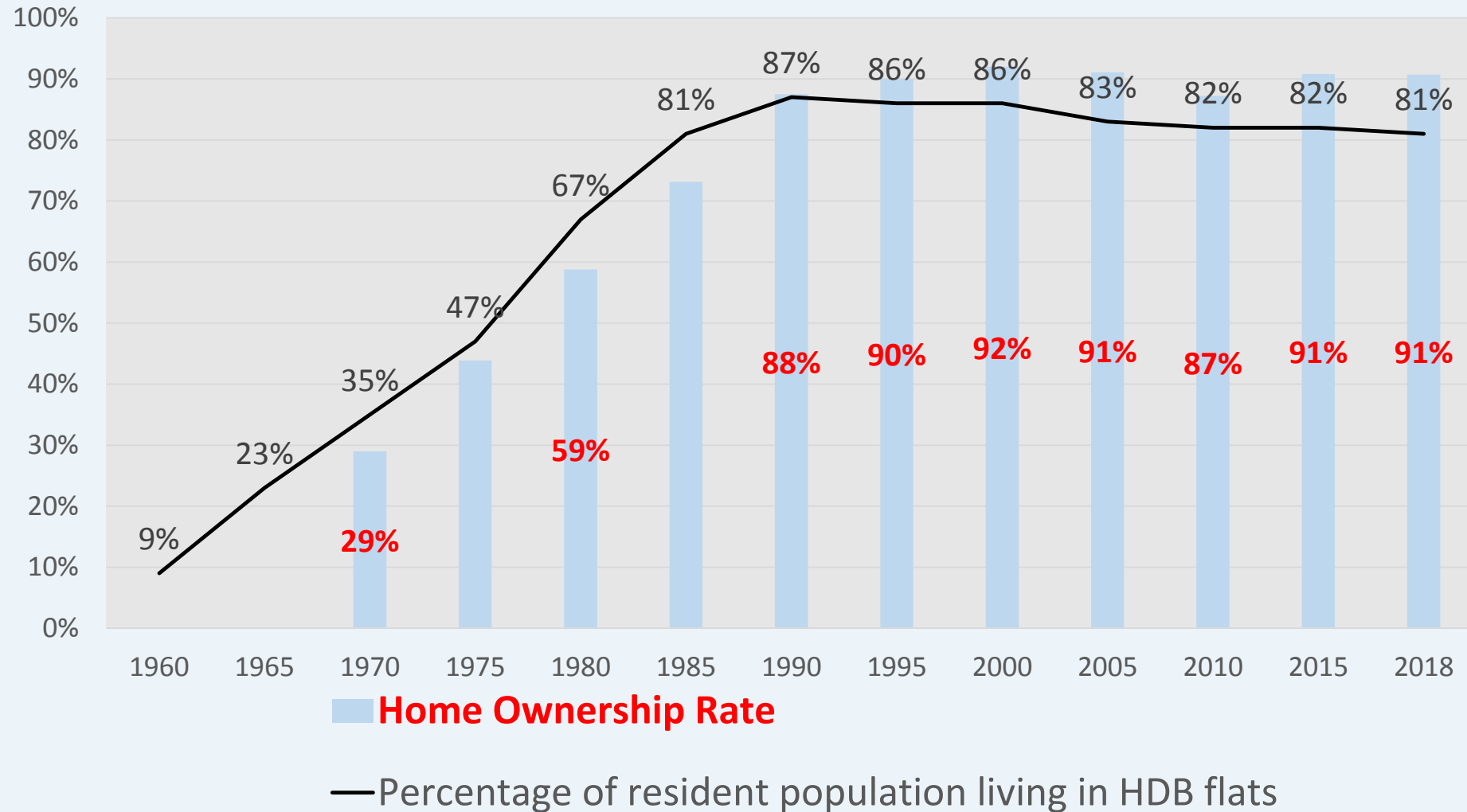
GDP per capita, PPP (constant 2011 international \$) - Singapore, Malaysia, United States, Hong Kong SAR, China, United Kingdom

World Bank, International Comparison Program database.

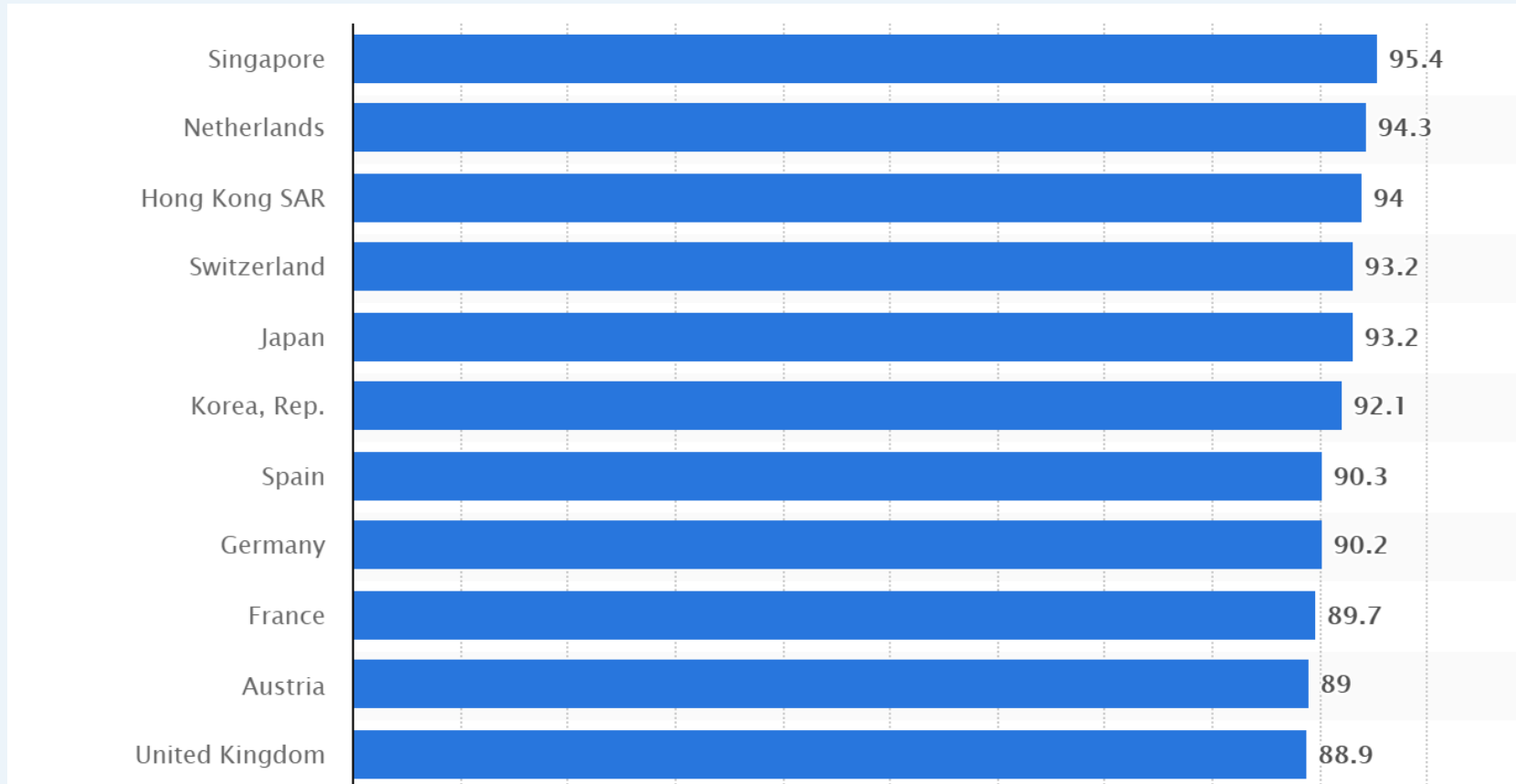
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91% Resident home ownership rate



Quality of infrastructure ranking 2019



- The infrastructure score is calculated based on the following factors: road connectivity index, quality of roads, railroad density, efficiency of train services, airport connectivity, efficiency of air transport services, linear shipping connectivity index, efficiency of seaport services, electrification rate, electric power transmission and distribution losses, exposure to unsafe drinking water, reliability of water supply.
- Source: <https://www.statista.com/statistics/264753/ranking-of-countries-according-to-the-general-quality-of-infrastructure/>



Thank you

Development Charge Use Groups Table

Use Group	Purposes for which development is permitted or to be authorised
A	Shop, office, association office, cinema, place of entertainment, clinic, medical suite, restaurant, petrol station, auto-service centre, commercial garage, market, sports and recreation building
B1	Residential (landed dwelling-house ¹)
B2	Residential (non-landed residential building)
C	Hospital, hotel room and hotel-related uses
D	Industrial, warehousing, science park, business park, transport depot, airport, dock, port uses, utility installation, telecommunication infrastructure, Mass Rapid Transit Station, Light Rail Transit Station
E	Place of worship, community building, community sports and fitness building, educational and institutional uses, government building
F	Open space, nature reserve
G	Agriculture
H	Drain, road, railway, cemetery, Mass Rapid Transit Route, Light Rail Transit Route