

Singapore's Development Experience Lessons for Sri Lanka

by

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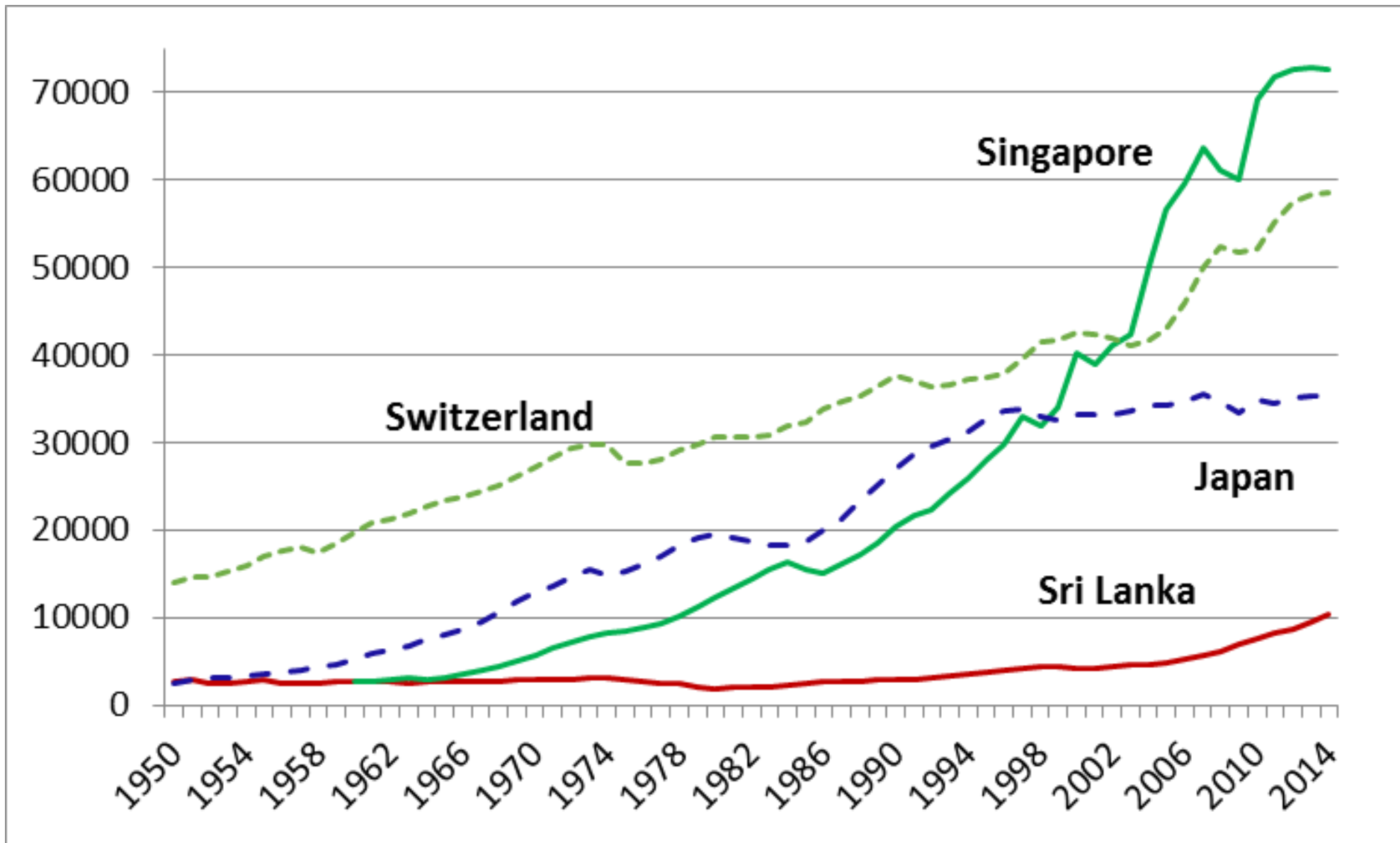
Content

- **Overview of the Singapore economy**
- **Lessons for Sri Lanka**
- **Some problems Singapore is facing**

OVERVIEW

Per capita GDP

(At chained PPPs in 2011 US\$, From Penn World Table 9.0)



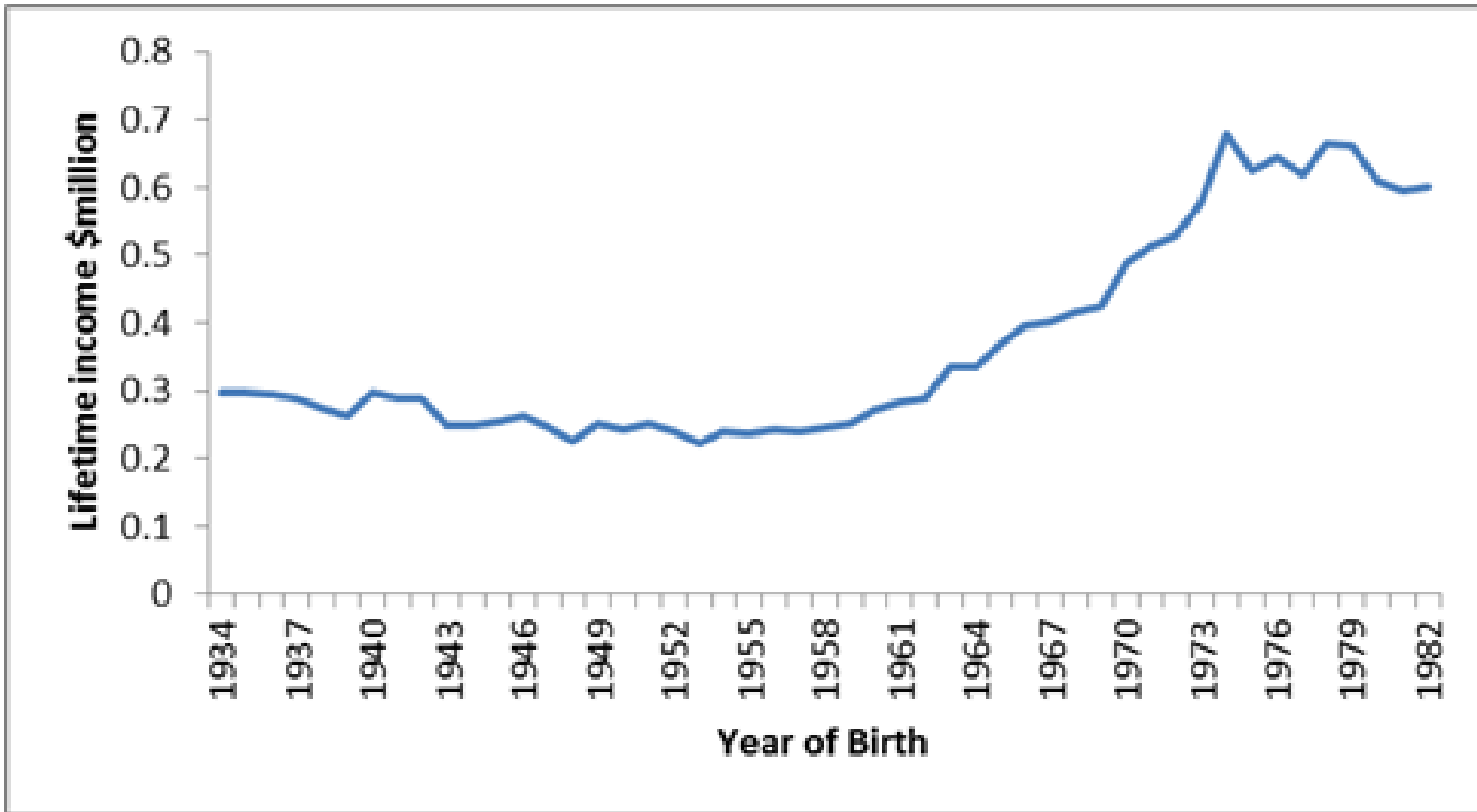
Per cap GDP by pop or land size similar to Singapore

(At chained PPPs in 2011 US\$, From Penn World Table 9.0)

(small size was not a key factor for S'pore's progress)

	Population Million	Land area Sq km	Per capita GDP 2014
Costa Rica	4.76	51,100	14,186
Slovakia	5.42	20,273	28,609
Singapore	5.51	719	72,583
Lebanon	5.61	10,452	13,999
Nicaragua	6.01	130,373	4,453
Dominica	0.07	751	10,188
Seychelles	0.09	459	25,822

Lifetime labor income (constant \$) of a Singapore household: 20th income percentile (Author's computation)
(progress only after independence)



Other development indicators

(Sri Lanka in parentheses in red)

	1965	2016
Infant mortality rate per 1000 births	26 (53)	2.4 (8.6)
Life expectancy at birth Years	66 (63.5)	Male 80.6, Female 85.1 (Male: 73.3, Female 80.4)
Public home ownership (Private home ownership)	4% -	>80% (83% : 2012)
Labor force (resident) with tertiary education (Employed with GCE A/L & above)	2% (2.1%: 1971)	53% (20.1%)
Labor force (resident) with a university degree	2.4%: 1974 (0.7%: 1971)	33.7 (6.4%: 2012)

Books on the Singapore Economy

1. Lim Chong Yah and Peter Lloyd, eds., *Singapore: Resources and Growth*, 1986
2. Lawrence B Krause et al., *The Singapore Economy Reconsidered*, 1987
3. Lim Chong Yah and Associates, *Policy Options for the Singapore Economy*, 1988
4. Linda Low and Toh Mun Heng, eds., *Public Policies in Singapore*, 1992
5. Lim Chong Yah, ed., *Economic Policy Management in Singapore*, 1996
6. Gavin Peebles and Peter Wilson, *The Singapore Economy*, 1996
7. Toh Mun Heng and Tan Kong Yam, eds., *Competitiveness of the Singapore Economy*, 1998
8. Arun Mahizhnan and Lee Tsao Yuan, eds., *Singapore Reengineering Success*, 1998
9. Linda Low, ed., *Towards a Developed Status*, 1999
10. Koh Ai Tee et al., eds., *Singapore Economy in the 21st Century, Issues and Strategies*, 2002
11. Gavin Peebles and Peter Wilson, *Economic Growth and Development in Singapore: Past and Future*, 2002
12. Winston Koh and Roberto Mariano, eds., *The Economic Prospects of Singapore*, 2006
13. Tilak Abeysinghe and Keen Meng Choy, *The Singapore Economy: An Econometric Perspective*, 2007
14. Tilak Abeysinghe, *Singapore Economy in The Far East and Australasia*, Routledge, 2008, 2009, 2010, 2011, 2012 editions.
15. Choy Keen Meng, *Studies on the Singapore Economy*, World Scientific, 2012.
16. Donald Low and S Vadaketh (eds.), *Hard Choices: Challenging the Singapore Consensus*, Singapore: National University of Singapore Press, 2014.

Other notable readings

1. Lee Kuan Yew, *From Third World to First: The Singapore Story 1965–2000*, 2000
2. Lee Kuan Yew, *Hard Truths to Keep Singapore Going*, 2011
3. Goh Keng Swee, *The Practice of Economic Growth*, 1995 (1977, 1st ed)

Goh Keng Swee was the Singapore's economic architect in the formative years.

Background information



- Self-governance, 1959
- Malaysian Federation, 1963
- Independence, 1965 (thrown out of the Federation)
- Land area – 581.5 sq km in 1960 to 719.9 sq km in 2017
- Population mid 2017: 5.6 mn (resident pop 3.96 mn)
- Population density 2017: 7796 per sq km
- **Political system: democratic (but PAP ruled since 1959)**
- **Cabinet: highly professional from different walks of life**
- Economic system: market-driven guided economy
- YouTube clips on history of Singapore:

<https://www.youtube.com/watch?v=O12Lwol3iaY>

* Lessons from LKY, 2015:

<http://www.dailynews.lk/?q=features/lessons-lee-kuan-yew>

Development Experience

At independence, 1965:

- **Massive unemployment (9-12 %)**
- **Low-skilled workforce**
- **No industrial entrepreneurs (only commercial entrepreneurs)**
- **No domestic savings**
- **Wretched housing condition**
- **Militant labor unions**
- **Racial riots**
- **Bombing**
- **Stinky river**



Villagers in Adam Park washing clothes near a well. In the early 1960s, people who lived in kampungs had to draw water from common wells. In an effort to improve standards of living across Singapore, Mr Lee announced that homes had access to taps from which potable water flowed. — ST FILE PHOTO



Development Experience: Strategic Plans

- **1960, First Plan**
- **1980, Second Plan**
- **1985, Economic Committee Report**
- **1991, Strategic Economic Plan**
- **1998, Competitiveness Report**
- **1999, Industry 21; Manpower 21**
- **2002, Economic Review Committee**
- **2009, Economic Strategies Committee**
- **2016, Committee on Future Economy**

Development Strategy

- **Historical continuity and branching off**

- * **Entrepot trade**

	1960	2015
Re-exports \$bn	3.3	242.9
Share in total X	94%	51%

- * **Manufacturing, from re-exports to exports**

- * **Service and knowledge-based economy**

- R&D thrust**

- Global schoolhouse**

- Medical hub**

- Casinos (2 Integrated Resorts)**

- * **Regionalization drive**

- **Reap on first mover advantages**

Major Institutions:

Statutory boards and GLCs play a major role

- **Economic Development Board (EDB, 1961)**
 - * **Attract FDI**
 - * **Develop local entrepreneurship**
 - * **Promote Singapore's investment abroad (since 1990s)**
- **International Enterprise Singapore (IE Singapore, former Trade Development Board)**
- **Urban Redevelopment Authority (URA; govt ownership of land increased from 44% in 1960 to about 85% in 2000)**
- **Govt owned holding companies under Ministry of Finance**

Major Institutions

- **National Wages Council (NWC, 1972)**
Bring together Govt, Employers, and Trade Unions to set wage guidelines
- **National Trade Union Congress (NTUC)**
Virtually a branch of Govt
Avoid industrial disputes
Also run a taxi service, grocery chain and insurance
- **Central Provident Fund (CPF, 1955)**
Mandatory retirement savings scheme

Fiscal Policy

➤ **Govt expenditure/GDP about 15% (1997-2017)
(OECD > 40%)**

➤ **Revenue:**

2016

1. Investment returns from reserves 17.3%

2. Corporate income tax 16.2%

3. Goods and Services Tax (GST) 13.1%

4. Personal income tax 12.6%

5. Others 40.8%

➤ **Budget surplus**

➤ **No external debt since mid 1990s**

➤ **Domestic public debt is a misnomer**

Monetary Policy

- **Central Bank: Monetary Authority of Singapore**
- **More than 2500 financial institutions in Spore**
- **Ranked among the 10 most sophisticated financial markets in the world**
- **Money supply endogenous, interest rate determined by world market**
- **Exchange rate policy to curb imported inflation**

Structural Changes

- **Planned structural changes**

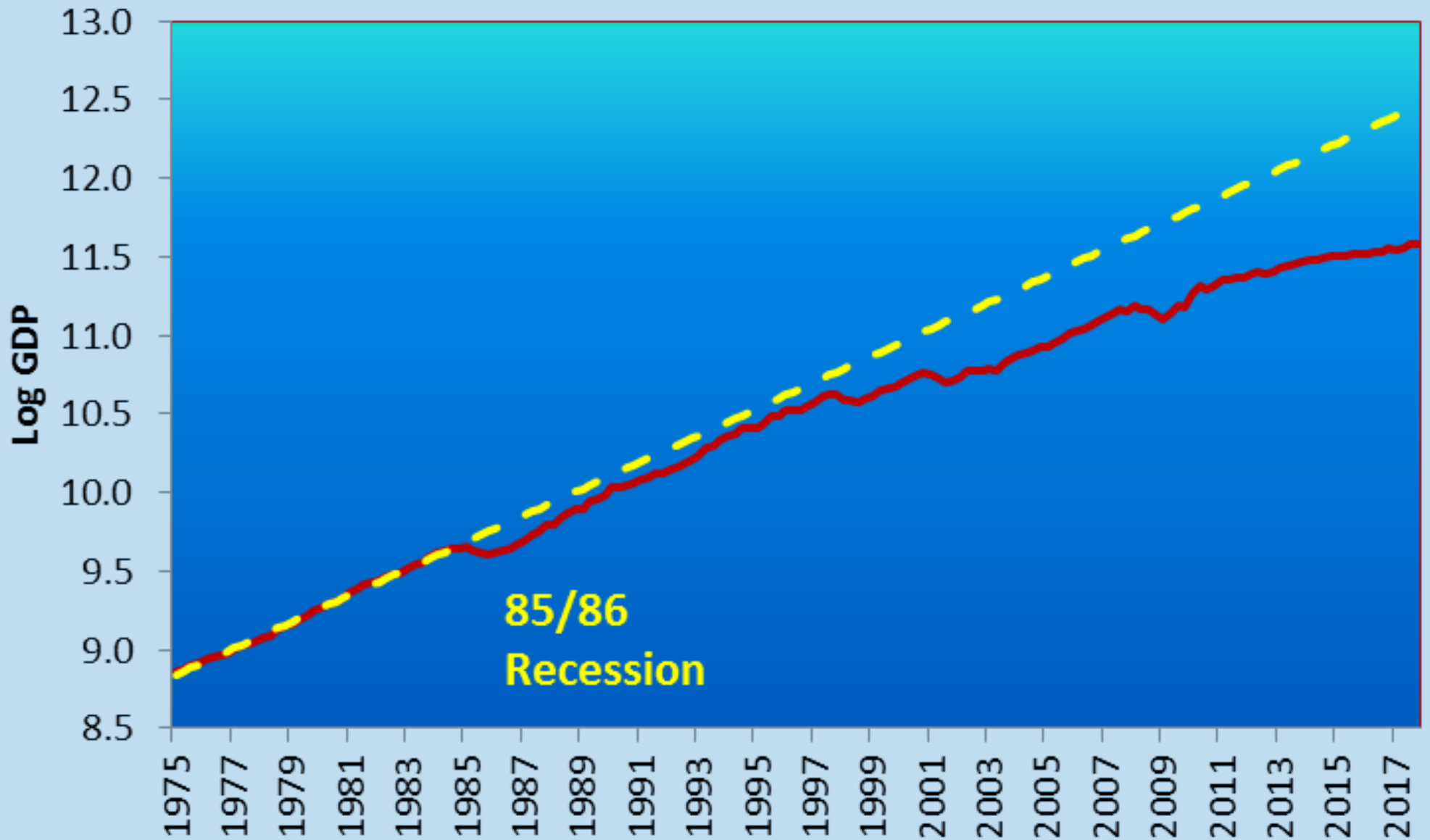
From entrepot trade to manufacturing to services.

Evolutionary

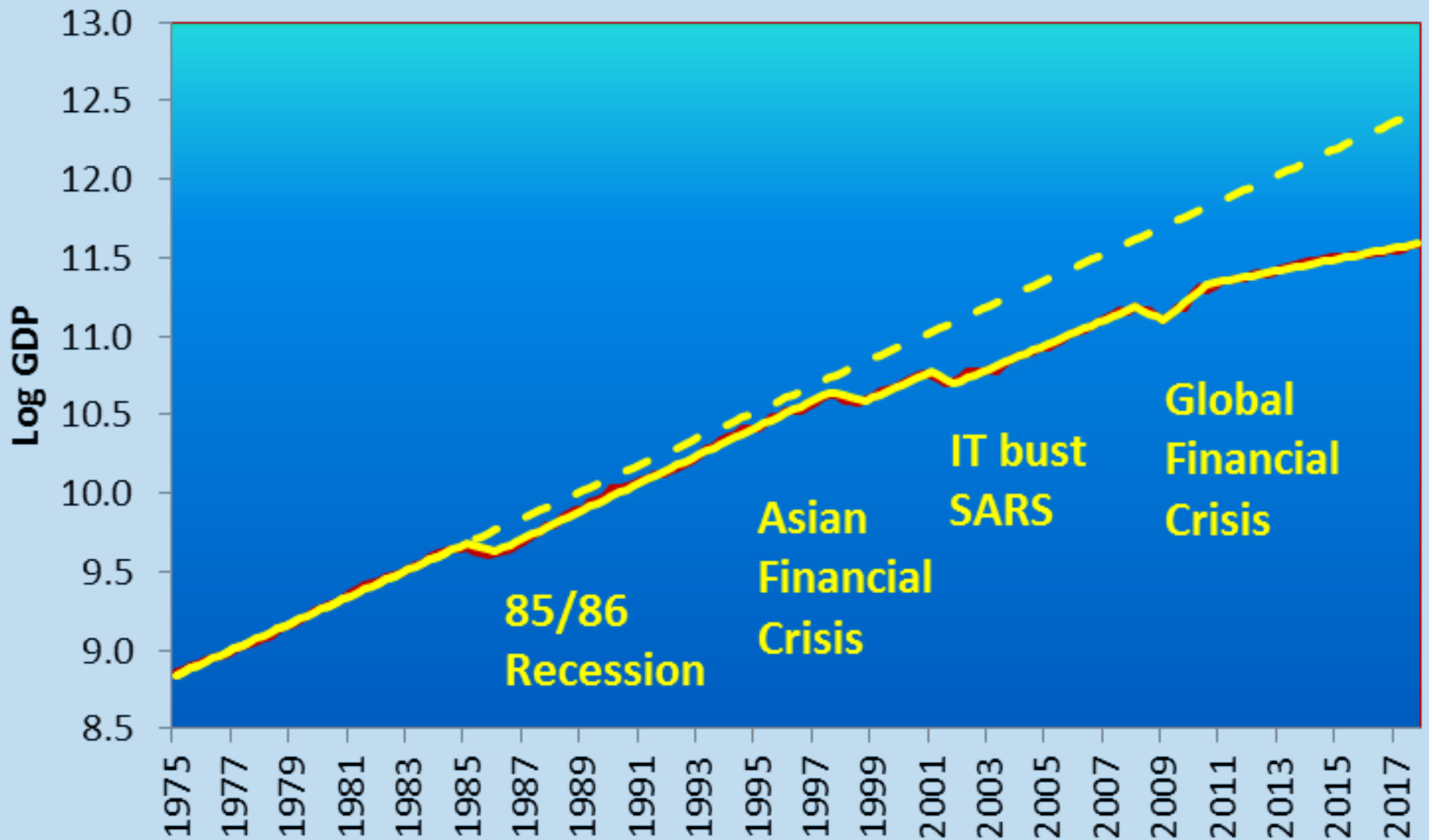
- **Structural changes resulting from crises**

Discrete shifts

Crises and Structural Shifts in GDP



Crises and Structural Shifts in GDP



Lessons to learn from Singapore

- **Lee Kuan Yew: Work on the political equation carefully first.**
- **Goh Keng Swee (1960s): “Our experience confirms some of the conventional wisdom of growth theory but refutes much of the rest. The role of government is pivotal. Non-economic factors, which have yet to be reduced to a coherent multi-disciplinary system, are more important than economic variables.”**
- **A blog post by me at Roubini’s EconoMonitor: <http://archive.economonitor.com/blog/2009/04/private-vice-to-public-virtue-re-examine-the-basic-economic-dictum/>**



Lessons to learn from Singapore

- **The role of govt. emphasized by two Nobel Laureates, Amartya Sen (2005?) and Michael Spence (2008).**
- **The Government's development ideology has been growth-driven, purely pragmatic and adaptable to changing circumstances. Market driven guided economy.**

Non-economic factors matter more than economic factors

Four key factors

- 1. Political stability and quality of governance**
- 2. National security**
- 3. Politicians with high opportunity cost**
- 4. Geopolitics - ASEAN**

1. Political stability & quality of governance

- ❖ Lee Kuan Yew, very strong leader supported by a committed team
- ❖ PM for 31 years, then Senior Minister and then Minister Mentor for another 21 years
- ❖ He popularized the idea of Asian values: community before self, duties over rights
- ❖ Advice to his cabinet: under-promise, deliver more
- ❖ Western journalists described him as a “tinpot tyrant”, but becomes an inspiration to world leaders

Political stability & quality of governance

➤ **Political stability is needed for the economy to take-off and quality of governance to maintain the altitude.**

➤ **Political stability is an exogenous variable and quality of governance is an endogenous variable.**

➤ **Changing party-politics vs single-party rule (East and Southeast Asian countries)**

➤ **American economist Mancur Olson: roving bandit vs stationary bandit.**

Political stability & quality of governance

- **Political stability:** Either a single-party rule for a sustained period or a common agreement on an economic agenda is needed to set the vision beyond a single (five-year) political term. Focus on the long-run, not on what is politically expedient.
- **Quality of governance:** Political stability does not guarantee quality of governance. **Quality of governance emerges through the type of economic and political system in place.**

Private-sector driven open economy is one mechanism that acts as a disciplining force on govt bureaucracy.

The Role of Openness

“Economic Openness, Disciplined Government and Ethnic Peace”, Nava Ravi Kumaran and Tilak Abeysinghe.

<http://www.fas.nus.edu.sg/ecs/scape/workingpaper.html>

Model

1. Growth on **Openness**, Quality of Governance and other variables
2. QG on **Openness**, Growth and other variables
3. Ethnic conflicts on **Openness**, Growth, QG, and other variables

Table 1: Dependent variable: Economic Growth

Independent variable	Openness as Trade/GDP ratio	Openness as Composite index
Openness	0.6256* (0.1608)	0.1563* (0.0344)
Quality of Governance	0.1394* (0.0399)	0.0832* (0.0388)
Physical Capital	0.0386* (0.0071)	0.0350* (0.0068)
Human Capital	0.0121* (0.0024)	0.0077* (0.0029)
Population growth	0.2166* (0.0657)	0.1872* (0.0662)
Inflation	-0.0112* (0.0021)	-0.0100* (0.0020)
Democracy	0.0247* (0.0074)	0.0153* (0.0075)
ELF	-0.3036** (0.1765)	-0.3245** (0.2017)
Constant	3.7246 (0.3094)	3.8083 (0.3076)
R ²	0.5818	0.5985

Table 2: Dependent variable: Quality of Governance

Independent variable	Openness as Trade/GDP ratio	Openness as Composite index
Openness	0.9921* (0.2465)	0.1463* (0.0467)
Growth	0.3164* (0.1048)	0.3567* (0.1130)
Inflation	-0.0129* (0.0035)	-0.0103* (0.0034)
Democracy	0.0603* (0.0106)	0.0623* (0.0108)
Population	-0.1520* (0.0542)	-0.2140* (0.0530)
Constant	2.0777 (0.9291)	2.5189 (0.9636)
R ²	0.5687	0.5710

**Table 3: Dependent Variable:
Ethnic Conflict (binary variable)**

Independent variable	Openness as Trade/GDP ratio		Openness as Composite index	
	Logit model	LPM with fixed effects	Logit model	LPM with fixed effects
Openness	-2.1827* (0.8207)	-0.2663* (0.1237)	-0.3864* (0.1091)	-0.0487* (0.0205)
Quality of Governance	-1.3720* (0.2747)	-0.2082* (0.0313)	-1.4546* (0.2694)	-0.2175* (0.0308)
Growth	-0.1301* (0.0531)	-0.0206* (0.0085)	-0.1069* (0.0472)	-0.0221* (0.0088)
Inflation	0.0302* (0.0139)	0.0048* (0.0017)	0.0354* (0.0136)	0.0085* (0.0021)
Population	0.7301* (0.2481)	0.1617* (0.0467)	0.8000* (0.2622)	0.1926* (0.0490)
Democracy	0.2700** (0.1616)	0.0520** (0.0291)	0.4316* (0.1481)	0.0834* (0.0280)
Democracy ²	-0.0147* (0.0077)	-0.0027* (0.0013)	-0.0224* (0.0070)	-0.0044* (0.0013)
ELF	18.1894* (3.7920)	2.7942* (0.5795)	11.5740* (3.2305)	1.6302* (0.6181)
ELF ²	-17.6627* (3.9121)	-2.7368* (0.5925)	-11.5289* (3.3035)	-1.6430* (0.6246)
Constant	3.5578 (1.9633)	1.0981 (0.3242)	3.2458 (1.0534)	1.1705 (0.2018)

Some results:

Trade Openness

Enhances growth

Improves quality of governance

Lowers the probability of ethnic conflicts

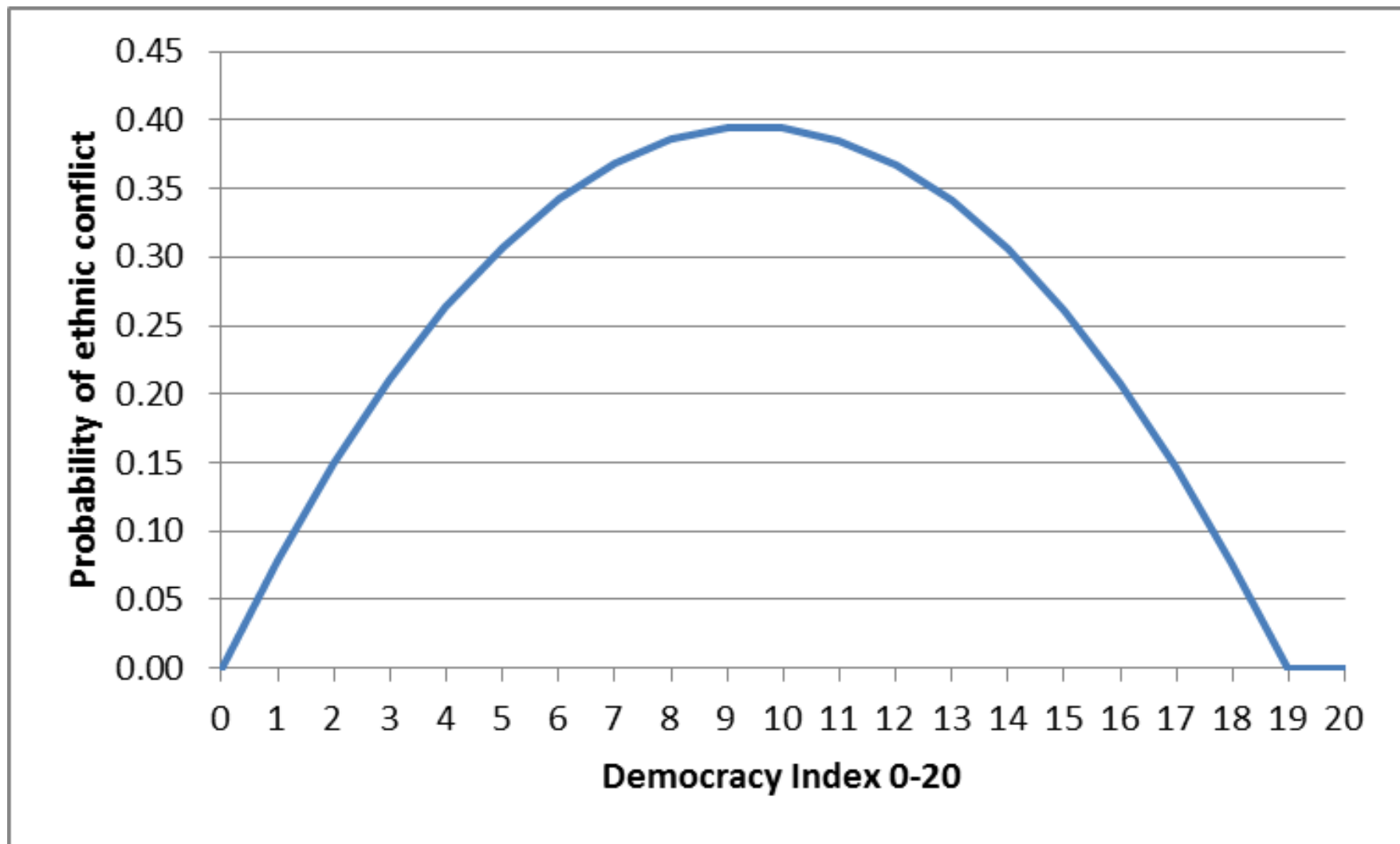
Regardless democracy or authoritarian

Openness to investment may re-inforce this effect

Openness exerts a disciplining effect on the regime

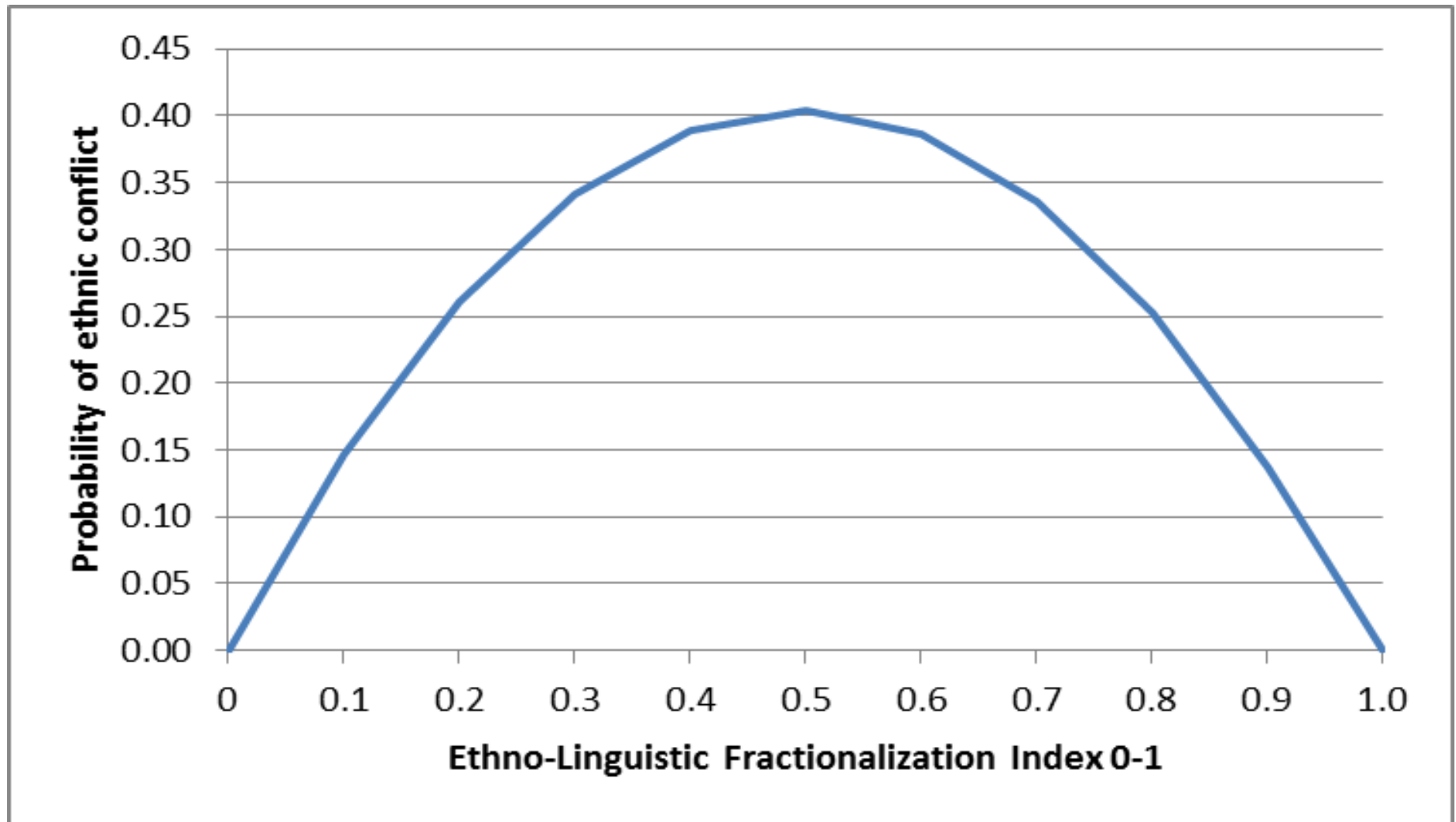
Some Results:

Fragile democracies are not so conducive for ethnic peace



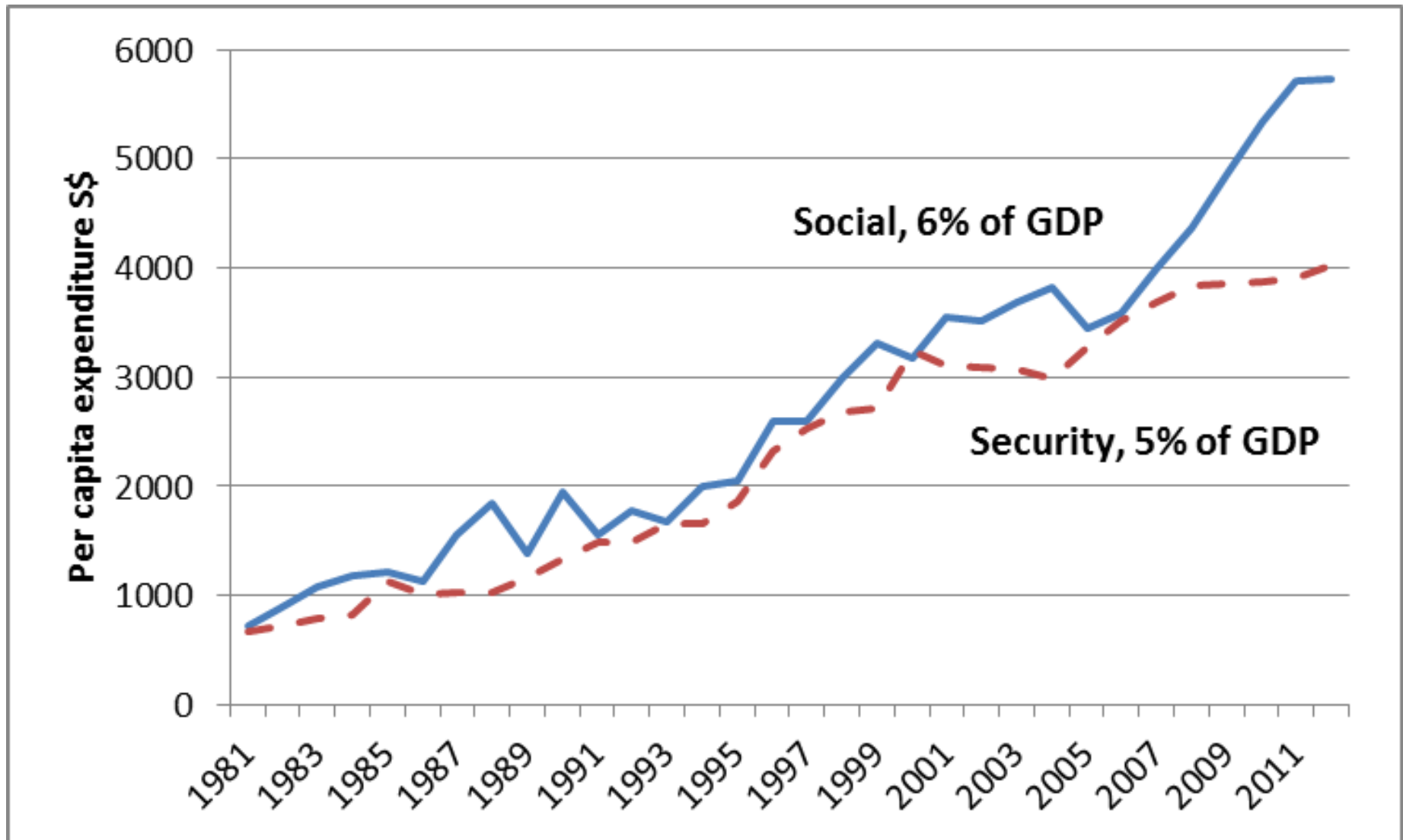
Some Results:

Ethnic homogeneity or large heterogeneity is good for ethnic peace



2. National security

Per capita social and security spending



National Security

- External vs **internal threats**
- Strict handling of race and religious extremism

High spending on national security may be viewed as a necessary evil or more positively as an insurance plan

3. Politicians with high opportunity cost

- **Should politics be a profession with zero opportunity cost? Spore said NO.**
- **Lee Kuan Yew: "Amazingly, throughout most of the contemporary Western world, leaders in government require no special training or qualification. Many get elected because they sound and look good on television. The results have been unhappy for their voters."**
- **Need foresight and vision**
- **Highest paid ministers in the world**

4. Geopolitics

- **Singapore, a tiny (Chinese) fish in a big Malay sea**
- **Indonesian Konfrantasi under Sukarno and bombing**
- **Lee Kuan Yew set things right with Indonesia**
- **ASEAN**
- **American alliance**
- **Now China? But**
- **Geography dominates**

Key Development strategies

Given Singapore's vulnerability and the lack of natural resources, policy makers gave priority to policies that promoted economic growth and quickly moved away from the British style welfare state.

Four key aspects

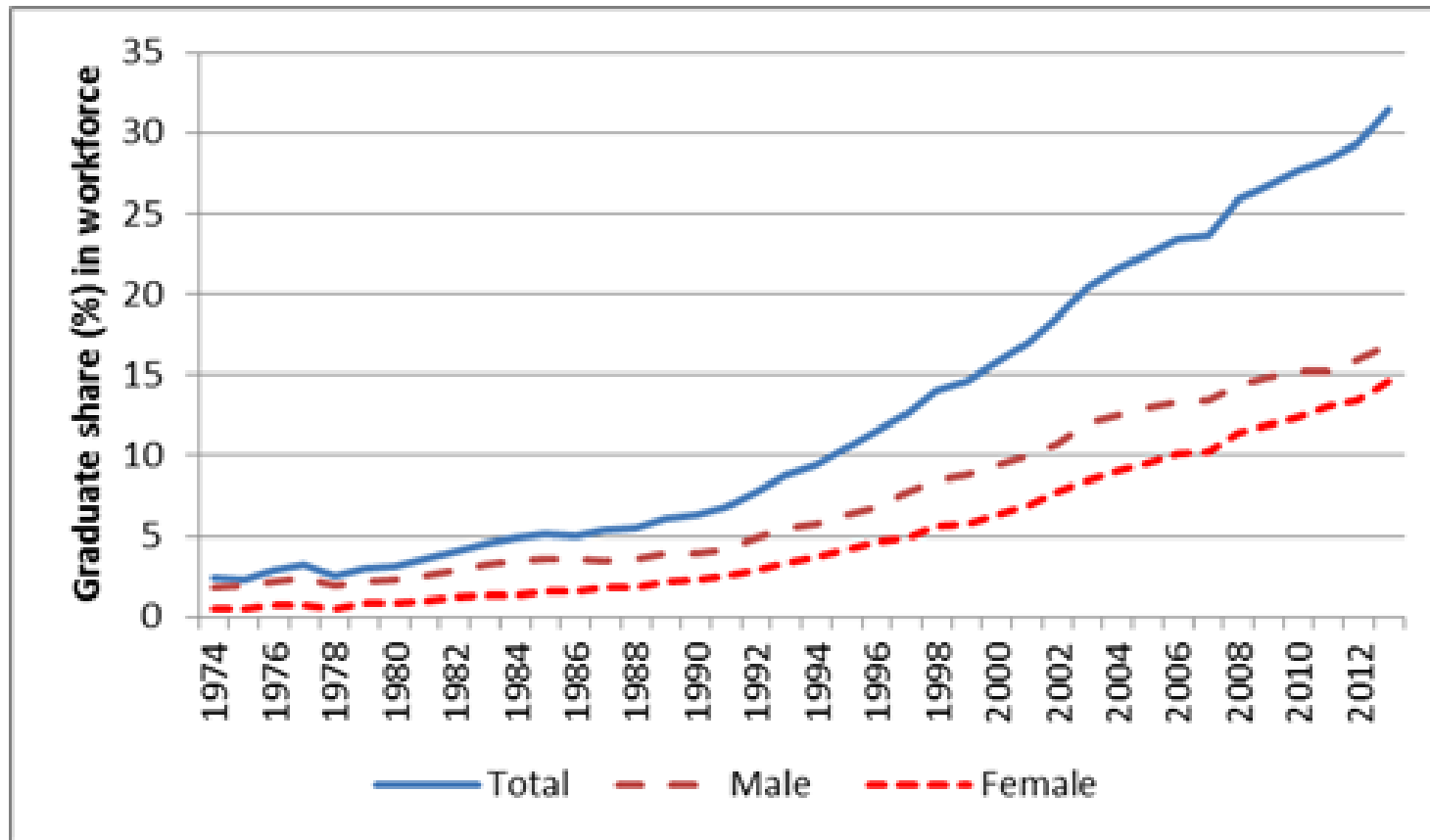
- Human resources
- Efficiency infrastructure
- International competitiveness
- Development welfare

1. Human Resources

Targeted education: Three phases

- 1. Early industrialization phase (unemployment, anti-natal policy-overshot, TFR fell to below replacement level)**
- 2. Post 1979 industrial re-structuring phase (high VA, pro-natal policy since 1980)**
- 3. Post 1997 Asian Financial crisis phase (knowledge driven, TFR continued to fall -1.16 in 2017. Import labor, more than 1/3 of LF is foreign)**

Targeted education and training



Proportion of economically active university degree holders in Singapore resident labour force: early 1970s <2.4%; 1990, 6.3%; 2013, 31%

Enrolment in university first degree courses (Percentage distribution)

Singapore	1995-2013	Sri Lanka	2010-2014
Engineering	34.6	Arts	30.1
Humanities & Social Sciences	17.1	Sciences	19.7
Sciences	11.7	Management	17.7
Business & Admin	11.4	Engineering	6.4
Accountancy	6.4	Medicine, Dent, Vet	6.0
Information Technology	5.5	Computer/ICT	5.3
Medicine, Dent, Health Sci	4.2	Agriculture	5.1
Architecture & bldg	3.4	Para med, Ind Med	4.4
Educ, App Arts, Service	2.3	Commerce	2.3
Law	2.2	Architecture	1.6
Mass Com	1.2	Law	1.5
		Fashion	0.4

2. Infrastructure

- **Efficiency infrastructure** : High quality physical infrastructure supplemented by efficient service framework; very attractive to FDI despite cost disadvantages.
- **Innovation infrastructure**: Conducive legal and physical environment for innovative work (eg. One North project)
- **Upgrading physical structures**

3. International Competitiveness

- **2014-2015 Global competitiveness report by World Economic Forum ranked Spore 2th in terms of overall competitiveness among 144 countries.**
- **Cost competitiveness: short-term cost cuts in response to economic crises and long-term productivity improvements**

Wage flexibility institutionalized

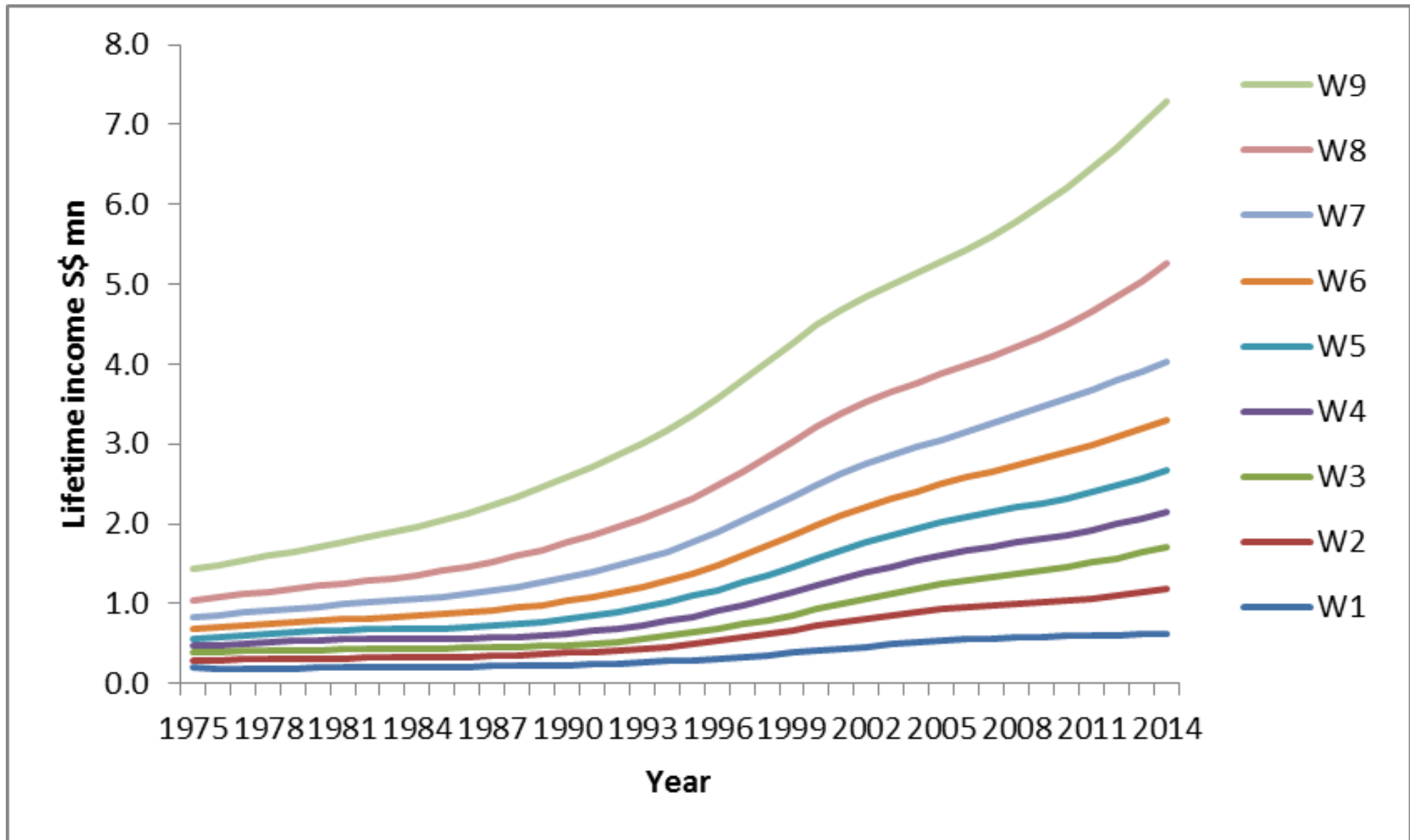
- **Wages are rigid downward**
- **Variable component in wages in Spore**
- **CPF and other wage cuts during downturns**

4. Development Welfare

- **NO to Western style consumption welfare**
- **Instead focused on development welfare to provide education, housing, healthcare and other services at subsidized rates to Singaporeans.**
- **Self and family responsibility (CPF and medical savings accounts)**
- **Workfare (instead of welfare)**

Problems: Rising Income Inequality

(Lifetime nominal labor income in Singapore by income decile, discounted to age 30)



Inequality vs Unfairness

Skill-based income inequality

Unavoidable and not hated

Getting rich through unfair means

**Singapore handled corruption by making
the top non-corrupt.**

Some other issues

- **Demand for more social welfare**
- **Aging population**
- **Labor shortage and automation**
- **Growing competition and strategies for the next lap**

Thank You