The question

• What are the limitations and challenges of Singapore’s economic growth model? And what reforms and transformations do you think are required to overcome those limitations and challenges, particularly in terms of productivity and innovation?
What is productivity?

How much stuff you make with how much resources.
What is productivity?

For the economy as a whole, labour productivity roughly equals GDP/workers, or VA/workers.

And VA roughly equals profits + wages + depreciation
What causes economic growth?

- Increase due to labour force growth
- Increase due to the increased capital intensity of labour
- ‘Residual’/total factor productivity (TFP)

Annual GDP growth
Why is productivity important?

“Productivity isn’t everything, but in the long run it is almost everything. A country’s ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.”
- Paul Krugman, The Age of Diminished Expectations.
Singapore’s Economic Performance

**1963** Merger with Malaya, Sabah and Sarawak to form Malaysia

**1964** Racial/communal riots throughout Malaysia and Singapore

**1965** Singapore separates from Malaysia, joins UN. Public campaign to “Stop at two”. Fertility rate drops

**1967** ASEAN formed with Singapore as a founding member

**2004** Lee Hsien Loong sworn in as prime minister

**2005** Bill passes that paves way for casino gambling

**2011** General elections: worst PAP performance since independence

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**Real GDP per person at PPP**, $’000

- **Singapore**
- **United States**
- **Hong Kong**
- **Japan**
- **Malaysia**
- **China**
- **Indonesia**
OUR HISTORY

The emergence of Singapore as the heart of Asia’s economy has come with many challenges. From its days as a small and underdeveloped nation, Singapore has emerged from the tumultuous financial, social and political changes over the years to transform into the first-world metropolis that it is today.

THE SIXTIES

With a GNP per capita of less than US$320, Singapore was a third-world nation with poor infrastructure and limited capital. Low-end commerce was the mainstay of the economy and the handful of industries that existed produced only for domestic consumption, leaving no room for direct foreign investment.

To create job opportunities following the massive unemployment and labour unrest, an environment conducive to industrial development had to be formed, thus leading to the birth of the Jurong Industrial Estate – the first of many such estates on the island.

It was during this exciting period of growth that the Singapore Economic Development Board (EDB) was established with a budget of S$100 million to take on the challenge of convincing foreign investors that the country was a good place for business.

These two developments marked the start of Singapore’s industrialisation programme that began with factories producing garments, textiles, toys, wood products and hair wigs. Along with these labour-intensive industries were capital and technology-intensive projects from companies such as Shell Eastern Petroleum and the National Iron and Steel Mills.

The success of this programme over time meant new issues had to be tackled, namely the lack of raw resources that once came from Malaysia and rapidly growing local demand. Singapore’s solution then was to develop its export-oriented industries, as EDB opened its first overseas centres in Hong Kong and New York to be better placed to woo foreign investors.
Increase in economic volatility
Slowdown in GDP growth

GDP Growth Rate (%)

Trend GDP growth rate

First oil shock
Second oil shock
1985 Recession
1992 Slowdown
Asian Financial Crisis
Collapse of dot.com bubble
SARS, Iraq war
Global financial crisis

Events:
- 1965-1979: First oil shock
- 1990-1992: Second oil shock
- 2003-2005: SARS, Iraq war
What was the growth model that emerged after the 1980s?
Diminishing returns to labour

Figure 10. Singapore – Real GDP Growth vs Population Growth (1980 to 2010)

Source: CEIC, Citi Research
What have economists said about Singapore?

“I advance the notion that Singapore is a victim of its own targeting policies, which are increasingly driving the economy ahead of its learning maturity into the production of goods in which it has lower and lower productivity... although Singapore might be experiencing learning-induced improvements in total factor productivity within individual sectors, this is masked at the aggregate level by a movement into industries in which the economy is less productive.”

Alwyn Young, “Tale of Two Cities: Factor Accumulation and Technical Change in Hong Kong and Singapore”, 1992

“All of Singapore’s growth can be explained by increases in measured inputs. There is no sign at all of increased efficiency. In this sense, the growth of Lee Kuan Yew’s Singapore is an economic twin of the growth of Stalin’s Soviet Union – growth achieved purely through mobilization of resources.”

“There have been no studies, to my knowledge, of the relative dependence of these countries on foreign investments as an instrument of economic growth. My own subjective impression is that this dependence is strongest in Singapore and that the participation of national entrepreneurs in promoting industrial development is smaller here than in the other countries...

Not only is Singapore more dependent on foreign entrepreneurs than are Hong Kong, Taiwan and South Korea, but her position is probably unique in that she is now dependent on a continuing supply of foreign workers to sustain growth... This, then, is the setting against which we have to consider our long-term problem of income distribution...

... All this involves a fundamental matter of policy. The question we must answer sooner or later is this: ‘When do we stop growing?’ Or to be more precise, at what point do we stop importing foreign workers and cease to encourage foreign entrepreneurs and capital in Singapore? Because of our limited land area, industrial expansion together with the concomitant population expansion will produce overcrowding to increasingly uncomfortable limits.”

Goh Keng Swee, Singapore in the International Economy, 1972
Singapore Tackles ‘2d Industrial Revolution’

By William Branigin
Washington Post Foreign Service

SINGAPORE — Building on an economy that is already the strongest in Southeast Asia, Singapore’s government is pursuing a “second industrial revolution” aimed at putting the city-state in the ranks of the world’s most technologically advanced countries.

At the same time, the administration of Prime Minister Lee Kuan Yew is moving toward greater political sophistication. Most political prisoners have been quietly released in recent months, and a “second generation” of young technocrats is being groomed to take over Singapore’s leadership.

These new leaders will inherit Southeast Asia’s best-run state, one whose world importance far outstrips its small size. Although Singapore has only 2.4 million people and 226 square miles of land, it ranks as the world’s third-largest oil refining center after Rotterdam and Houston and, according to diplomats, recently passed Oklahoma in terms of government efficiency and generally made their continued presence difficult.

Instead of labor-intensive industries, Singapore is trying to attract tives and generally made their continued presence difficult.

The city-state’s prosperity has a price. “Singaporeans get a high standard of living in return for being treated like schoolchildren.”

Among the risks, however, is that the economic reprogramming could entail labor problems. This concern apparently lies behind theawan.

This sort of control is exercised over the society generally by Lee Kuan Yew’s ruling People’s Action Party, which has not lost an election since 1959 and has won every seat in parliament since 1968.

Singapore’s press observes a fairly stringent self-censorship, and the government retains the authority to imprison opponents for two years without trial under the Internal Security Act, a remnant of British colonial days.

But with the political situation stable and public support ensured by the country’s economic successes, the government has felt confident enough to release most of the 50 political prisoners Lee acknowledged were being held four years ago.

The release of Communists, union organizers and student leaders began about two years ago, and several have been freed in recent months. Now Singapore is believed to hold no more than 15 political prisoners.

“There are still political prisoners, but they’re no longer a major issue.”
Immigration Policy, Labour Forge Growth and Final Population Size

The Future Singapore Society – Switzerland or Dubai?

Total population projections under different labour force (LF) growth assumptions

- 3.5% LF growth assumption: 17,937
- 3% LF growth assumption: 15,216
- 2% LF growth: 11,103
- 1.67% LF growth: 10,056
- 33% NR foreigner: 6,526

IPS TFR1.24, 30k new citizens/PRs, 0.5% LF growth, 1 in 4 persons a foreigner
Points to ponder

- What is Singapore’s economic model and how does it relate to Singapore’s productivity challenges?

- Does Singapore need a new economic model? If so, what assumptions need to be rethought?

- How important will entrepreneurship and innovation be to Singapore in the future?

- While GDP per capita is high, the wage share is low by rich country standards. A large part of profits is repatriated rather than invested domestically.

- What role does the aspirations of Singapore’s citizens play in its economic restructuring?
Questions?