

macroeconomic



# REVIEW

briefing  
27 April 2017



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## Special Features



# International Economy

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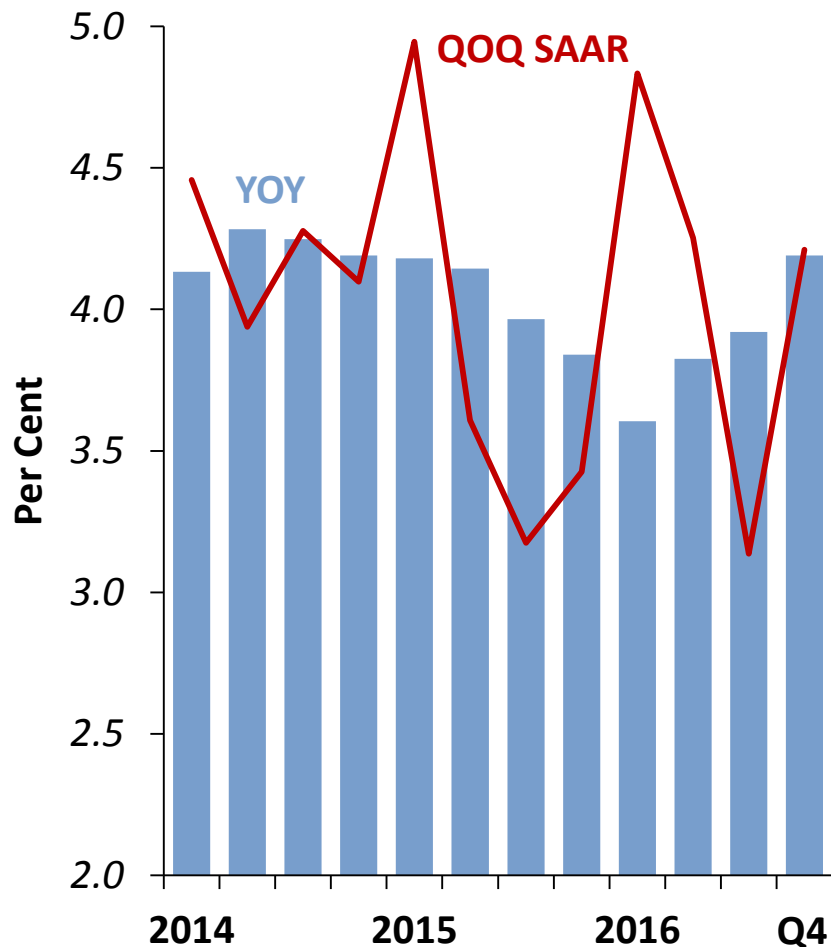
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Some Improvement In Global Growth

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# Global growth has regained some traction.

## Global GDP Growth



## GDP Growth Forecasts (%)

	2017F	2018F
<b>Total*</b>	<b>4.0</b>	<b>4.0</b>
<b>G3*</b>	<b>1.8</b>	<b>1.7</b>
US	2.2	2.4
Japan	1.3	1.0
Eurozone	1.7	1.5
<b>NEA-3*</b>	<b>2.2</b>	<b>2.2</b>
Hong Kong	2.1	2.1
Korea	2.5	2.5
Taiwan	2.0	2.0
<b>ASEAN-4*</b>	<b>4.7</b>	<b>4.7</b>
Indonesia	5.2	5.4
Malaysia	4.4	4.4
Philippines	6.4	6.3
Thailand	3.3	3.3
China	6.5	6.2
India**	7.3	7.6

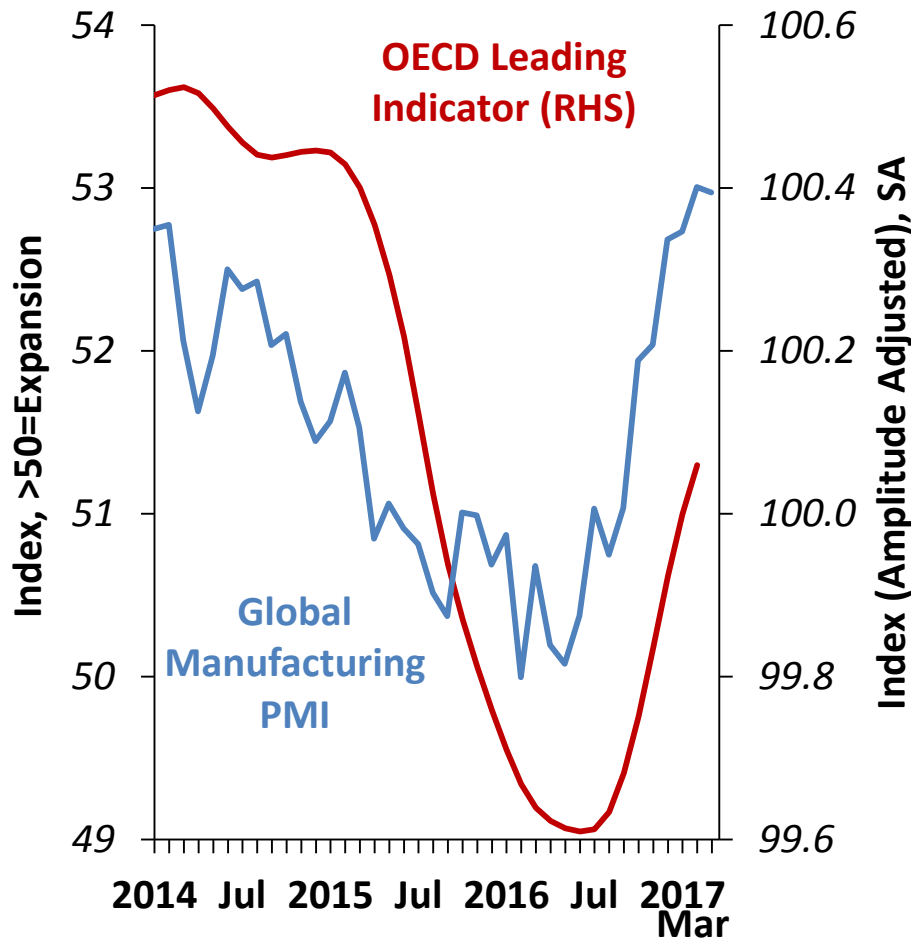
Source: CEIC, Consensus Economics, Apr 2017 and EPG, MAS estimates

\* Weighted by shares in Singapore's NODX.

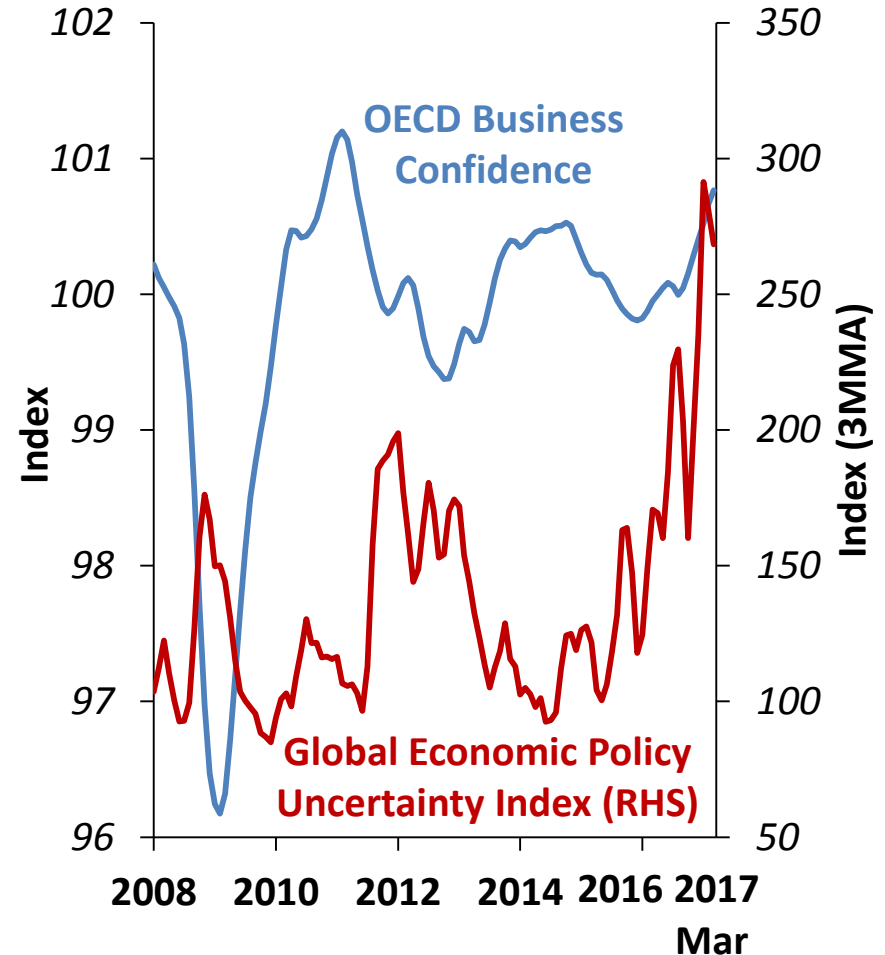
\*\* Figures are reported on a Financial Year basis; FY2017 refers to the period from April 2017 to March 2018.

# In the G3, activity has strengthened amid improving sentiment, despite rising policy uncertainty.

### Global Manufacturing PMI and OECD Leading Indicator

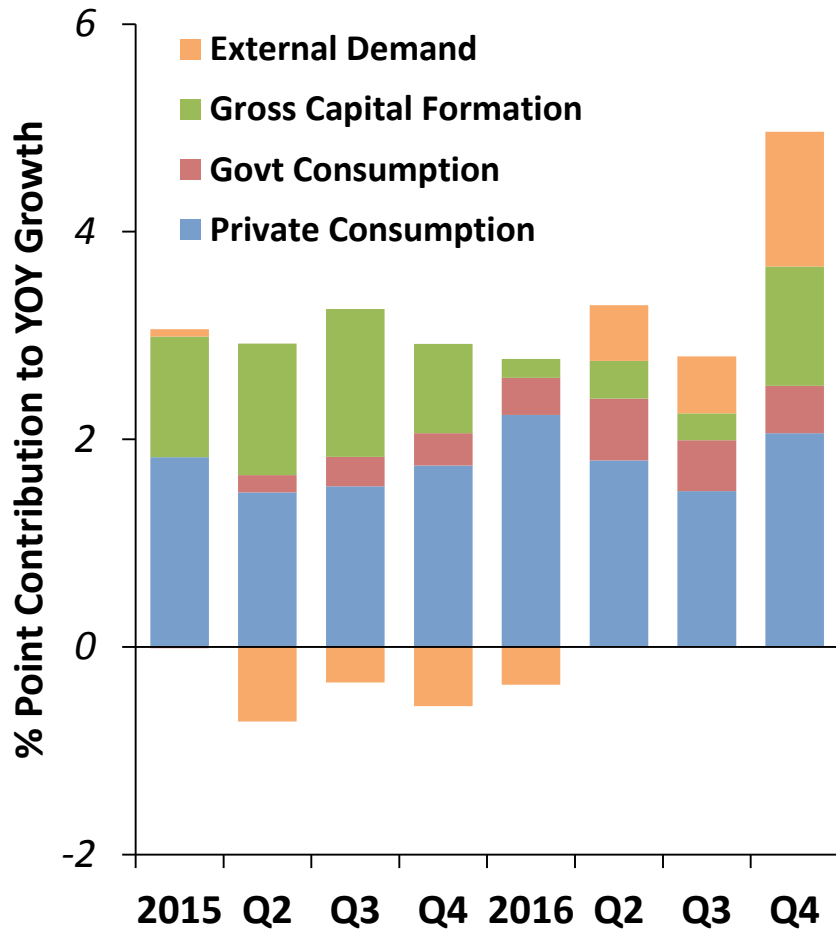


### Global Economic Policy Uncertainty and OECD Business Confidence

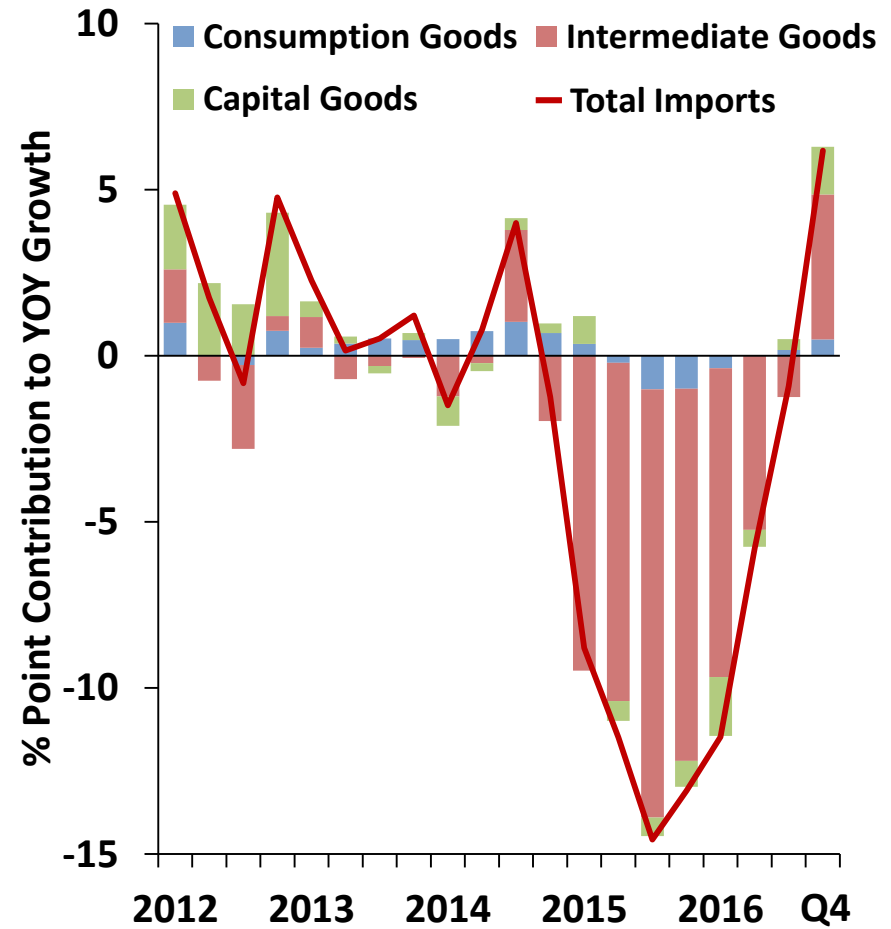


# External demand re-emerges as a growth driver in Asia

## Contribution to Growth in Asia-8 Total Demand



## Contribution to Growth of NEA-3 and ASEAN-4 Imports by Product Category





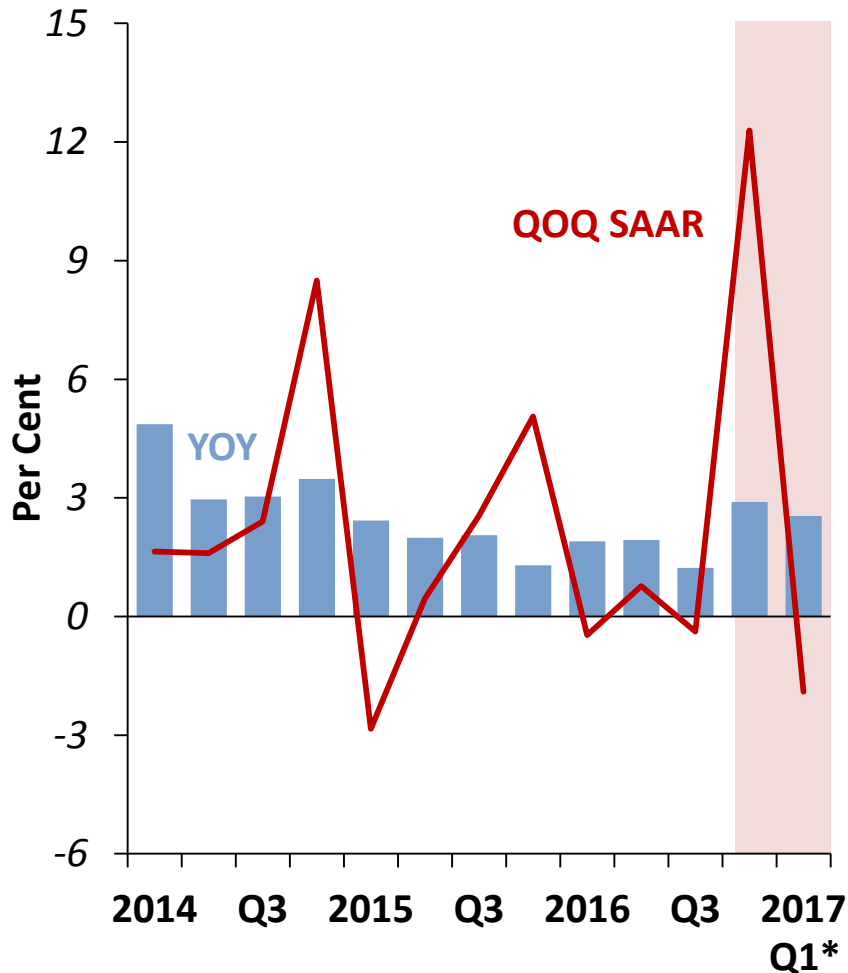
# Domestic Economy

Cyclical Impulses And Structural Trends

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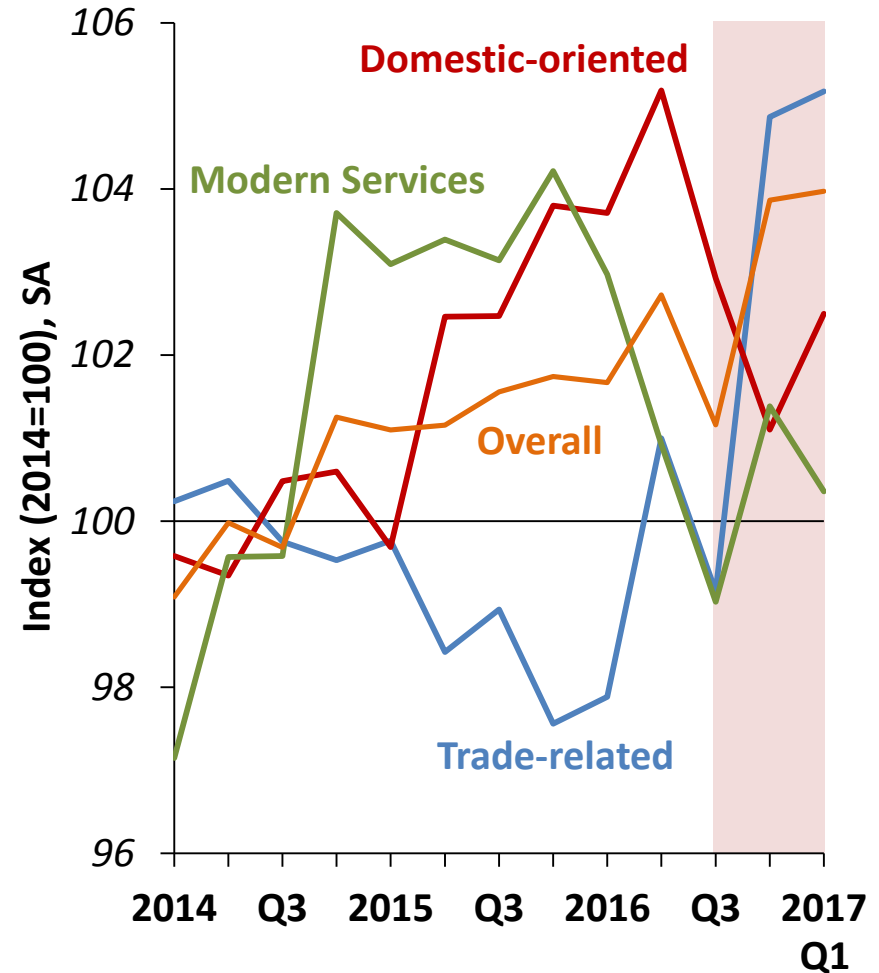
# Domestic economic growth has seen some improvement.

## Singapore's GDP Growth



\* Advance Estimates

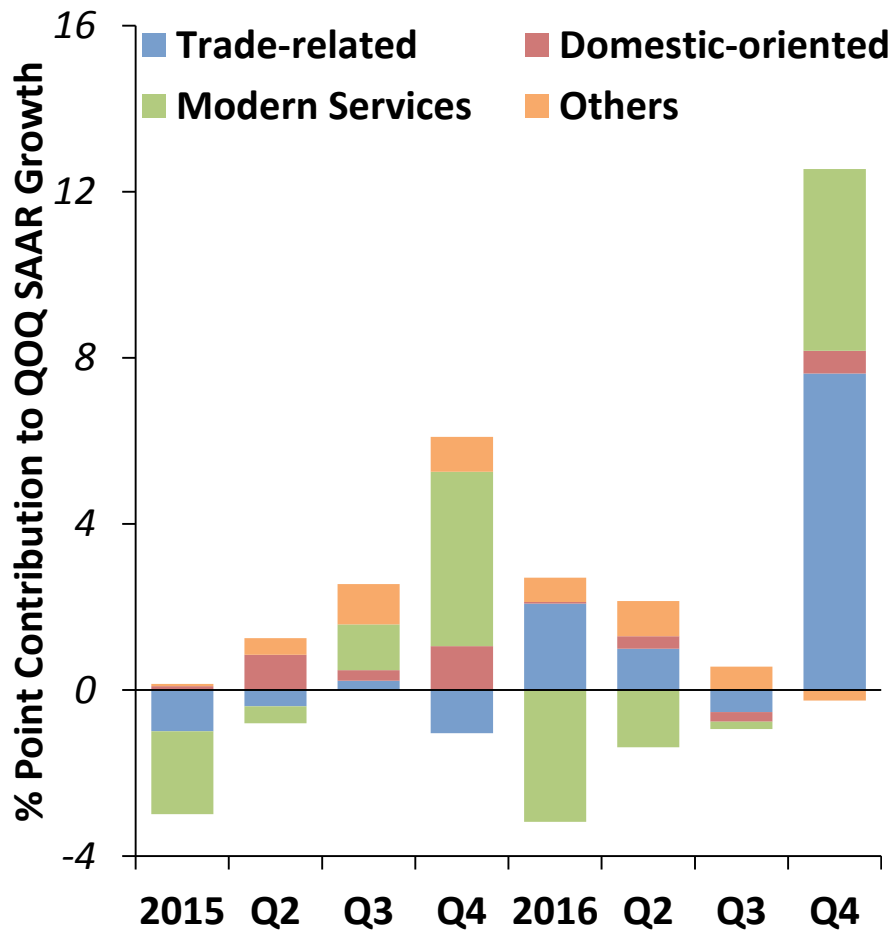
## EPG's Economic Activity Index



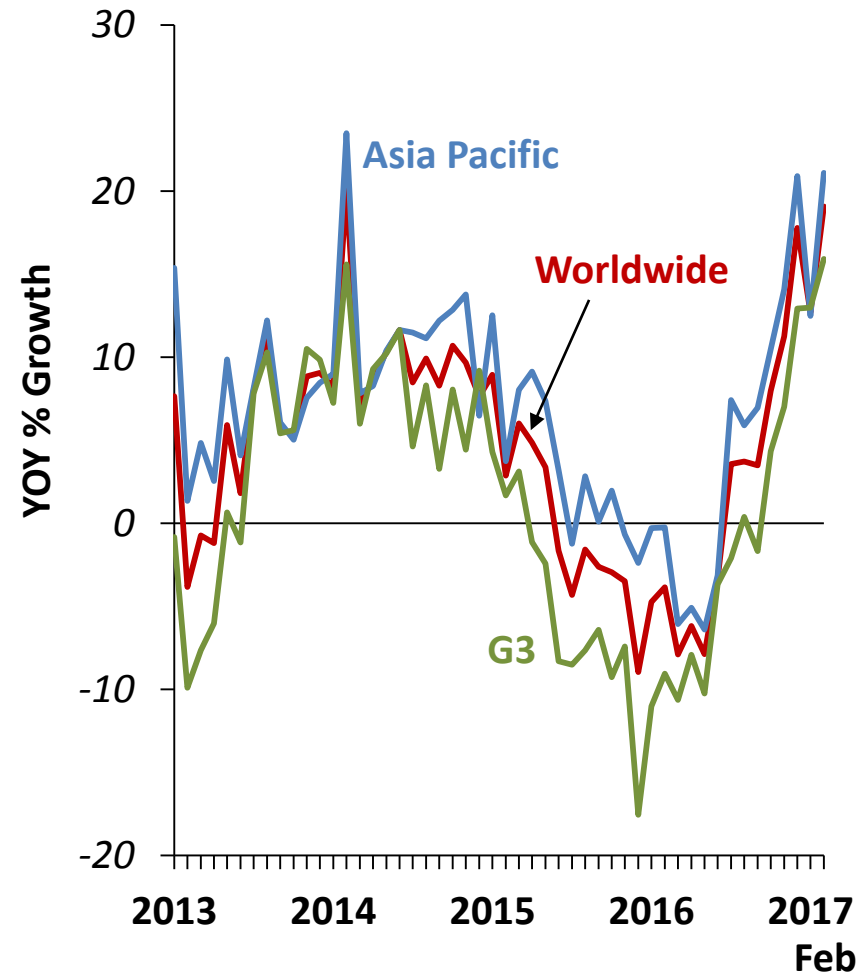


# Going forward, the cyclical uplift in the electronics sector will be a key support of demand.

## Domestic vs Trade-oriented Growth in Singapore

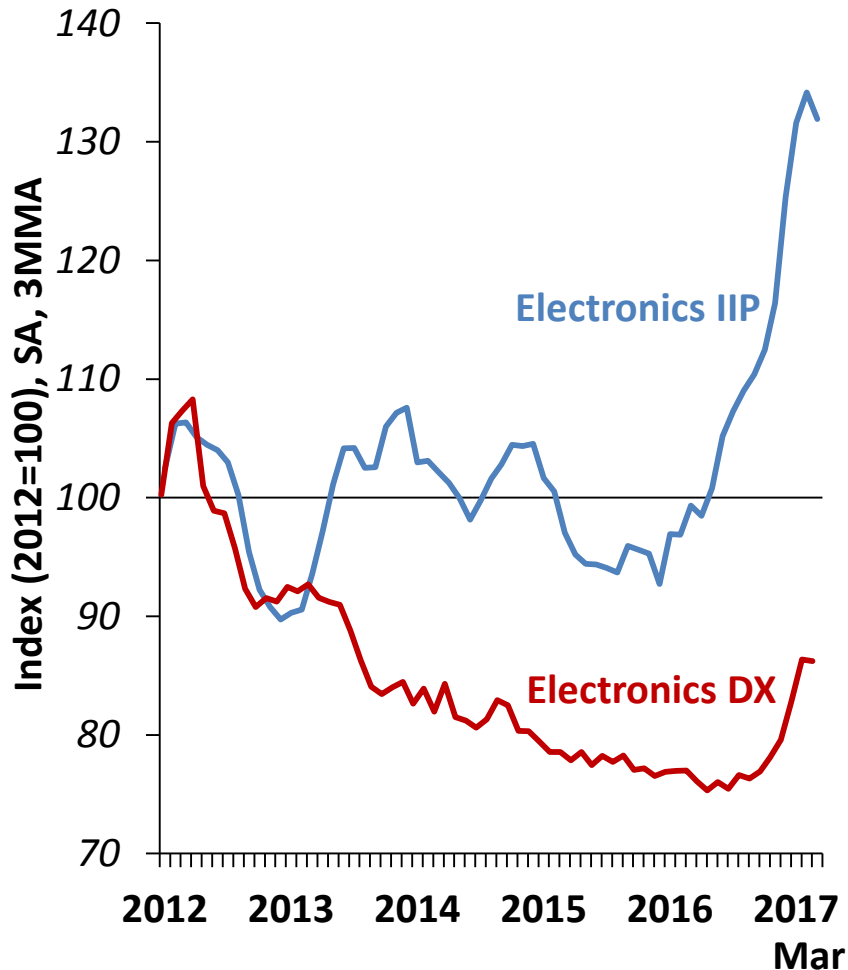


## Global Chip Sales by Region

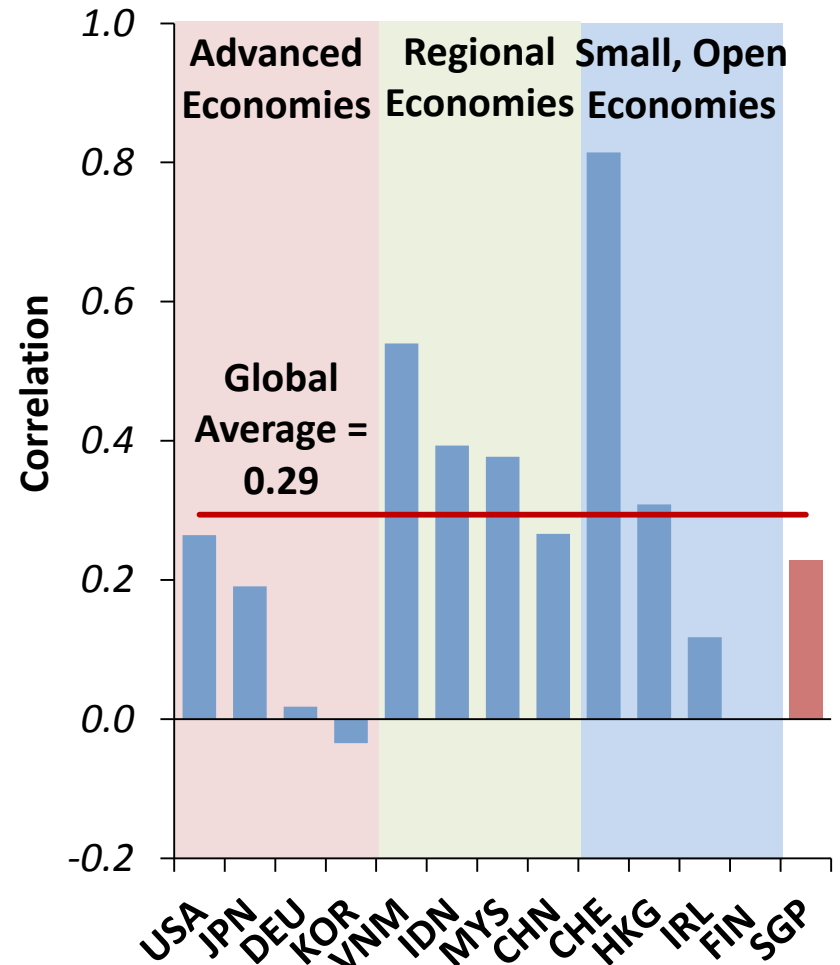


# Singapore's role in the global IT chain has evolved, alongside a dynamic export basket.

## Electronics IIP and DX

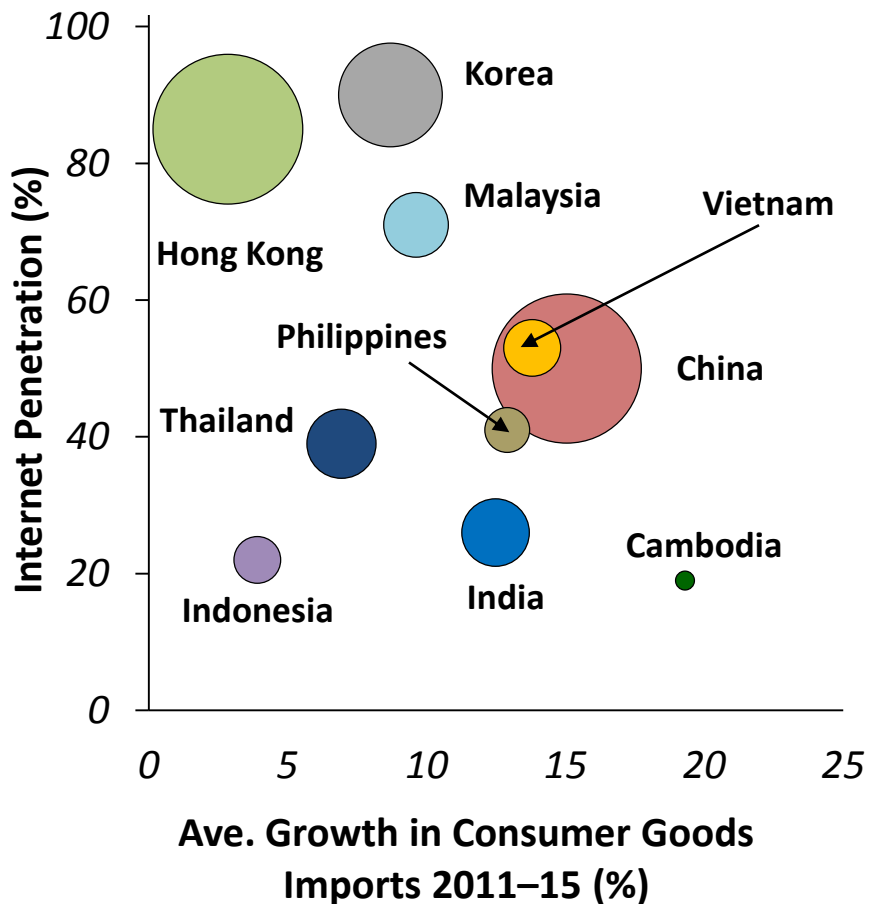


## Rank Correlations of the Top 20 Exports

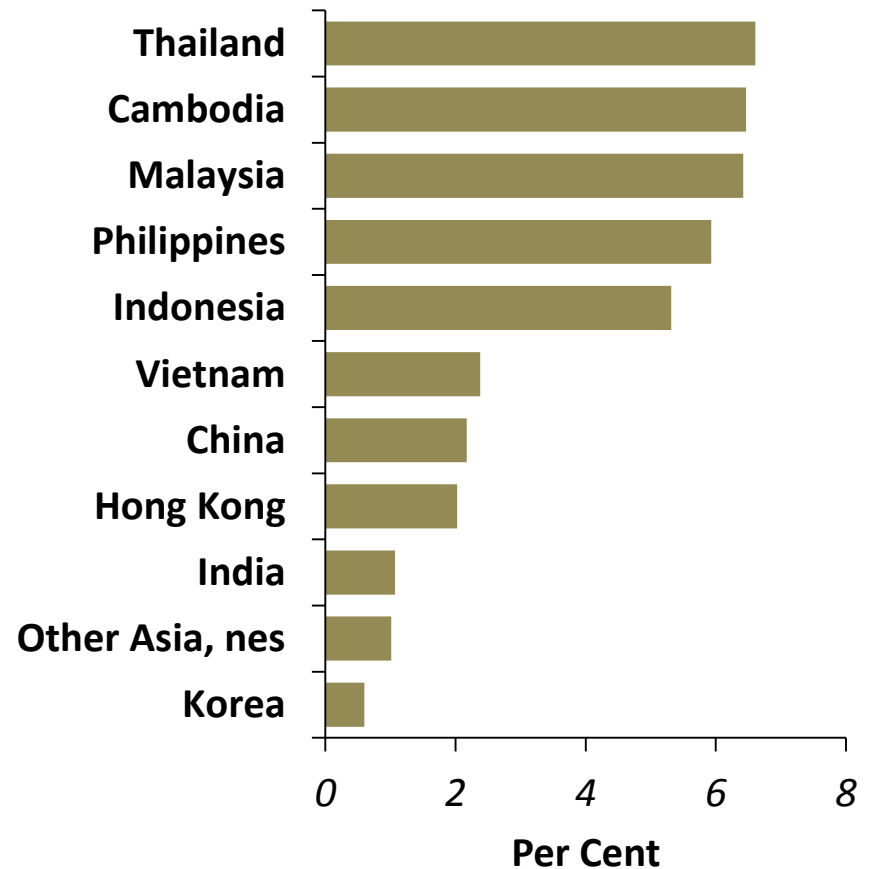


# Box A: The Opportunities for E-commerce in the Retail Sector

**Market Potential: Growth in Consumer Goods Imports & Internet Penetration Rates**



**Share of Country's Consumer Goods Imports Supplied by Singapore**





# Labour Market and Inflation

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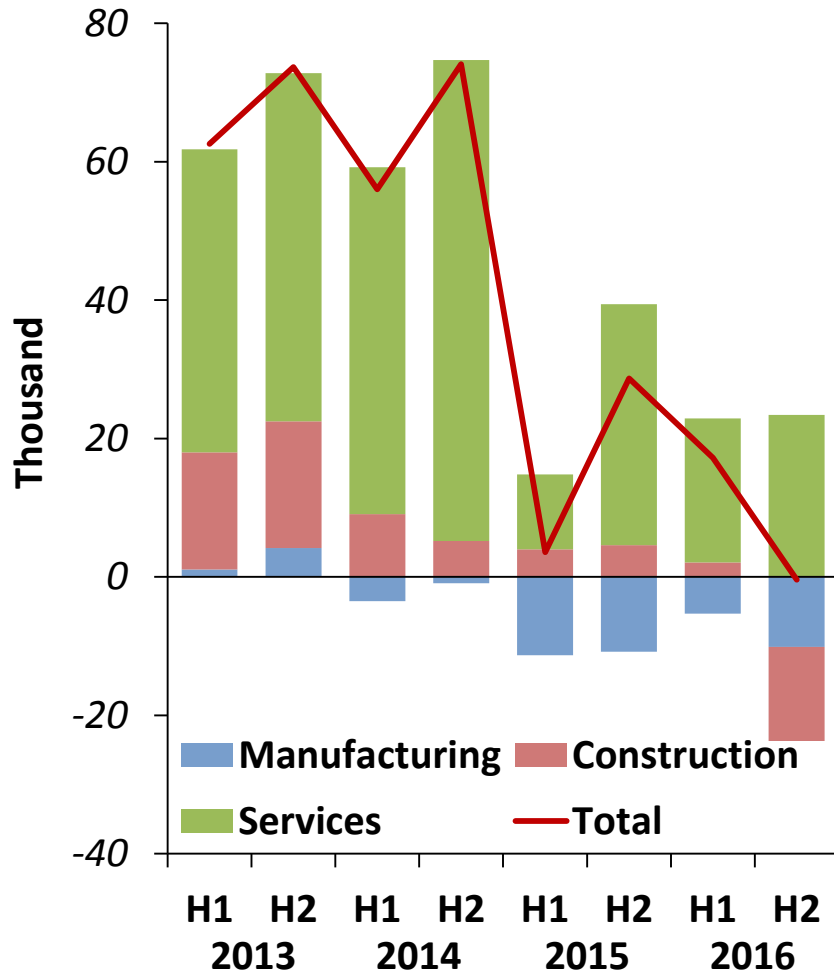
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Demand-side Inflationary Pressures Remain Muted

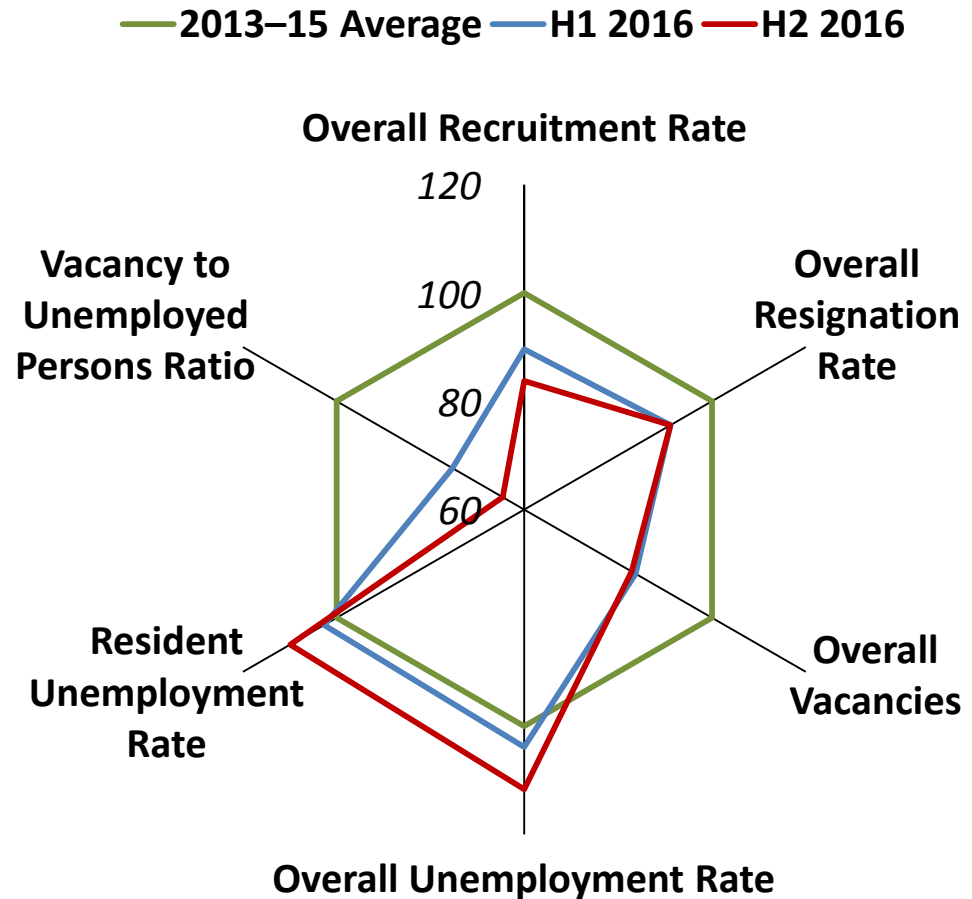
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# Activity in the labour market has remained soft.

## Overall Employment Changes

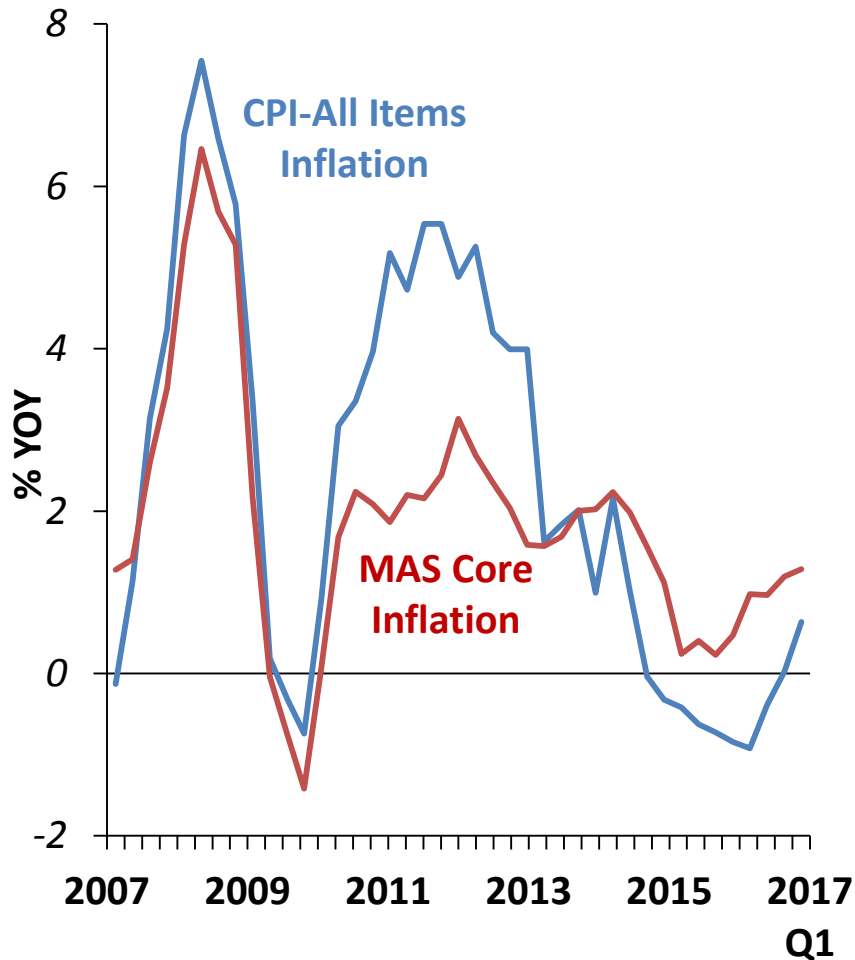


## Labour Market Indicators

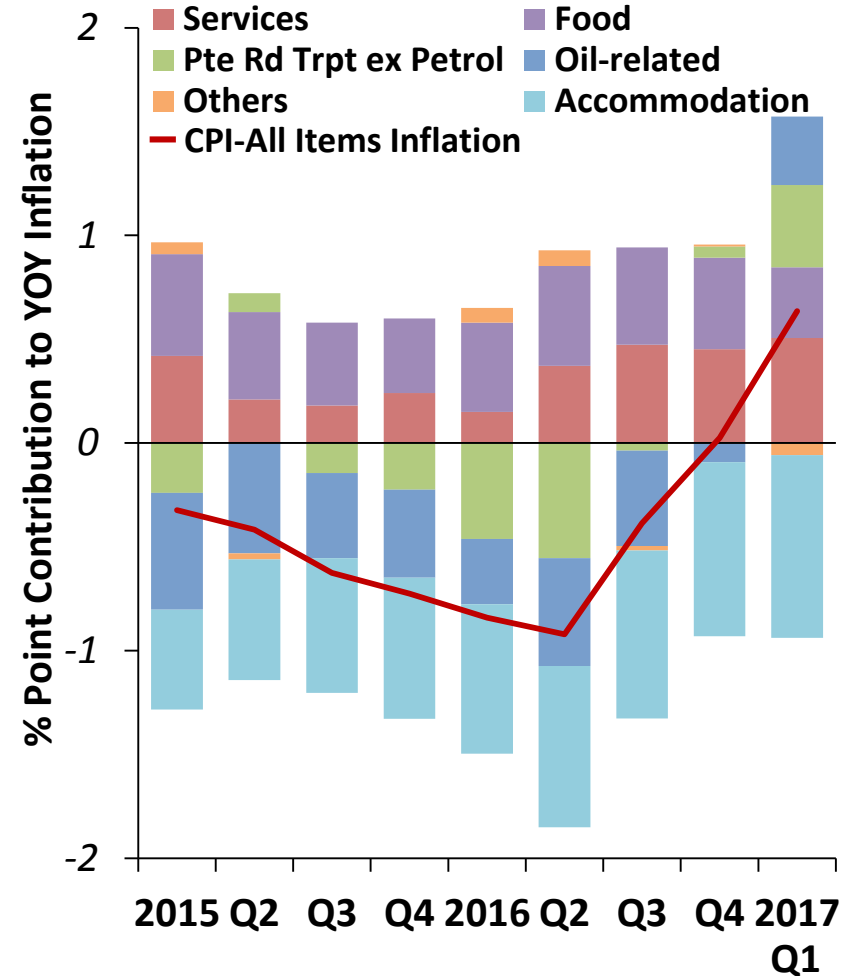


# Inflation continued to trend up amid a pickup in the prices of oil-related items.

## CPI-All Items and MAS Core Inflation

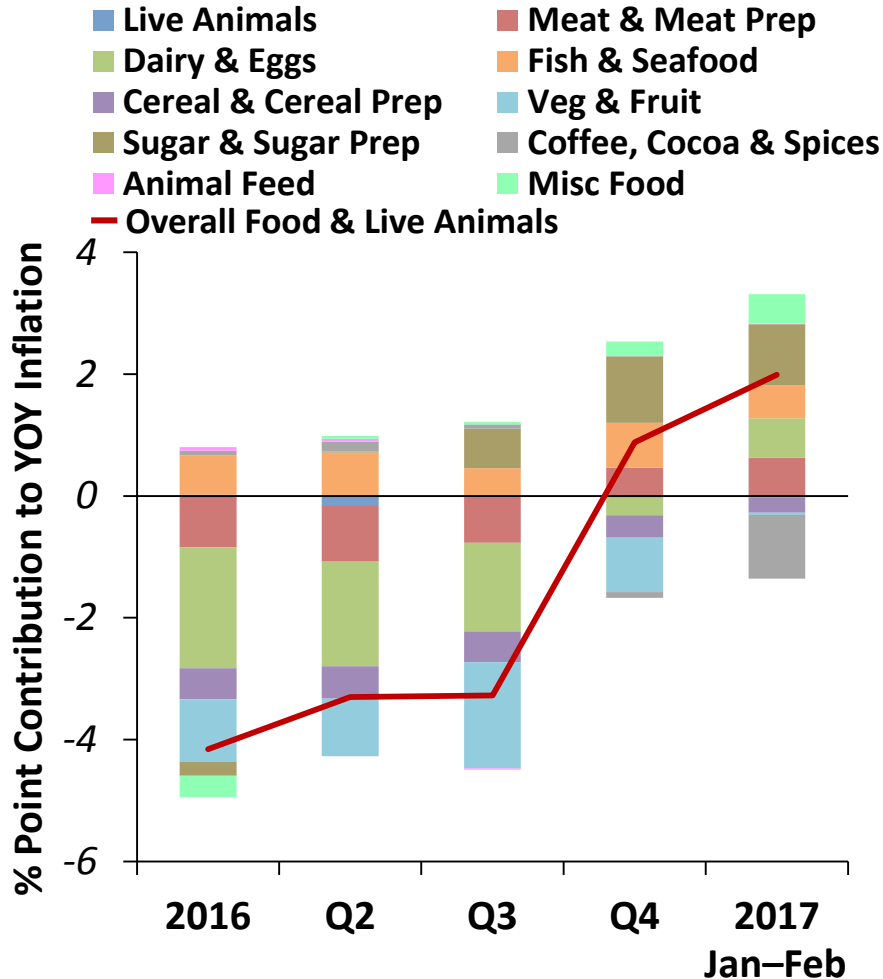


## Contribution to CPI-All Items Inflation

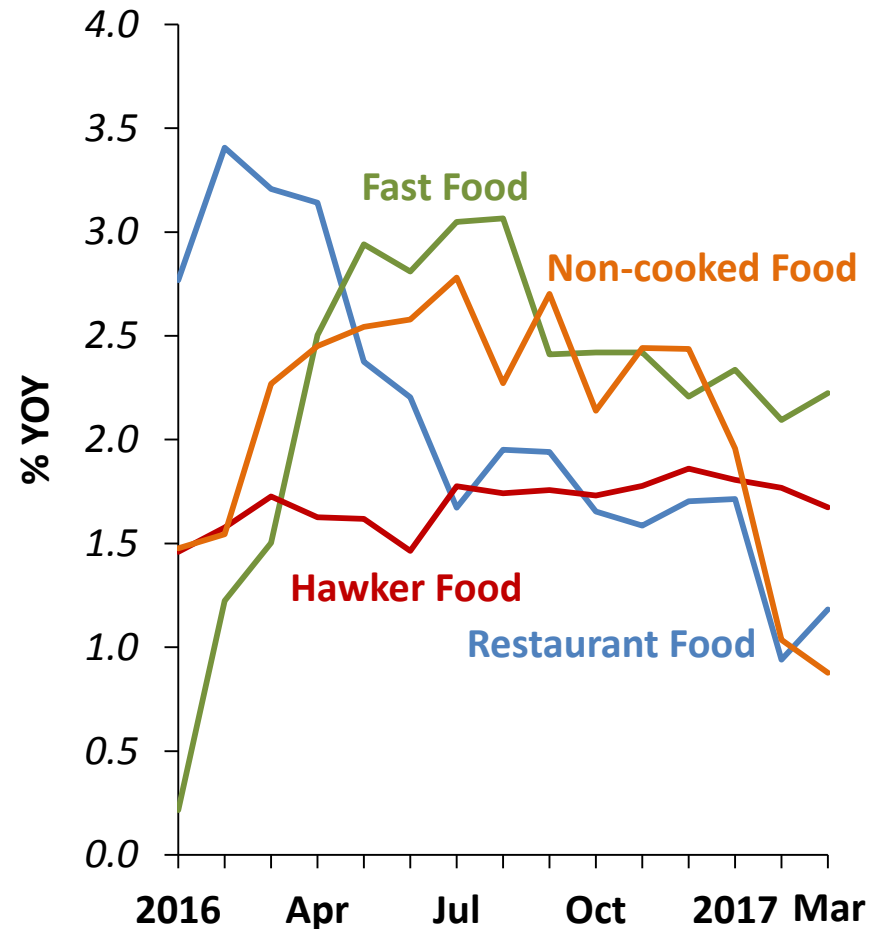


# Imported food prices have risen but the pass-through to consumer food prices is more gradual

## Contribution to Imported Food Inflation

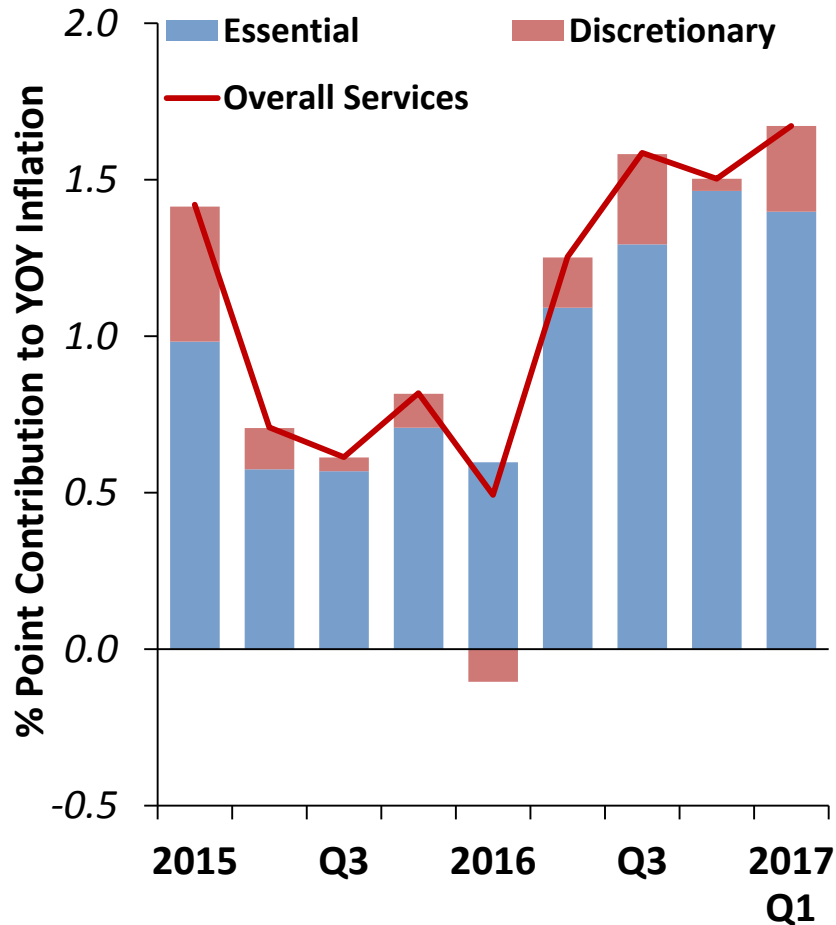


## Components of Food Inflation for Consumers

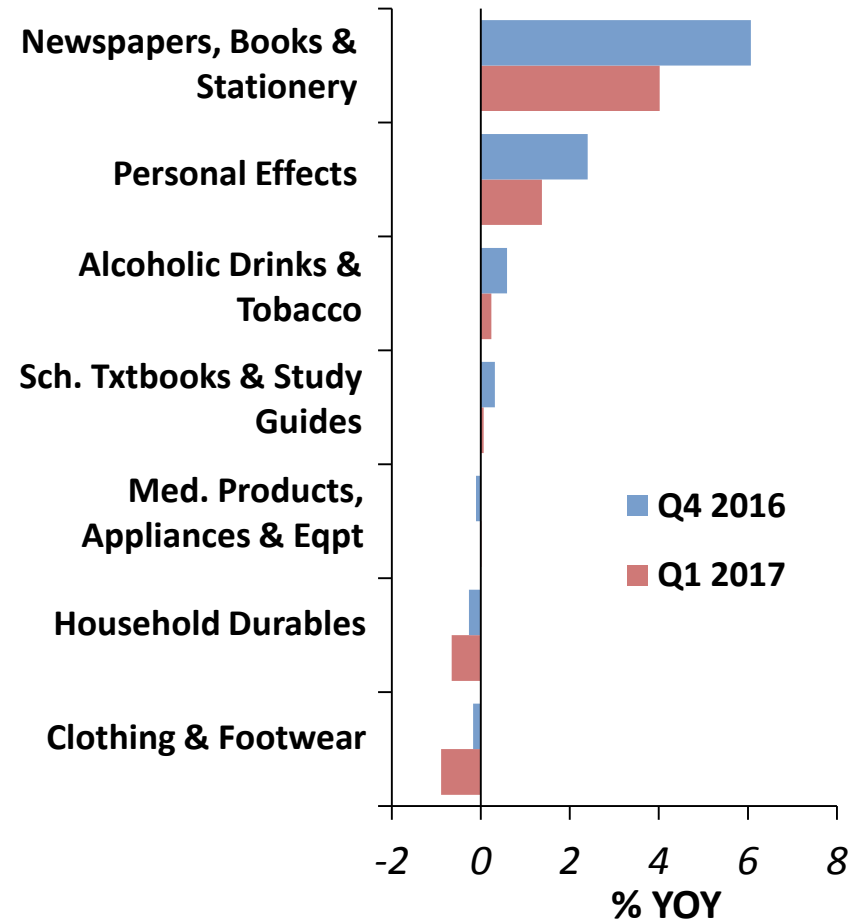


# Muted price pressures from discretionary services and retail goods.

## Contribution to Overall Services Inflation



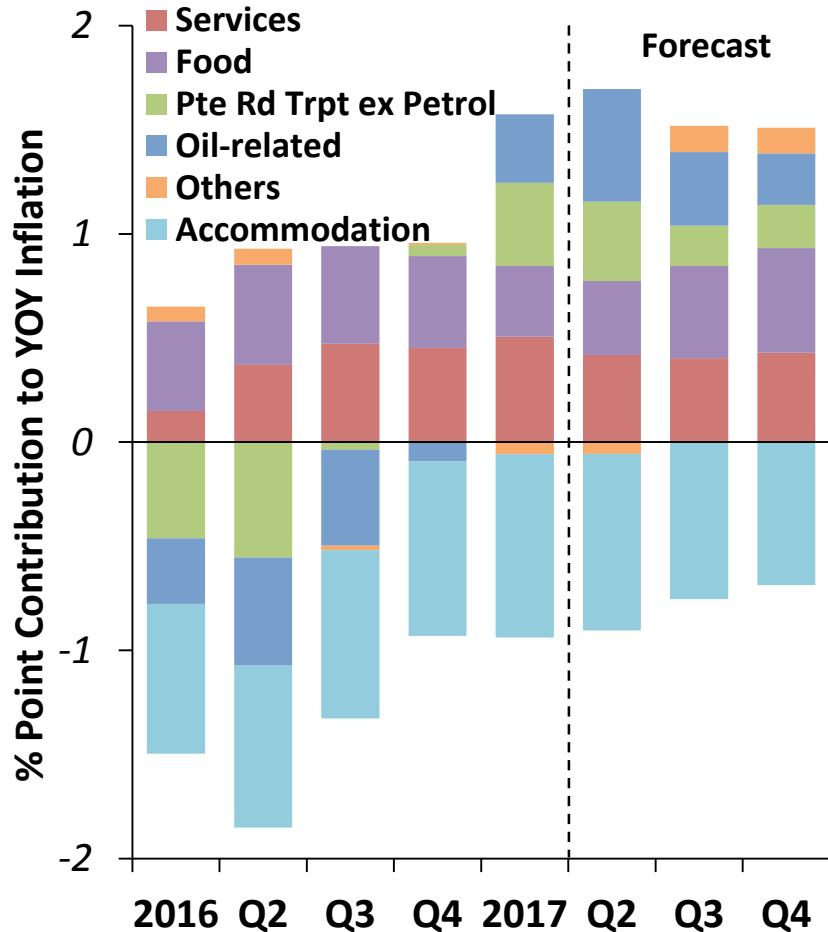
## Price Change for Selected Retail CPI Components



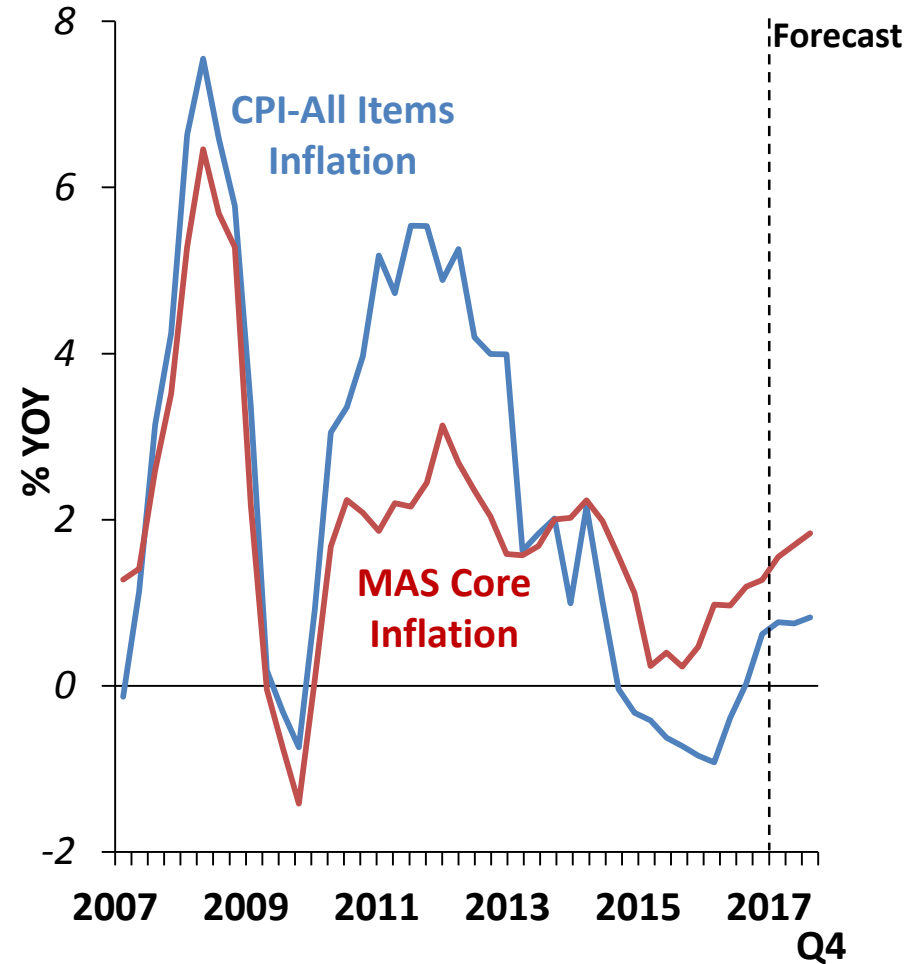


# Administrative price hikes could increase business costs but the pass-through to consumers is likely to be modest

## Contribution to CPI-All Items Inflation



## CPI-All Items and MAS Core Inflation





# Macroeconomic Policy

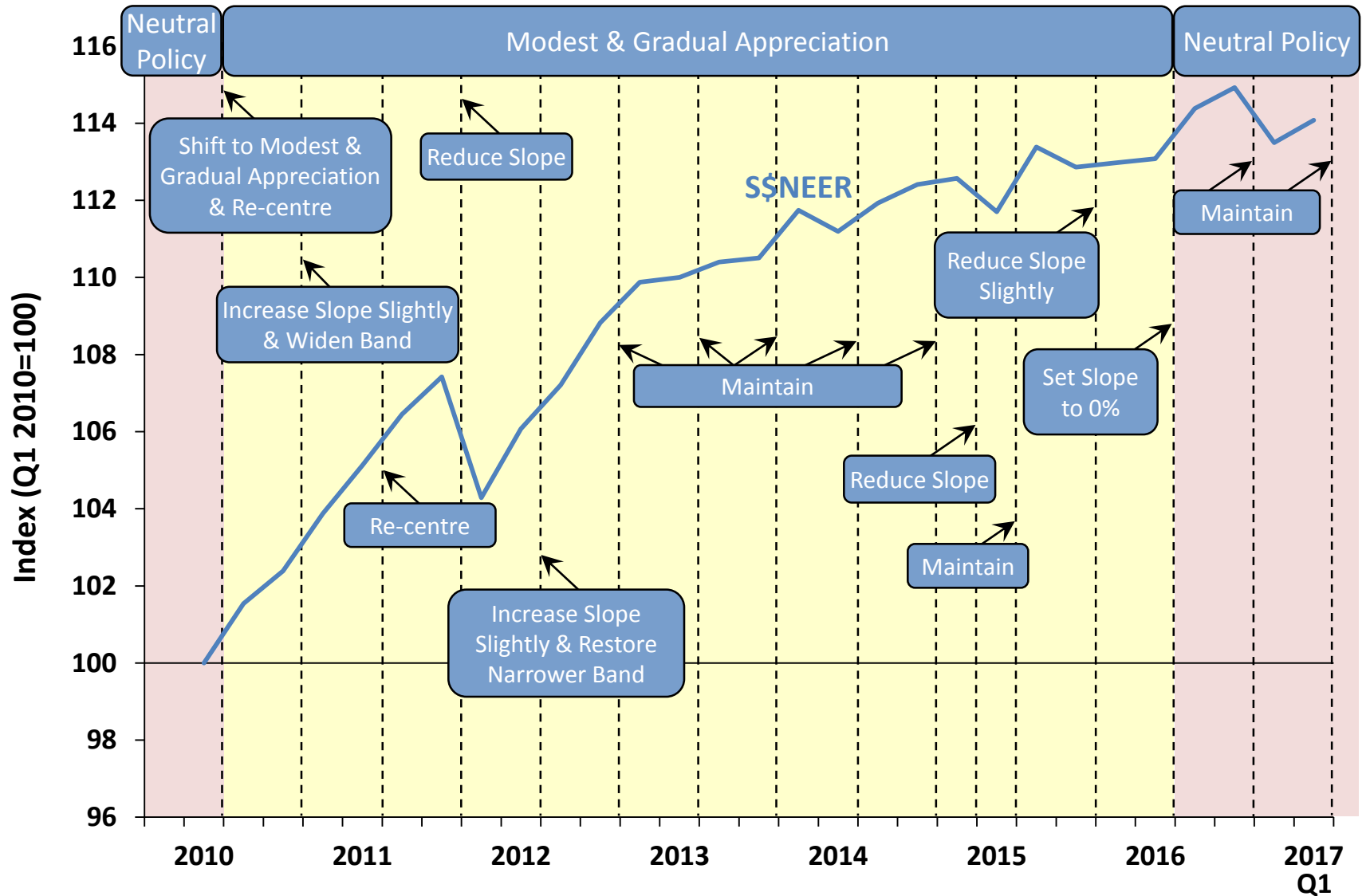
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Keeping the Economy on an Even Keel

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# Maintaining a neutral monetary policy stance.



# The Currency Interchangeability Agreement: Fifty Years On



- AMBD and MAS collaborated on Box C to commemorate the 50<sup>th</sup> anniversary of the Currency Interchangeability Agreement. The Agreement came into force on 12 June 1967, when Brunei and Singapore began issuing their own currencies. Under the Agreement, both countries undertook to accept each other's currency and to exchange it at par, without charge, into its own currency.
- This article highlights how the long history of exchange rate cooperation between Brunei and Singapore, which dates back to the 19<sup>th</sup> Century, laid the foundation for the Agreement in 1967. It also highlights how the Agreement has remained intact in the five decades since, as it has been compatible with macroeconomic stability in both countries and has helped to deepen economic and financial linkages between Singapore and Brunei.

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# REVIEW

Q&A



27 April 2017



# Special Features

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# Optimal Control in the Monetary Model of Singapore

- *Special Feature A is an exposition of the optimal control facility that was recently added to the Monetary Model of Singapore (MMS), as part of EPG's ongoing efforts to enhance its quantitative economic toolkit. This approach entails solving the model for the path of the policy instrument that would achieve macroeconomic stability.*
- *After describing how the optimal control policy is related to the literature on central bank loss functions, it is applied in a retrospective historical setting and the results are compared with actual outcomes.*
- *This exercise demonstrates both the usefulness and limitations of the optimal control approach. Specifically, the results are contingent on the set of macroeconomic forecasts and do not take into account uncertainty.*

# The Role of Exchange Rates In International Price Adjustment



**Prof Charles Engel**  
Department of Economics,  
University of Wisconsin,  
USA

- *In September 2010, Guido Mantega, the Brazilian finance minister, commented that “we are in the middle of a currency war”. In February 2017, US President Donald Trump called China “the grand champions at manipulation of currency.”*
- *Policymakers believe that a change in the exchange rate affects a country’s competitiveness, while academic studies typically assume that international prices are determined independently of nominal exchange rates.*
- *Professor Engel argues that nominal exchange rates do play a role in determining international prices and international competitiveness. Nonetheless, there is also a role for price adjustment, so competitiveness is by no means determined only by the value of the currency.*



# Using Cost-Benefit Analysis In Developed And Developing Countries: Is It The Same?



**Prof Euston Quah**  
Department of Economics,  
Nanyang Technological  
University, Singapore

- *Properly accounting for the full costs of growth through GDP and other indicators of national income may prove too costly for developing countries. Often, developing nations account for these costs by carrying out cost-benefit analysis (CBA) on public projects.*
- *In this Special Feature, Professor Quah discusses the similarities and differences in the application of CBA in developed and developing countries. These differences arise from the operation of goods, labour and financial markets, as well as behaviours that affect experimental design and results.*
- *Consequently, several issues and pitfalls relating to investment decision criteria, valuation techniques, and distributional considerations need to be borne in mind. CBA should only be used as a guide, and not as the final or only arbiter of project proposals.*

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