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LIST OF ABBREVIATIONS

ACU	Asian Currency Unit
ARF	Additional Registration Fee
ASEAN	Association of Southeast Asian Nations
BCA	Building and Construction Authority
BEA	US Bureau of Economic Analysis
COE	Certificate of Entitlement
CPF	Central Provident Fund
CPI	consumer price index
CSP	community, social & personal
DBU	Domestic Banking Unit
DLI	Domestic Liquidity Indicator
ECB	European Central Bank
EIA	Energy Information Administration
ELI	Electronics Leading Index
EPG	Economic Policy Group
EU	European Union
FDI	foreign direct investment
FI	Fiscal Impulse
GDP	gross domestic product
GFC	Global Financial Crisis
GFCF	gross fixed capital formation
GOS	gross operating surplus
GST	goods and services tax
HDB	Housing Development Board
IIP	Index of Industrial Production
IMF	International Monetary Fund
IPI	Import Price Index
IPO	Initial Public Offering
IT	information technology
m-o-m	month-on-month
NIEs	newly-industrialised economies
NEER	nominal effective exchange rate
NODX	non-oil domestic exports
OECD	Organisation of Economic Cooperation and Development
OPEC	Organisation of the Petroleum Exporting Countries
PMI	Purchasing Managers' Index
QE	Quantitative Easing
q-o-q	quarter-on-quarter
REER	real effective exchange rate
SA	seasonally-adjusted
SAAR	seasonally-adjusted annualised rate
SIBOR	Singapore interbank offered rate
SOR	swap offered rate
WTI	West Texas Intermediate
y-o-y	year-on-year

Preface

The *Macroeconomic Review* is published twice a year in conjunction with the release of the MAS Monetary Policy Statement. The *Review* documents the **Economic Policy Group's (EPG)** analysis and assessment of macroeconomic developments in the Singapore economy, and shares with market participants, analysts and the wider public, the basis for the policy decisions conveyed in the Monetary Policy Statement. It also features in-depth studies undertaken by EPG on economic issues facing Singapore.

The *Review* was edited by Associate Professor Peter Wilson, and continues to feature our collaborations with academics. We are pleased to work again with Professor Ilian Mihov of INSEAD. Highlights of his recent work on the exchange rate as an instrument of monetary policy appear in Special Feature A. We are also grateful to Professor Shang-Jin Wei of Columbia University for his contribution of Special Feature B on an alternative approach to explaining aggregate saving behaviour.

The data used in the *Review* was drawn from the following government agencies, unless otherwise stated: BCA, CPF Board, DOS, EDB, HDB, IE Singapore, LTA, MOF, MOM, MTI, STB and URA.

The *Review* may be accessed in PDF format on the MAS website: <http://www.mas.gov.sg/Monetary-Policy-and-Economics/Monetary-Policy/Macroeconomic-Review.aspx>

The *Review* may also be purchased at major bookstores, online (<http://asp.marketasia.com.sg/Spore/sporeindex.asp>), or on an annual subscription basis (details can be found on the last page).

Highlights

Since the last *Review* in October 2012, the uncertainty that loomed over US fiscal policy and Eurozone financial conditions has eased, together with the risk of a “hard landing” in China, at least for the time being. Forceful policy support from Japan and the renewed commitments to maintain accommodative monetary policy in other industrialised countries have also lifted sentiment. Nonetheless, overall growth of Singapore’s major trading partners is envisaged to be only mildly stronger in 2013 compared to a year ago, led by firmer activity in Asia ex-Japan.

Chapter 1 provides an overview of recent economic developments in Singapore and in the external environment. Since the last *Review*, Singapore’s economic growth has been tepid and volatile, a pattern that first emerged in 2011. Helped by a rebound in the external-oriented industries amid stronger Asian activity, the Singapore economy resumed growth and expanded by 3.3% q-o-q SAAR in Q4 2012. However, the upward momentum waned in Q1 2013, with growth coming in at –1.4% q-o-q SAAR, according to the *Advance Estimates*. Singapore’s growth is expected to pick up modestly over the course of the year, alongside the gradual improvement in the external environment, and average between 1–3% in 2013.

Chapter 2 looks at recent developments in inflation and the labour market. Labour demand picked up towards the end of 2012, largely driven by the non-tradable sectors such as construction, healthcare and education, amid a ramp-up in infrastructure development and initiatives to build capacity in essential services. At the same time, the increased demand for resident workers pushed the resident jobless rate down to a five-year low in Q4 2012. On the inflation front, benign external price pressures and temporary restraint in domestic cost pass-through led to a moderation in core consumer price increases in H2 2012. Firms appear less confident to pass on cost increases in view of muted consumer sentiment in recent quarters. However, accommodation costs and car prices continue to feature significantly in overall inflation, accounting for more than 60% of the headline number in the last two quarters. Chapter 2 also includes a box item that provides an updated estimate of the natural rate of unemployment in Singapore and analyses the structural factors that have caused it to fluctuate over time.

Chapter 3 delves into the outlook for global and domestic growth, as well as consumer price inflation. Compared to the last *Review*, the outlook for the global economy has improved slightly, alongside a moderation in tail risks. Economic activity in the G3 is expected to be tepid and pick up only gradually towards the second half of 2013, while the Asia ex-Japan economies are likely to experience relatively steady growth this year. On the domestic front, prospects for a modest recovery over the rest of this year are accompanied by downside risks. For one, the relatively sanguine outlook for the advanced economies, on which this recovery is predicated, is not a foregone conclusion. Also, supply-side constraints could limit the pace of Singapore’s cyclical turnaround. As such, growth in the domestic economy may not match the behaviour that has characterised past upturns. Moreover, cost pressures could strengthen, as the labour market is likely to stay at, or near, full employment into the second half of the year. Core inflation is therefore expected to rise in H2 2013. Overall inflation is, however, likely to recede from its Q1 high and remain broadly stable for the rest of the year. Following recent motor vehicle policy measures, the contribution of COE premiums to CPI-All Items inflation will likely fall. For 2013 as a whole, MAS Core Inflation is projected to come in at 1.5–2.5% while CPI-All Items inflation is forecast to average 3–4%. The appreciating stance of MAS’ exchange rate policy will continue to facilitate the adjustment of domestic prices as part of the ongoing restructuring in the economy towards sustainable growth.

This issue of the *Review* includes two Special Features. In Special Feature A, Professor Ilian Mihov of INSEAD shows how a theoretical model based on the optimising behaviour of households and producers is able to generate useful results about the desirability of the exchange rate as an instrument of monetary policy. He develops a New Keynesian small open economy model in the dynamic stochastic general

equilibrium (DSGE) mould, and calibrates it to Singapore's economic and policy settings. His findings suggest that the adoption of an exchange rate policy rule results in an improvement in social welfare associated with a reduction in the volatility of key macroeconomic variables, such as inflation and output, when compared with an interest rate policy rule.

In Special Feature B, Professor Shang-Jin Wei of Columbia University highlights his recent research relating gender imbalances to the aggregate savings rate. In novel theoretical work, he and his co-author introduce a utility function-based approach to rationalise the "competitive saving motive" and use the model to examine the impact of China's persistent gender imbalances. He finds that a sustained deterioration in this imbalance can cause aggregate savings to rise for an extended period. An important policy implication that flows from his work is that an analysis of the determinants of global external positions must take into account the broader structural determinants of countries' savings rates.

The next issue of the Review will be released in October 2013.

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