

Frank Rövekamp

Moritz Bälz

Hanns Günther Hilpert *Editors*

Monetary Policy Implementation in East Asia



Springer

Financial and Monetary Policy Studies

Volume 51

Series Editor

Ansgar Belke, Faculty of Business Administration and Economics, University of
Duisburg-Essen, Essen, Germany

More information about this series at <http://www.springer.com/series/5982>

Frank Rövekamp · Moritz Bälz ·
Hanns Günther Hilpert
Editors

Monetary Policy Implementation in East Asia

Editors

Frank Rövekamp
East Asia Institute
Ludwigshafen University of Applied
Sciences
Ludwigshafen, Germany

Moritz Bälz
Faculty of Law/Interdisciplinary Centre for
East Asian Studies
Goethe University Frankfurt
Frankfurt am Main, Hessen, Germany

Hanns Günther Hilpert
German Institute for International and
Security Affairs (SWP)
Berlin, Germany

ISSN 0921-8580 ISSN 2197-1889 (electronic)
Financial and Monetary Policy Studies
ISBN 978-3-030-50297-3 ISBN 978-3-030-50298-0 (eBook)
<https://doi.org/10.1007/978-3-030-50298-0>

© Springer Nature Switzerland AG 2020

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface and Acknowledgements

As central bankers would openly admit, implementation *does* matter in monetary politics. However, implementation issues are rather seldom the subject of serious academic research. To counteract both these deficits in perception *and* this research gap was the motive for the international conference entitled “Monetary Policy Execution in East Asia”, which was organised by the East Asia Institute in Ludwigshafen in May 2018. The conference brought together leading experts from both academia and monetary authorities to explore the economic, legal and policy perspectives of monetary policy implementation in East Asia, complemented by a European perspective. The papers delivered at the conference formed the basis for this book.

The conference was made possible through the generous support of the *Deutsche Bundesbank*, the *Haniel Foundation* and the *Taipeh Representative Office* in Germany, which is gratefully acknowledged. Likewise, we wish to thank Springer International Publishing for accepting this volume into its series entitled *Financial and Monetary Policy Studies*. Finally, we are indebted to Chris Engert in Florence for his excellent work in the language revision and copy-editing of the manuscript.

Ludwigshafen am Rhein, Germany
Frankfurt am Main, Germany
Berlin, Germany

Frank Rövekamp
Moritz Bälz
Hanns Günther Hilpert

Contents

1 Monetary Policy in East Asia: Implementation Matters	1
Frank Rövekamp, Moritz Bälz, and Hanns Günther Hilpert	
Part I The Framework of Monetary Policy Implementation	
2 China's Monetary Policy: Institutional Setting, Tools and Challenges	13
Patrick Hess	
3 Inflation Targeting in Korea	31
Woosik Moon	
Part II Central Banks in Foreign Exchange Markets	
4 Exchange-Rate Management in East Asia: Words and Deeds	45
Ulrich Volz	
5 Taiwan's Exchange-Rate Policy and Its Current Challenges	61
Ti-Jen Tsao	
6 Monetary Policy Implementation in Singapore	73
Hwee Kwan Chow and Fot Chyi Wong	
Part III Dimensions of Monetary Policy Implementation	
7 The Asset Purchase Programmes of the ESCB in the Courts	87
Helmut Siekmann	
8 The Bank of Japan's Exchange-Traded Fund Purchases under Quantitative and Qualitative Easing with Yield Curve Control	143
Sayuri Shirai	
Index	167

Contributors

Moritz Bälz Faculty of Law/Interdisciplinary Centre for East Asian Studies, Goethe University, Frankfurt am Main, Germany

Hwee Kwan Chow Singapore Management University, Singapore, Singapore

Patrick Hess European Central Bank, Frankfurt am Main, Germany

Hanns Günther Hilpert Research Division Asia, German Institute for International and Security Affairs (SWP), Berlin, Germany

Woosik Moon Graduate School of International Studies, Seoul National University, Gwanak-gu, Seoul, Korea

Frank Rövekamp East Asia Institute, Ludwigshafen University of Business and Society, Ludwigshafen, Germany

Sayuri Shirai Keio University, Fujisawa, Kanagawa, Japan

Helmut Siekmann Institute for Monetary and Financial Stability (IMFS), Goethe University, Frankfurt am Main, Germany

Ti-Jen Tsao Central Bank of the Republic of China (Taiwan), Taipei, Taiwan, R.O.C.

Ulrich Volz SOAS University of London, London, UK;
German Development Institute, Bonn, Germany

Fot Chyi Wong Singapore Management University, Singapore, Singapore

Abbreviations

ABC	Agricultural Bank of China
ABSPP	Asset-Backed Securities Purchase Programme
AG	Aktiengesellschaft
ANFA	Agreement on Net Financial Assets
APP	Asset Purchase Programmes
ASEAN	Association of Southeast Asian Nations
Bhd.	Berhad (Malaysian public limited company)
BIS	Bank for International Settlements
BoC	Bank of China
BoCOM	Bank of Communications
BoJ	Bank of Japan
BoK	Bank of Korea
Brexit	The Exit of the UK from the European Union
CBC	Central Bank of the Republic of China, Taiwan
CBIRC	China Banking and Insurance Regulatory Commission
CBP	Covered Bond Programmes
CBPP	Covered Bond Purchase Programmes
CBRC	China Banking Regulatory Commission
CCB	China Construction Bank
CCP	Chinese Communist Party
CIRC	China Insurance Regulatory Commission
CJEU	Court of Justice of the European Union (formerly ECJ)
CME	Comprehensive Monetary Easing
COFER	Current Composition of Official Foreign Exchange Reserves
CPF	Central Provident Fund
CPI	Consumer Price Index
CSPP	Corporate Sector Purchase Programme
CSRC	China Securities Regulatory Commission
DBS	Development Bank of Singapore Ltd
DSGE-VAR	Dynamic Stochastic General Equilibrium-Vector Autoregression

EAPP	Expanded (Extended) Asset Purchase Programme
EC	European Community/ies
ECB	European Central Bank
ECJ	European Court of Justice
EFSF	European Financial Stability Facility
EFSM	European Financial Stabilisation Mechanism
EFT	Exchange-Traded Funds
ELA	Emergency Liquidity Assistance
EMU	European Monetary Union
EPS	Earnings Per Share
ESCB	European System of Central Banks
ESM	European Stability Mechanism
ETFs	Exchange-Traded Funds
EU	European Union
EUR	European Monetary Unit
Fed	Federal Reserve
FOMC	Federal Open Market Committee
FSDC	Financial Stability and Development Commission
FX	Foreign Exchange
G-20	Group of Twenty: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, United Kingdom, United States and the European Union
GCEU	General Court of the European Union
GDP	Gross Domestic Product
GFCC	German Federal Constitutional Court
GPIF	Government Pension Investment Funds
GVC	Global Value Chain
HK\$	Hong Kong Dollars
HKMA	Hong Kong Monetary Authority
ICBC	Industrial Bank of China
iDeCo	Individual-type Defined Contribution Pension Plan
IDE-JETRO	Institute of Developing Economies
IMF	International Monetary Fund
ISIN	International Security Identification Number
IT	Inflation Targeting
JGB	Japanese Government Bonds
JMoF	Japanese Ministry of Finance
JPY	Japanese Yen
J-REITs	Japan Real Estate Investment Trusts
KRW	South Korean Won
LB	Liabilities Box
LCU	Local Currency Unit
LTRO	Long-Term Refinancing Operations
M2	Money Supply

MA	Moving Average
MAS	Monetary Authority of Singapore
MCB	Minimum Cash Balance
MLF	Medium-Term Loan Rate Facility (rate)
MoF	Ministry of Finance
MPC	Monetary Policy Committee
MPS	Monetary Policy Statement
N.A.	National Association
NCB	National Central Bank
NEER	Nominal Effective Exchange Rate
NISA	Nippon Individual Savings Account
NPC	National People's Congress
NTD	New Taiwan Dollar
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal
OMO	Open Market Operations
OMT	Outright Monetary Transaction
P/E	Price–Earnings Ratio
PBC	People's Bank of China
PCE	Personal Consumption Expenditure (price index)
PDR	People's Democratic Republic
PRC	People's Republic of China
PSPP	Public Sector Asset Purchase Programme/Public Sector Purchase Programme
QE	Quantitative Easing
QQE	Quantitative and Qualitative (Monetary) Easing
R&D	Research and Development
Repo	Re-purchase Agreements
RMB	Renminbi
RRR	Reserve Requirement Ratio
S\$NEER	Singapore Dollar Nominal Effective Exchange Rate
S&P	Standard & Poor's
SD	Standard Deviation
SDR	Special Drawing Right
SGD	Singapore Dollar
SGS	Singapore Government Securities
SME	Small- and Medium-sized Enterprise
SMP	Securities Market Programme
SNB	Swiss National Bank
SOAS	School of Oriental and African Studies
TAIEX	Taiwan Stock Exchange Weighted Index
TEU	Treaty on European Union/Treaty of Maastricht 1992, renewed by the Treaty of Lisbon in 2009
TFEU	Treaty on the Functioning of the European Union/Treaty of Lisbon in force 2009

TIVA	Trade in Value Added (OECD-WTO Database)
TLTRO	Targeted Longer Term Refinancing Operations
TMLF	Targeted Medium-Term Loan Facility
TOPIX	Tokyo Stock Price Index
UK	United Kingdom
UNCTAD	United Nation Conference on Trade and Development
US	United States (of America)
USA	United States of America
USD	United States Dollar
VA	Value Added
VAR	Vector Autoregression
WEO	World Economic Outlook (IMF)
WTO	World Trade Organization

Chapter 1

Monetary Policy in East Asia: Implementation Matters



Frank Rövekamp, Moritz Bälz, and Hanns Günther Hilpert

Abstract When monetary policy was still largely confined to the setting of interest rates and conventional open market operations, monetary policy implementation could be considered a technical issue beyond the scope for academic analysis. This has changed with the advent of the so-called unconventional monetary policies such as Quantitative Easing (QE). The exact way of conducting such policies has a huge influence not only on financial markets, but also on the real economy and on fiscal affairs. Meanwhile, central bank communication has proven to be a major factor for the efficiency of monetary policy paths, and in this field, too, success depends to a large degree on proper implementation.

The chapters in this book take a look at monetary implementation issues in various Asian economies. This widens the perspective for further areas, such as inflation targeting, exchange-rate policies and company-stock purchases by central banks. The case of the People's Bank of China demonstrates that the smooth implementation of monetary policy may be infringed by governance issues. Experiences from the Bank of Korea show that Inflation Targeting faces fundamental challenges in communication. Exchange-rate management remains very important for smaller and open economies, such as those of Singapore and Taiwan; here skilful implementation has to assure the control of short-term speculative capital movements without

F. Rövekamp (✉)

East Asia Institute, Ludwigshafen University of Business and Society, Rheinpromenade 12,
67061 Ludwigshafen, Germany
e-mail: roevkamp@oai.de

M. Bälz

Faculty of Law/Interdisciplinary Centre for East Asian Studies, Goethe University,
Theodor-W.-Adorno-Platz 4, 60323 Frankfurt am Main, Germany
e-mail: baelz@jur.uni-frankfurt.de

H. G. Hilpert

Research Division Asia, German Institute for International and Security Affairs (SWP),
Ludwigkirchplatz 3-4, 10719 Berlin, Germany
e-mail: hanns.hilpert@swp-berlin.org

© Springer Nature Switzerland AG 2020

F. Rövekamp et al. (eds.), *Monetary Policy Implementation in East Asia*,
Financial and Monetary Policy Studies 51,
https://doi.org/10.1007/978-3-030-50298-0_1

negatively affecting trade and direct investments. The boundaries of QE are tested in Japan, where the central bank not only purchases government bonds but also company stock. The potential side effects on corporate governance and stock market volatility may still unfold. The cases presented in this book underline the importance of the implementation aspect of monetary policy and point to the need for further research in this area.

The achievement and preservation of price stability remain the primary goal of monetary policy. Ever since the global financial crisis of 2008/09, however, concerns about financial stability have also taken centre stage and the fighting of deflation, rather than inflation, has become the order of the day in the major economies. In this environment, traditional monetary policy tools, such as the setting of short-term interest rates and reserve policy quickly reached their limits and a range of largely untested measures, under the heading of “quantitative easing” (QE), emerged. With QE, central banks involved themselves in financial market dealings on an unprecedented scale. QE has also had strong effects on the global movement of capital, as investors faced rapidly decreasing opportunities for decent returns.

The strong side effects of QE have also brought the concrete implementation of monetary policy into focus. Differences in this regard potentially have huge repercussions on matters such as financing conditions and market volatility. In this connection, attention has been drawn to the question of what kind of collateral central banks accept in exchange for central bank money. In Europe, for example, more than 30,000 different securities are eligible as collateral for the European Central Bank, and Nyborg has shown that there has been a growth towards the usage of lower quality collateral over time. This, in the end, distorts market prices and thus affects the efficient allocation of resources not only in the financial markets, but also in the real economy.¹ Thus, the implementation details of QE, which are rarely in the spotlight, prove to be of the utmost importance.

Furthermore, the execution of monetary policy is a major concern not only for investors in finance and the real economy, but also for actors in the fields of fiscal and exchange-rate policy. Central bank communication and forward guidance is another field, in which success strongly depends on the precise implementation.

As the implementation aspect of monetary policy has not received much attention in academic research and literature, its practice has proven to be a somewhat evolutionary learning process.² Every step in this evolution is a kind of experiment, and central banks are learning from their successes and failures. In this way, spectacular monetary policy events are major concerns for the credibility of central banks and determine the monetary implementation path further down the road. Some prominent examples from Asia and Europe vividly illustrate the importance of implementation in the realms of communication:

Mario Draghi’s magical words announcing the ECB’s “Outright Monetary Transactions” (OMT) programme on 26 July 2012 can be considered as a brilliant masterpiece of successful central bank communication:

¹Nyborg (2017).

²Bindseil (2016).

Within our mandate, the ECB is ready to do whatever it takes to preserve the Euro. And believe me, it will be enough.³

Subsequently, the spread of French, Italian and Spanish government bonds declined and returned to their previous levels with yields slightly above that of German government bonds. Eventually, not a single Euro was spent for the OMT programme.

But there were also examples of mishaps, misjudgement and even impotence. Thus, the ECB has been less successful in its attempts to uphold prerogative sovereignty in the discussion about the significance and fiscal risks of target-2 balances.⁴ In the Northern Eurozone countries, scepticism prevailed. To mention two further examples, the People's Bank of China's (PBC) surprising, uncommented decision of August 2016 to devalue the RMB by 1.9% against the USD, let the stock markets tumble. Eventually, the PBC had to spend almost 500 billion USD to prevent the RMB from falling further. Similarly, the surprising announcement of the Indian government on 8 November 2016 to de-monetise all 500 and 1000 Rupee banknotes provoked an enduring cash shortage and created serious economic disruptions.

All these examples show that central bank communication faces a structural dilemma: to give credible forward guidance, precise and unambiguous information in sufficient quantity is called for. This, however, is accompanied by reduced possibilities to react flexibly in the face of surprising external developments. A central bank may face the unpleasant option of sticking to its forward guided course, even though it no longer constitutes the most appropriate choice, or of suddenly changing direction, which may come at the expense of credibility. In this way, there can be no fixed recipe for successful monetary policy communication; its implementation needs to be carefully gauged against the specific circumstances in which it finds itself.⁵

The contributions in this volume bear witness of the critical importance of monetary policy implementation mainly from the perspective of Asian economies, notwithstanding the major differences in their size and circumstances.

The conduct of monetary policy by the People's Bank of China is analysed by *Patrick Hess* in Chap. 2. In general, the PBC uses the same monetary policy tools as other central banks, namely, open market operations, standing facilities (*i.e.* borrowing and deposit facilities for commercial banks) and reserve requirements. It may also still rely on "window guidance" to informally advise the financial sector on the amounts of the banking loans to different sectors. Hess concludes that, despite its multiple objectives—price stability, promoting growth and employment, maintaining the balance of payments and financial stability—and despite a challenging and rapidly changing external environment, the PBC has, in fact, done reasonably well with its policies.

Hess' verdict, however, is less confident when it comes to transparency and accountability, which are conventional key demands on central bank policy to achieve

³Draghi (2012).

⁴Hellwig (2018).

⁵Weidmann (2018).

low inflation and manage inflation expectations. One reason for this is the fact that the PBC still lacks independence, as it needs to have its decisions approved by the State Council, China's government. But beyond this, a clear-cut communication policy is also hindered by the peculiar composition of the Monetary Policy Committee (MPC), the top decision-making organ of the PBC, and the position of the bank within the setting of other state institutions.

The MPC has many more external, than internal, members. The external members are vice-ministers or leaders of other economic and regulatory institutions. Already the process of decision-making is thus not only driven by the usual monetary indicators, but also by a complex balancing of interests with other institutions in the economic and the financial field. There is no "arm's length relationship" between the PBC and other important economic institutions in the Western sense.

After an episode of strong market volatility because of non-communication or miscommunication in the second half of 2015, the PBC's communication policy has improved, but, Hess concludes, transparency remains linked to independence, which is still clearly limited for the PBC as of today. The smooth implementation of monetary policy measures may, therefore, pose challenges, also in the future.

Woosik Moon, in Chap. 3, provides an inside view into the workings as well as the shortcomings of *Inflation Targeting* (IT) based on the Bank of Korea (BoK) experience. As IT has become the main monetary policy strategy for the major central banks of developed countries, the BoK also adopted it in the aftermath of the Asian crisis of 1997/98.

Under IT, a central bank focuses directly on achieving a specific inflation rate, instead of focusing on an intermediate target such as the money supply. This was first adopted by the Bank of New Zealand in 1990. Later the consensus emerged that, rather than 0%, a target of 2% was both appropriate and commensurate with price stability, considering price rigidities in the labour market. The 2% target was thus symmetric in the sense that undershooting it was as undesired as overshooting it.

However, given the history of high inflation in Korea, the BoK sets the target at 3% so as not to jeopardise its credibility. 3% was an asymmetric target, because a higher inflation rate was to be avoided, whereas an inflation rate of less than 3% was still welcome, even though it was considered unlikely. When, in the course of time, the BoK achieved inflation rates well below 3%, it was, however, widely criticised for not matching the goals that it had actually set for itself. It turned out that the workings of the fine points of inflation targeting are difficult to communicate, and, accordingly, are often not well understood. This resulted in credibility problems for the BoK.

Another issue with IT is that it needs to rely on inflation expectations, which the central bank tries to influence. This can be achieved comparatively well in a high inflation environment if the central bank communicates its willingness to use the well-proven monetary instruments to achieve the desired (lower) inflation rate in a credible manner. In a low inflation or even deflation environment, however, when inflation uncertainties are low, it is much more difficult to stimulate inflation expectations. In the case of Japan, for example, inflation expectations fail to reach the targeted 2% despite long-term efforts and unprecedented monetary easing by the

Bank of Japan. Thus, Moon concludes that the whole concept of inflation targeting may have reached its limits in an environment of low inflation.

Ulrich Volz, in Chap. 4, analyses the gap between declared monetary policy, often IT, as in Korea, and the actual behaviour of central banks in a range of East Asian countries. Traditionally, exchange-rate stability towards the US Dollar ranks high in importance for Asian economies, as many of them strongly depend on international trade and have a large share of their assets and liabilities denominated in US Dollars. Intervening in currency markets has, therefore, been a common feature for many central banks in the region. In this way, they try to control exchange-rate volatility and to avoid exchange-rate misalignments. Another goal of these interventions is the build-up of foreign currency reserves as a buffer against potential speculative attacks on their currency in the future.

On the other hand, a range of countries, namely, Japan, Indonesia, Korea, the Philippines and Thailand, have officially adopted an inflation-targeting strategy, which is incompatible with interventions in currency markets. Buying foreign currency to counter the appreciation of one's own currency, for example, increases the domestic money supply and may thus run counter to a targeted inflation rate. Volz shows, however, that, with the exception of Japan, the countries officially operating in an inflation-targeting framework have intervened significantly in the currency market in recent years, too. This is even more the case with countries which declare that they operate under a "managed exchange-rate regime", including China. Fear of being named a "currency manipulator" may be the most important reason for the deviation between officially declared and actually performed policy. This furthermore indicates that inflation targeting, despite its popularity, still lacks a clear operating framework or may even not be a suitable concept under certain circumstances.

Two central banks which officially put the exchange rate at the centre of their monetary policies are the Central Bank of the Republic of China, Taiwan (CBC) and the Monetary Authority of Singapore (MAS). Both are open economies that depend, to a very large degree, on foreign trade and, in principle, support the free flow of capital.

Ti-Jen Tsao analyses the case of Taiwan in Chap. 5. He emphasises that international capital movements are mostly driven by short-term financial speculation, and not by trade or long-term investment motives. This trend is reinforced by the massive quantitative easing strategies of major central banks in recent years, which drives capital to seek acceptable returns wherever it is still possible.

Taiwan's economy relies highly on international trade. Not only are exports of importance, but, because the export goods depend—to a large degree—on foreign value added, imports and exports are also strongly intertwined. A predictable and rather stable exchange rate without strong volatility is crucial in this environment. Notwithstanding this, less than 10% of the trade in New Taiwan Dollar (NTD) is now based on international trade, whereas more than 90% is for the purpose of short-term financial transactions, for example, in the Taiwanese stock market. Such short-term capital movements can be a source of considerable macroeconomic and financial instability, as is already evidenced by the Asian financial crisis of 1997/98.

The CBC, therefore, implements a range of measures to stabilise the exchange rate of the NTD. The strategy devised is that of “leaning against the wind”, which means the central bank will not try to stem exchange-rate movements based on fundamental economic trends, but will try to avoid erratic movements based on the speculation and the short-term transactions of foreign investors. For this purpose, the CBC intervenes in the currency markets and has built a large pool of foreign currency reserves in order to give credibility to such interventions. Short-term capital movements are also restricted by regulations, such as prohibiting foreign investors from making NTD time deposits or the calling of cash collaterals in securities borrowing. *Tsao* considers the CBC monetary policy implementation to be successful, because the value of the NTD is less volatile than the currency of similar economies. This has helped Taiwan to maintain a current account surplus, low external debt and high financial liquidity.

Singapore is a small and open economy dependent on international transactions even to a higher degree than Taiwan. Also, Singapore bases its monetary policy on the stability of the exchange rate. As *Hwee Kwan Chow* and *Fot Chyi Wong* point out in Chap. 6, this simply makes sense, even for the purpose of inflation control, without even considering the potentially damaging effects of large short-term capital movements.

To achieve currency stability the Monetary Authority of Singapore (MAS) keeps the Singapore Dollar (SGD) stable against the value of a basket of currencies of important trading partners by currency market interventions. The exact composition of the basket is deliberately not made public in order to provide less attacking points for potential speculative movements. Otherwise, however, the MAS communicates in a very structured way to inform the market participants about its movements and the rationale behind them. Like the central bank in Taiwan, the MAS also deploys the strategy of “leaning against the wind”, thereby allowing the gradual appreciation of the Singapore Dollar based on economic fundamentals, but keeping the short-term movements of the currency value within a defined band, which can be adjusted according to the prevailing economic situation. The MAS has been very successful in safeguarding the defined currency stability under various circumstances, such as the financial crisis of 2008/09 and in ensuring the recovery phase.

The focus on currency stabilisation has, however, the side effects that the MAS cannot directly control short-term domestic interest rates, because to do so might run counter to the exchange-rate targets. To avoid erratic movements of interest rates, the MAS has devised a range of measures in the domestic money market, such as providing credit and dealing in securities with selected participants. Chow and Wong conclude that the successful operations of the MAS over the years have also been due to the institutional framework in Singapore and the ethos of financial prudence on the part of the government.

Some fundamental issues in connection with monetary policy implementation come to light in connection with quantitative easing (QE) strategies, which gained popularity in major economies after the financial crisis of 2008/09 and also considerably affected the Asian financial and currency markets, as seen above. In order to