

Central Bank Governance: Common Elements or Different Models?

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Abstract

This paper evaluates the governance performance of four small, open economy central banks. Two of these, the Reserve Bank of Australia and the Reserve Bank of New Zealand, are inflation targeting; the other two, the Hong Kong Monetary Authority and the Monetary Authority of Singapore, place major emphasis on exchange rate stability.

The four have in common, many elements necessary for excellent governance. But they also display significant differences in principle and in operating procedures, and hence in their monetary policy and corporate governance frameworks. The differences can be associated with different primary goals, different constitutional environments, single-person or “committee” decision-making models, and the central banks having proceeded at different speeds to recognise the need to commit fully to optimal transparency and accountability.

There is “no one size fits all” best practice governance framework for central banks, but key desirable principles should be adhered to and two specific suggestions on governance reporting and funding agreements should be considered.

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Key words: Central bank governance; corporate governance; monetary policy independence; credibility; transparency; accountability; Australia; New Zealand; Hong Kong; Singapore; inflation targeting; exchange rate targeting; currency board.

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1. Introduction

The development of strong central bank governance has been a relatively recent, but steadily evolving process. However, most previous studies have focussed on inflation-targeting central banks for larger economies, and taken a primarily partial rather than integrated approach to evaluating governance performance.

A key contribution of the paper is therefore its evaluation of central bank governance performance in four small, open economies, two of which place major emphasis on exchange rate stability¹. Australia and New Zealand are primarily inflation targeting countries, operating under somewhat different institutional frameworks. Hong Kong and Singapore place major emphasis on exchange rate stability, the former in a fixed exchange rate (Currency Board) context, and the latter in a managed floating exchange rate context.

In a broad sense, the aim of this paper is to establish whether the considerable successes of these four central banks in achieving primary monetary policy goals can be associated with common elements of governance, or are substantially associated with different statutory and institutional frameworks, governance arrangements and decision-making procedures. The key specific focus is on *central bank* governance, particularly as that relates to monetary policy objectives, decision-making and performance, and some closely related *corporate* governance issues².

Section 2 summarises macroeconomic and monetary policy goals for the four economies, and briefly considers relative performance since the early 1990s. By and large, each economy has had considerable success. Section 3 considers the extent to which empirical economic evidence has been able to establish robust relationships between monetary policy objectives on the one hand, and broad governance related concepts such as independence, credibility, transparency and accountability on the other. Successful establishment of relationships at such broad levels has been limited. In section 4, therefore, attention is focussed on detailed identification and assessment of recent and current operational procedures. These cover the roles of governing boards, decision making-procedures, and degrees of transparency and accountability. Some assessments are offered. Concluding comments are presented in section 5.

2. Macroeconomic and Monetary Policy Goals, and Economic Performance³

For any economy, monetary policy objectives⁴ should be seen in the context of the government's overall economic goals, the legislative and other public mandates for

¹ For a study focussing on the world's two most prominent central banks, the U.S. Federal Reserve System and the European Central Bank, see Pollard (2003). For a study covering 20 major developed country central banks over the past 50 years, but not Hong Kong or Singapore, see Siklos (2002b, especially chapters 2, 6).

² Governance issues relating to financial system stability are not within the scope of the paper.

³ Further detail underpinning the material in this and subsequent sections is available in Hall (2003).

⁴ Monetary policy "objectives" or "goals" are taken to be the ultimate (generally longer-term) goals for monetary policy. Under most monetary policy frameworks, ultimate policy objectives will be different from short-term operational objectives (or policy instruments) such as a key interest rate or exchange rate.

monetary policy objectives, and the central bank and corporate governance environments within which monetary policy decision making and accountability take place.

2.1 Macroeconomic and Monetary Policy Goals

In a broad sense, Australia and New Zealand's inflation targeting objectives reflect historical periods of high and variable inflation, while Hong Kong and Singapore's emphasis on exchange rate stability can be seen against objectives to promote themselves as major international financial centres.

Legislated objectives

The legislated objectives for the Reserve Bank of Australia (RBA), the Reserve Bank of New Zealand (RBNZ), and the Monetary Authority of Singapore (MAS) are set out in Acts of Parliament (Table 1). The Hong Kong Monetary Authority's (HKMA) legal mandate comes from the Exchange Fund Ordinance of 1992. That in turn is underpinned by Article 110 of the Basic Law⁵, providing that the Hong Kong Special Administrative Region (SAR) Government "...shall, on its own, formulate monetary and fiscal policies."

These legislated objectives differ considerably as to the form of "currency stability" to be achieved, the number of objectives to be aimed at, and the extent to which the legislation subsequently has had to be clarified through further documentation.

The RBA and the RBNZ are required to aim at stability in the general level of prices or domestic currency stability, whereas the monetary objectives of the HKMA and MAS feature exchange rate stability.

In terms of number of objectives, the currency stability objective of the HKMA is unequivocally clear; it has to maintain currency stability, within the framework of the linked exchange rate system. Similarly, the RBNZ's legislated primary function is simple and transparent: to maintain stability in the general level of prices.

In contrast, the RBA is required under its Act of 1959 to ensure that monetary policy contributes in the best way it can to three objectives: the stability of the currency of Australia; the maintenance of full employment; and the economic prosperity and welfare of Australia's people. However, public statements in 1996 and 2003 have since made clear the Australian Federal Government's support for the goal of medium term price stability⁶. The legislated objective for the MAS is to promote, within the context of the government's general economic policy, monetary stability and credit and exchange conditions conducive to growth of the economy. That objective does

⁵ The Basic Law came into effect on 1 July 1997. Article 5 provides that "The socialist system and policies shall not be practised in the Hong Kong Special Administrative Region, and that the previous capitalist system and way of life shall remain unchanged for 50 years.", i.e. through to 30 June 2047.

⁶ This was done in the context of emphasising that price stability is a crucial precondition for sustained growth in economic activity and employment. See *Statement on the Conduct of Monetary Policy*, 14 August 1996, and the reaffirming and updating *Second Statement on the Conduct of Monetary Policy*, 29 July 2003. See also Macfarlane (1998), and Stevens (1999, 2003), for historical background to these Statements and for evaluation of subsequent experience.

not provide immediate clarity on a specific objective for monetary policy. As a result, the ultimate goal for MAS monetary policy has, until recently, been subject to some confusion. In particular, it has not been well understood precisely what has been the MAS ultimate objective, and what its operational objective.⁷ The degree of public misunderstanding has since been lessened through the issuing of documents entitled *Singapore's Exchange Rate Policy* and *Monetary Policy Operations in Singapore*. They state (MAS, 2001, p 2; 2003a, pp 12, 13) that the primary objective of monetary policy is to promote price stability (or low inflation) as a sound basis for sustainable economic growth.

Hence, while the mix of existing statutory and subsequently clarifying documents differs, from a governance perspective the meaning of each central bank's legislated medium term monetary policy objective is now very clear.

Monetary policy objectives

In the context of the legislated objective, there needs to be provision for *specific* monetary policy objectives and for the extent to which they might be varied over time. Legislation should ideally set out the *process* through which this should be done, and specify the *form* in which the new policy objective is made public; it should not enshrine the specific numbers or target bands. Monetary policy objectives for the RBA, RBNZ, HKMA and MAS vary in their degree of transparency and clarity.

The monetary objective for the HKMA is the clearest: to maintain a rule-based Currency Board system, fixed to the US\$ at the rate of HK\$7.80⁸. The RBNZ objective is also very prominently stated: it is expressed in an explicit *contract* termed the Policy Targets Agreement (PTA), between the Minister of Finance and the Governor, with the RBNZ's monitoring Board having to take into account additionally the extent to which "unusual events" and "implementation and accountability" clauses have been satisfied. Currently the policy target is to keep future CPI outcomes between 1 and 3 per cent on average over the medium term. The target band is therefore clear, though in what is now explicitly acknowledged as a flexible inflation targeting regime (e.g. Svensson, 1997, 2001), there is very considerable scope for discretion over what the Board should reasonably interpret "on average over the medium term" to mean.

⁷ See McCauley (2001, pp 12-13), and Tables A.1 to A.7 in Mahadeva and Sterne (2000). As of 1998-99, the scores give an indication of the *degree* to which monetary policy focuses on its principal objective. They should be treated as indicative rather than definitive, and in this context show the HKMA with a 100% exchange rate focus, the RBA and RBNZ with a 94% inflation focus, and the MAS with focuses of 19% for inflation, 56% for exchange rate, and 53% discretion. These can be benchmarked against the US Fed having 19% inflation focus and 84% discretion, and the Bank of England having 100% inflation focus.

⁸ This monetary policy objective received added transparency recently, with the publication of "Functions and Responsibilities in Monetary and Financial Affairs: Exchange of Letters between the Financial Secretary and the Monetary Authority", dated 25 June 2003. The letters reflect the existing arrangements under the relevant legislation, and were published in the context of recommendations made in the IMF's Financial Sector Assessment Programme (FSAP) report for Hong Kong (IMF, 2003, p 67). The letters also give added transparency to the operational independence of the Monetary Authority for the purpose of achieving the monetary policy objective, and to the division of functions and responsibilities in monetary and financial affairs between the Financial Secretary and the Monetary Authority.

The monetary policy objective for the RBA is to keep underlying inflation between 2 and 3 per cent, on average, over the cycle. This intent is broadly similar to that now existing for the RBNZ, though the guidance provided for regular monitoring purposes is much less clear. This is essentially because, in a strict sense, the turning points of a business cycle cannot be dated until some time after the cycle has turned, and even then has to be subject to considerable further discretion. Interim calculations and judgements are, of course, publicly provided at regular intervals by the RBA, and also offered by others.

The MAS's monetary policy objective involves managing the Singapore dollar nominal effective exchange rate (S\$NEER) within a periodically revised, undisclosed policy band, so as to promote price stability. The latter has recently been clarified as the ultimate target, and the S\$NEER as the operational or intermediate target within the prescribed policy band⁹. However, unlike the other three central banks, but which is also the case for the US Fed, the MAS provides no numeric target or band for "price stability"¹⁰.

The degree of numeric guidance provided for each central bank's monitoring body therefore varies considerably.

2.2 Performance since the early 1990s

All four central banks can claim considerable success in achieving their designated monetary policy objectives.

The two inflation-targeting countries, Australia and New Zealand, have maintained low and stable inflation (Table 2, Figure 1). New Zealand's CPI inflation has averaged 2.4 per cent since the beginning of the 1990s, with a standard deviation of 1.1 per cent. The RBNZ Governor's contracted target bands were also achieved for almost all those quarters¹¹. Australia's CPI inflation has averaged 3.0 per cent for the same time period, and averaged 2.5 per cent since 1993. Hence, without resorting to formal computation of an average "over the business cycle", it is clear that the RBA has been achieving its monetary policy objective.

The HKMA has been successful in maintaining its rule-based Currency Board system, fixed to the US\$, despite very considerable pressure during the Asian financial crisis period¹². The absence of numeric target information for the MAS' ultimate and intermediate monetary policy objectives limits formal evaluation of the extent to which the MAS has achieved "price stability" and managed the S\$NEER within its

⁹ See MAS (2003a, p 13).

¹⁰ Recently, however, it has provided forward-looking indicative information for its intermediate target. See, for example, the January 2003 MPS which states "MAS will therefore maintain the neutral policy stance of a zero percent appreciation for the S\$NEER policy path in the period ahead, with no change in the level at which the policy band is centred and in the width of the band."

¹¹ The key exception is the upside breaching of the narrow 0-2 per cent band for a short period during 1995-96. The accountability procedures required under the RBNZ Act were duly followed and made public. See Svensson (2001, pp 27-32).

¹² See Latter (2001, 2002a, 2002b). Note also, in the current context, that Article 107 of the Basic Law states that the Hong Kong SAR is required to follow the principle of keeping the expenditure within the limits of revenues in drawing up its budget, and strive to achieve a fiscal balance. The latter is a condition which is particularly crucial for maintenance of an effective currency board.

periodically revised, undisclosed policy band. It is clear, however, that since the beginning of the 1990s, Singapore has maintained low and stable CPI inflation (averaging 1.7 per cent annually, with standard deviation of 1.4 per cent), while for its intermediate target, it has had a noticeably lower standard deviation for its NEER than New Zealand and Hong Kong, but not than Australia (Table 2).

It is well known that, in the long term, monetary policy can control only nominal variables such as inflation and the nominal exchange rate. It cannot sustainably determine real aggregates such as real GDP growth, real interest rates and the level of the real exchange rate. However, Australia and Singapore have statutory requirements, and the RBNZ a contractual requirement, for monetary policy to “best contribute to” or to “have due regard to the volatility of” real economic growth. In this context, how should each monitoring body and the public evaluate monetary policy performance?

Measures of each economy’s *overall macroeconomic performance* can be misleading as measures of central bank accountability. For example, Singapore has recorded considerably better real GDP growth and inflation performance than Hong Kong (Table 2). This is in direct contrast to the clarity, numerical precision, and hence specific accountability for monitoring purposes, of their monetary policy objectives¹³. Moreover, even very clearly articulated monetary policy objectives and successfully implemented monetary policy can fail, if not supported by coherent overall economic policy, especially fiscal policy.

So, monetary policy objectives, not overall macroeconomic performance, should be taken as the proper benchmark for monetary policy performance. We now examine the extent to which the four economies’ basically very good performance on monetary policy objectives can or cannot be associated with governance arrangements.

3. Monetary Policy Objectives and Central Bank Governance: Conceptual underpinnings and some aggregate level evidence

The theoretical, empirical and institutional literatures on macroeconomic and central bank performance all place considerable emphasis on concepts such as “independence”, “credibility”, “transparency” and “accountability”¹⁴. For example, Cecchetti and Krause (2002, p 48) have suggested not only that these four are key ingredients for an effective central bank, but also that central banks having these qualities can deliver better overall policy outcomes. Obtaining agreed definitions and meaningful quantitative measures for the concepts has not been straightforward¹⁵. Also, most attempts at establishing statistical relationships have used cross section or panel data, and have related the concepts to overall macroeconomic performance rather than to monetary policy performance. So, can one identify any key empirical findings which relate directly to monetary policy performance, and which are

¹³ Genberg (2002, p 4) makes a similar point for Singapore, in a different context. He notes that the inflation performance of Singapore has been as enviable as in Australia and New Zealand, though it uses a quite different monetary policy framework.

¹⁴ “Time consistency of policy”, and the associated literature on “pre-commitment strategies” and “rules versus discretion”, are similarly important for the operational effectiveness of monetary policy, but are not as easily linkable to governance issues. They are therefore not considered here.

¹⁵ See Fry *et al.* (2000, ss. 4.3, 4.4)

sufficiently robust to assist us in saying something about excellence in monetary policy performance and governance for individual central banks?

Independence

It is not surprising that central banks rate “Independence of the central bank” as the most important feature of their monetary framework, and that they regard by far the most important characteristic of that independence, as the absence of factors that constrain their ability to set instruments in pursuit of objectives.¹⁶

Blinder (1998, ch 3) has also supported instrument independence for central banks, regarding it as independence from the rest of the government sector, from politics, and from financial markets. But his substantial survey of central bankers and NBER academic economists showed central bank independence to be outranked marginally, by “a history of living up to its word” in building or creating central bank credibility. To him, that raised the possibility that “...independent central banks that lack a track record may be less credible than even non-independent central banks that have a good track record.” (Blinder, 2000, pp 1428, 1431). Moreover, in an East Asian and other country context, Genberg (2002, pp 8, 13) has suggested that while central bank independence is likely to be a useful signalling device, it may not be necessary for a successful monetary policy. This is because monetary policy could still be successful, if the government’s overall economic strategy were sound, and the public were to understand what the central bank is and is not capable of achieving. So, where does that leave us?

Independence does not have a unique meaning. The early studies generally distinguished goal from instrument independence and, for data covering the 1980s, were able to associate instrument independence with lower industrial country inflation. However, this association did not necessarily follow for either developing country or Asian economy sub-sets.¹⁷ More recently, answers from the Bank of England’s 1999 Survey of 94 central banks seem consistent with independence having rather too diverse a range of meanings to produce robust quantitative relationships for central banks with different monetary policy objectives and governance frameworks¹⁸.

Hence, there is not yet compelling quantitative evidence of robust linkages between measures of central bank independence and better achievement of *monetary policy* objectives. At best, associations can be established for certain inflation targeting central banks. Analysis for *individual* central banks, including for exchange rate targeting central banks in particular, has been limited.

Credibility

Credibility is perhaps even more difficult to characterise and measure, and so contributions relevant to monetary policy performance and governance are few¹⁹.

¹⁶ Fry *et al.* (2000, pp 99, 116, 137, Charts 6.1, 8.1). See Goodhart (2000, pp 226-228) for key arguments for and against central bank goal dependence, and for operational independence.

¹⁷ Cukierman (1992, p 381), McCauley (2001, pp 36-38).

¹⁸ Fry *et al.* (2000, p 117).

¹⁹ Quantitative contributions have been even fewer. In a *macroeconomic* performance context, though, Cecchetti and Krause (2002) have established that better macroeconomic performance and more

Blinder (2000) has argued that credibility has been both very important in theory and a major focus of practical attention for central bankers. He defined a central bank to be credible if “people believe it will do what it says”, and then sought through his direct survey to ascertain why specifically credibility is seen as important, and what key factors might help to establish or maintain credibility. The top four contributors to central bank credibility were seen as a history of honesty, independence, a history of fighting inflation, and transparency.

Hence, either general, or some specific form of credibility, is seen as something for central banks to prize rather than be without. Again, linkages seem to have been established primarily for inflation targeting central banks, though exchange rate targeting central banks also regard transparency as an increasingly important underpinning for credibility.

Transparency and Accountability

The theoretical and empirical literature involving transparency and accountability has been expanding rapidly²⁰. Much of this has been aimed at clarifying precisely what these concepts mean, but the empirical work has been assisted considerably through the availability of central bank survey data published in Fry *et al.* (2000). Until very recently, transparency and accountability have been treated as close to equivalent concepts. Yet for central bank governance purposes, it makes considerable sense to differentiate carefully their respective roles and key features. How might this be done?

One useful approach is to take transparency as “mere information disclosure”, and to take accountability as a central bank’s obligation to account, and bear responsibility for, actions delegated to it under law²¹ and assumed voluntarily.

Geraats (2002, pp 540-541) has developed a conceptual framework²² which reflects five stages of the monetary policy making process. The stages involve: *political* transparency (about policy objectives and institutional arrangements); *economic* transparency (for economic information); *procedural* transparency (on the way monetary policy decisions are taken); *policy* transparency (involving announcement and explanation of decisions); and *operational* transparency (reflecting appraisal of monetary policy actions).

Elements of political, procedural and operational transparency are conceivably relevant under both an accountability and a transparency heading, but in the context of the above, we consider first transparency and then accountability issues.

efficient macroeconomic policy can be associated with more credible, and possibly also with more transparent, central banks.

²⁰ See Geraats (2002), Bini-Smaghi and Gros (2001), Chortareas *et al.* (2002) and Posen (2002)

²¹ See Briault *et al.* (1996), Geraats (2002, p 560) and Bini-Smaghi and Gros (2001, pp 3-4).

²² See also Posen (2002, Table 1, p 125) for a “practical view” framework, with six conceivable channels for central bank transparency.

Transparency

Central bankers consider achieving “transparency of policy” particularly important. Central bankers, as a whole, have rated it as the third most important feature of their monetary policy framework, after “independence” and “maintenance of inflationary expectations”. Exchange rate targeting central bankers have ranked it third, following the attributes of “exchange rate targets” and “independence”. (Fry *et al.*, 2000, p 137, Table 8.1).

Empirically, research approaches have varied from reluctance to endorse or utilise an aggregate index, through to carefully qualified use of sub-category measures. Fry *et al.* (2000, pp 73-75) questioned whether monetary policy transparency can be reflected in any meaningful way by an overall index, and chose not to produce one. A key reason for this is because economic transparency requirements need to be different between forward-looking inflation targeting central banks, and those that are exchange rate targeting. Also, exchange rate targeters can be regarded as *inherently* transparent, with their transparency emanating from the ability of financial markets and the public to monitor the credibility of their target performance in real time.

Consistent with this, most recent research has worked either with sub-sets of the Bank of England survey data, or supplemented the primarily economic policy measures with accountability measures. For example, Eijfnger and Geraats (2002) construct their own index of “central bank transparency” for nine inflation-targeting central banks, including the RBA and the RBNZ. The RBNZ, the Bank of England and the Swedish Riksbank were rated the most transparent; the RBA, the Bank of Japan and the Swiss National Bank were seen as least so. The RBA and the RBNZ achieved the maximum rating for *political* transparency, but both were considered able to improve *operational* transparency, essentially on evaluation of “errors”²³. Key differences between the two are in both the transparency and accountability areas, with the RBA rating measurably lower on each of *economic* transparency (policy models and forecasts), *policy* transparency (policy explanation and policy inclination), and *procedural* transparency (minutes and voting records)²⁴.

The Fry *et al.* “policy explanations” measures for the RBA and RBNZ are basically consistent with Eijfnger and Geraats’ findings. The RBNZ would continue to rate highest on policy explanations, especially given that it now provides brief explanations when the policy-maker announces no change. The HKMA measures, as at 1999, seem be lower than would now be the case, partly through the recent provision of certain forward-looking liquidity information, but also because the measures seem not to make explicit allowance for the *inherent* transparency of its rule-based currency board system. No scores are published for the MAS in the relevant table. An examination of information now published by the MAS suggests modestly favourable values could be established for their categories of “explaining

²³ McCaw and Ranchhod (2002) have since evaluated RBNZ forecasting performance.

²⁴ Procedural transparency is the category closest to accountability. While neither central bank publishes minutes or voting records, Eijfnger and Geraats (2002, p 12) argue “The RBNZ is special in the sense that its policy decisions are solely made by its Governor. This means that voting records are immaterial. In addition, minutes are substituted by comprehensive explanations of its decisions, including forward-looking analysis.”

policy decision” and “published assessments”, though these values on their own are unlikely to lead to rating them as high as the RBA.

Accountability

Accountability is the concept which has received the least attention in the economics literature. Also, at the time of the Fry *et al.* (2000, p 135) survey, central bankers ranked accountability lower in importance than both independence and transparency. Increased accountability can lead to both improved economic benefits and better democratic accountability, and in practice formal accountability has generally been sought either through a formal *contract* mechanism (e.g. RBNZ-style), or more often through various parliamentary and governing board *monitoring devices*.

Empirical measures specific to accountability are relatively few, and some of these have limited relevance for particular central banks. For example, the Fry *et al.* accountability measures for the RBA, RBNZ, HKMA and MAS feature three measures of accountability with respect to a specific target, and a measure for public accountability through parliamentary monitoring; the RBA, RBNZ and HKMA all rate particularly high, and the MAS particularly low. Bini-Smaghi and Gross (2001) constructed an index for the six major central banks from 15 largely policy and communication strategy sub-categories. They concluded (pp 7, 17) that “...indicators based on formal criteria are not useful in this field [of central bank accountability and transparency]”, and that the existence of a seemingly transparent and accountable formal framework does not necessarily ensure performance will be rated by financial markets and the public as effective and credible.

In short, it seems that while the sophistication and relevance of transparency and accountability measures has been evolving rapidly, current measures are still unable to reflect a sufficiently wide range of central bank and related corporate government measures. In particular, they cannot yet capture crucial differences between formal frameworks and their degree of operational effectiveness.

So where does this leave us? Considerable effort has gone into clarifying meanings of the four broad concepts and the relationships amongst them. Most empirical work has utilised cross-section data, including recent survey data. Limitations are that most findings have involved potential linkages to macroeconomic rather than monetary policy objectives, and have been for inflation targeting or multiple objective central banks. There has been little focus, perhaps because of small sample sizes, on exchange rate targeting central banks. More positively, but in a very broad sense, *operational independence* is regarded by central bankers as the most valuable of their monetary framework characteristics, with central bank *credibility* being the outcome to be strived for and maintained. Increased emphasis has been placed recently on *transparency* and accountability, by both inflation and exchange rate targeting central banks, though for somewhat different reasons. *Accountability* has been the least appreciated and researched, and yet in principle, its potential links to *governance* are the strongest.

Hence, because there has been limited success in establishing robust empirical relationships between monetary policy objectives on the one hand, and broad governance related concepts such as independence, credibility, transparency and

accountability on the other, we turn now to detailed identification and some assessment of their current governance procedures.

4. Identification, benchmarking, and assessment of Governance Procedures: Common elements or different models?

4.1 Central Bank Governance: what should it comprise?

Conceptually, governance is underpinned by the need for accountability, and in practice, successful governance can only be achieved with the assistance of various forms of transparency. However, just as there has been limited consideration of accountability issues in the research literature until recently, so too there has been little in depth analysis of central bank governance questions²⁵.

There seems to be no comprehensive, legally binding set of governance principles for central banks, akin to those existing for the corporate sector. However, there are a steadily evolving set of desirable principles and practices which have similar aims²⁶. For example, in the very broadest sense, one would expect central bank governance principles to be underpinned by²⁷:

- *an effective constitutional and legal framework*, stating explicitly the objectives for monetary policy. This would also specify the rights and obligations of the various parties in relation to the monetary policy objectives, the degree of operational independence of the central bank, the role and duties of the governing board, and the role and responsibilities of the chief executive. The framework may or may not additionally involve specific contractual requirements;
- *ongoing political and public support* for the monetary policy framework, maintained through a *high level of transparency* and *strong accountabilities* to government, to Parliament, to financial markets, and to the public at large;
- *an effective governance culture for the central bank*, engendering public disclosure of the extent to which statutory and other obligations have been met, and in a corporate governance sense, ensuring best quality financial disclosure and risk management practices.

There is not, to my knowledge, a clear dividing line between monetary policy and corporate governance areas. Accordingly, I cover board issues, monetary policy decision-making issues, and transparency and accountability issues under the central bank monetary policy governance heading in section 4.2. Selected governance

²⁵ See Siklos' (2002a, p 14) view that "Governance questions, until recently, largely ignored in discussions about the relationship between the government and the central bank, should be treated on an equal footing with the accountability and transparency considerations." He also presents a set of "Core elements of an 'ideal' central bank law", primarily specifying elements considered essential for ideal monetary policy governance, but also including some corporate governance elements.

²⁶ See the IMF's *Code of Good Practices on Transparency in Monetary and Financial Policies* and its associated *Financial Sector Assessment Program* (FSAP), and the OECD's *Core Principles on Corporate Governance*.

²⁷ See Mortlock (2002), Perry (2001) on key corporate governance principles for central banks.

reporting issues, financial accountability issues, and chief executive risk issues are then treated under corporate governance in section 4.3.

4.2 Central Bank Governance: Monetary Policy Objectives and Performance

Board issues

Is there an ideal governance structure for evaluating monetary performance against designated objectives? Issues central to any ideal structure would be the following: should the central bank board be solely a monitoring and evaluating one, or can it additionally have monetary policy decision making power? If the latter, is there another specialist body or individual responsible for evaluating the board's monetary policy decisions? Are the duties of the board set out clearly in legislation, or do its powers and responsibilities need to be clarified by other public documents? Who is responsible for appointing board members and its chair? Hence, what is the overall transparency of the evaluation processes, what is the balance between independence and accountability in the evaluation procedures, and are these easily understood?

Ideally, the *basic* answers to these questions should initially be obtainable quickly and clearly from legislation. Also, whether the monetary policy decision is taken by a monetary policy committee, by an individual decision-maker, or by a board, it is reasonable to expect performance evaluation by the board (or by an equivalently credible process) to take place at arms length from the decision.

In practice, the roles of the RBA, RBNZ, HKMA and MAS "governing boards" vary considerably in scope and complexity, and lead to different degrees of independence and transparency. Key information is summarised in Table 3.

The RBA, RBNZ, and MAS Acts set down the duties of their boards, including whether they are responsible for formulating or monitoring monetary policy. The Acts are also clear on who is responsible for appointing board members, and for how long.

The RBNZ board operates under the simplest and most transparent system. The board is required to monitor the decision making and communication performance of the Governor, and is in a very clear position to do this independently²⁸. The outcome of the process is visible in the non-executive directors' annual report, available in the Bank's Annual Report.

The RBA has two boards, with the Reserve Bank board being responsible for all Bank policies, except payments system stability and efficiency. The Reserve Bank board *decides* monetary policy, and is chaired by the Governor. There is no separate, specialist body or process designated for evaluating the board's monetary policy decision making.

²⁸ The chair of the Board is appointed from among the non-executive directors. The RBNZ's non-executive directors' (2000, p 159) arguments for the Governor not being the chair were based on the principle of separating the executive management and governance roles. Their arguments (pp 149, 160) against the Minister appointing the chair were based on this potentially being seen as undermining the monitoring independence of the board and, indirectly, the operational autonomy of the central bank.

The MAS board is responsible for all MAS policies. The board chair, who is the Deputy Prime Minister and Finance Minister, is appointed by the President, on the recommendation of Cabinet. It is not immediately clear from an examination of legislation and other official documents whether this board is essentially monitoring and evaluative, or has some operational role in monetary policy decision-making. It seems reasonable to assume, however, that it is in effect an evaluative board for monetary policy purposes, and that there is considerable operational independence between the MAS's monitoring and decision-making bodies. The MAS' most recent Annual Report (2003, p 24) states that its Economics Policy Department (EPD) formulates monetary policy and its Monetary Management Division (MMD) implements monetary policy²⁹.

For the HKMA, the equivalent of the governing board is the government's Financial Secretary (FS), in consultation with the Exchange Fund Advisory Committee (EFAC). The FS's responsibility for setting monetary policy objectives, the duties of EFAC and its Sub-committee on Currency Board Operations³⁰, and the appointment procedures for the FS and EFAC can be found from studying the Basic Law of the HKSAR, the Exchange Fund Ordinance, the *Accountability System for Principal Officials* (Constitutional Affairs Bureau, 17 April 2002), and the HKMA's information note for the Legislative Council's (LegCo) Panel on Financial Affairs, entitled *Governance of the Hong Kong Monetary Authority* (27 September 2002). This model is unique, and heavily conditioned by the HKSAR's current constitutional status and historical development. In essence, the model can be seen as "a single person governing board", in the form of the Financial Secretary. The FS is responsible for choice of the rule-based currency board system, a system which has considerable *inherent* accountability. There are also extensive other accountabilities: through the FS being appointed by the Central People's Government (CPG) on the recommendation of the HKSAR Chief Executive; through FS accountability to the HKSAR CE and to LegCo³¹; through FS exercising powers in consultation with EFAC (but whose members are appointed by the FS under delegated authority from the HKSAR CE); and through the "Monetary Authority"³² having sole responsibility for achieving the monetary policy objective³³. It is therefore a system of considerable complexity, but which also incorporates an exceptional number of monitoring checks and balances, as offsets to the FS's very considerable powers and independence of authority³⁴.

²⁹ See also Monetary Authority of Singapore (2003a, p 12, and pp 13-14) which states that "The Monetary Policy Division (MPD) of the Economic Policy Department ... provides recommendations on the slope and width of the exchange rate policy band ..." and "The Monetary Management Division (MMD) reports ... at the weekly Monetary and Investment Policy Meeting (MIPM), which is equivalent to the MPC of other central banks." Its website Organisation Chart as of 21 April 2003, also states that the EPD formulates monetary policy.

³⁰ EFAC's Remuneration and Finance Sub-committee has governance responsibility for staff, administrative and other matters; its recommendations go to EFAC.

³¹ See the *Accountability System for Principal Officials*, and Article 64 of the Basic Law.

³² The Monetary Authority is "a person", the CE of the HKMA, appointed under the Exchange Fund Ordinance.

³³ See the letter of 25 June 2003 from the HKSAR Financial Secretary stating that "As Monetary Authority you shall on your own be responsible for achieving the monetary policy objective within the structure of the monetary system I have both determined herein."

³⁴ See Latter (2003, pp 9,19), Tsang (2003, pp 2, 5, 8) for specific suggestions on how the HKMA's statutory underpinnings and governance arrangements might be simplified and strengthened, through

Monetary policy decision-making issues

Is there an ideal monetary policy framework, from a governance perspective? Perhaps not surprisingly, Fry *et al.* (2000, p 133) concluded “there is no ‘best-practice’ [monetary policy] framework for all. Relevant considerations include the size and openness of the economy, the degree of centralisation in the political structure, norms for transparency in the public sector, and the history of past monetary successes and failures”. Similarly, but more narrowly in a governance arrangements context, Archibald (2001, pp 10-11) suggested “each of the decision-making structures ... is likely to have different strengths and weaknesses. ... there is no single ‘right’ or ‘wrong’ monetary policy decision-making model.”

Nevertheless, issues key to a best practice accountability framework for any particular economy and central bank would include the following: Should the monetary policy decision-maker be an individual or a “committee”? If an individual, what are the accompanying advisory structures? If a “committee”, what is its composition, and in particular does it have external and/or government members, with or without voting status? In both cases, who is responsible for appointing the decision-maker, and is the length of their terms explicit?

So what are the relative risks and benefits for the single decision-maker and collective decision-maker models³⁵? Risks associated with a single decision-maker model are that the decision is too reliant on the judgement and personal qualities of one individual, that the decision-maker becomes hostage to one particular line of thought, and that the non-elected person is *perceived* by the public at large as having too much power and responsibility. Potential benefits associated with a single decision-making model are its clear and strong accountability, and the efficiency and clarity of the policy and communication processes, both within and beyond the central bank. Under such a model, accountabilities need to be particularly strong, to ensure the potential benefits clearly outweigh the commensurate risks. The potential benefits and risks are largely reversed for collective decision-making models: loss of coherence in monetary policy decision-making, lesser clarity of communication of policy and accountability, and benefits which emerge from wider input to the decision or from a “committee average” view. Net benefits will also depend on the extent to which external input³⁶ and a full range of options are taken into account in advisory processes under the single decision-maker model, and the extent to which operational independence is compromised by government input³⁷ under a collective model.

being incorporated in a single legal document, and being subject to a considerably less complex and more widely understood set of governance and financial accountabilities.

³⁵ See Fry *et al.* (2000, pp 128-133), Goodhart (2000, pp 228-232), Svensson (2001, pp 49-50), Non-executive directors of the RBNZ (2000, pp 157-159), Archibald (2001, pp 5,8 10-11).

³⁶ See Svensson (2001, pp 49-56), Fry *et al.* (2000, pp 130-131) for discussion on the relative contributions able to be made by internal and external committee members.

³⁷ Siklos (2002a, p 21) includes in his core “ideal” elements the requirement that “The central bank will be entirely responsible and accountable for the day-to-day implementation of monetary policy. Monetary policy decisions shall not be subject to any direction from the government unless it makes public the reasons it wishes to direct the central bank to alter existing policies. From time to time, the government may, via periodic reviews of the conduct of monetary policy, wish to set a new course for the central bank. This may require amending the central bank law.”

Fry *et al.* (2000, pp 128, 130) report that a policy-making committee is the more common model for central banks, with the decision being taken by committee in 79 countries and by an individual in only nine central banks. However, they also suggest that a committee will take better decisions only if the committee bring "...diverse but relevant experience, and they engage in a process of 'creative challenge'". This is consistent with Svensson (2001, p 51) reporting that a senior central banker told him: "Of all arrangements, the best is the right committee. The worst is the wrong committee."

So what are the relative balances of individual versus collective responsibility for monetary policy decisions, and the relative weightings amongst efficiency (or simplicity), single decision-maker riskiness, transparency, and accountability, for our four central banks?

In practice, the RBA, RBNZ, HKMA and MAS monetary policy decision-making processes and entities are structured very differently, take differing lengths of time to understand, and exhibit differing degrees of operational independence and accountability. Key information is summarised in Table 4.

New Zealand and the HKSAR formulate monetary policy through single person decision-maker frameworks, counterbalanced by strong accountability requirements³⁸, and significant advisory processes. In the case of the RBNZ, this leads to particularly sharp operational independence for the Governor, and hence similarly clear personal responsibility for monetary policy outcomes. Unlike for the other central banks, there is no government representative on either the monitoring board or as a participant to the monetary policy decision-making or advisory process. The HKSAR in effect seems to operate a "double, single decision-maker" model, with the FS responsible for determining the monetary policy objective and the Monetary Authority responsible for achieving it. This monetary policy decision making framework and range of counterbalances to single decision maker powers takes very considerable time to understand, monetary policy has operational but not goal independence from government, and there is powerful rule-based accountability, together with the extensive other checks and balances set out above under "Board issues".

The RBA and the MAS have "committee models" for taking monetary policy decisions, the former through vote at its board meeting, the latter through the combination of its Economic Policy Department recommending the slope and width of the exchange rate policy band, and its weekly Monetary and Investment Policy Meeting. The RBA procedures are relatively widely known and understood, and five out of the six non-executive board members are appointed to bring wider or non-government input to the monetary policy decision. Direct accountability for the monetary policy decisions, twice yearly to Parliament and through the Bank's regular publications and communications programme, is somewhat less comprehensive than for the above single decision-maker models³⁹. By way of contrast, MAS decision-

³⁸ For the RBNZ, these are summarised as: the rigorous "double veto" process for appointing a Governor; constraints on the Governor and the requirements for monetary policy transparency, from legislation and the PTA contract; and constant monitoring of the Governor by the Board. See NEDC (2000, pp 149, 158).

³⁹ "Committee" decision-making models vary in the intensity of their transparency and accountability. See the Bank of England's procedures (Fry *et al.*, 2000, pp 128-129; and Tables 2, 5, 6).

making procedures are not as extensively documented as those for the RBA, and are also probably not as widely understood. Nor are specific accountabilities yet apparent. For example, who takes ultimate responsibility for monetary policy decisions? Is it the MIPM chair, the managing director of the MAS, or the board⁴⁰?

Transparency and accountability issues

Empirical conclusions from the quite disparate sets of transparency measures of Geraats (2002) and Fry *et al.* (2000) showed the RBNZ as amongst the most transparent of nine inflation targeting central banks, and the RBA rating measurably lower in the areas of “policy models and forecasts”, “policy explanation and inclination”, and “minutes and voting records”. Conclusions from the Fry *et al.* survey data are commensurate with the “policy explanations” measures now being somewhat dated, and therefore misleading for current HKMA and MAS procedures. They also show that, in the category designated as (monetary policy) “accountability”, the RBA, RBNZ, and HKMA rate very highly, and the MAS particularly low.

Hence, what additional and updated insights can be obtained from the recently assembled information on “transparency” and “accountability”, presented in Table 5?

Transparency of the monetary policy decision-making process

Procedural transparency on the way decisions are taken is a controversial area⁴¹, with judgements often being dominated by whether votes of committees are taken and made public, and minutes or transcripts of meetings published. In my view, debate over the latter can often be more distracting than informative, through failing to keep debate primarily about actual and potential achievement of the monetary policy objective. These aspects also need not be the most suitable to focus on, for single decision-maker and exchange rate targeting frameworks⁴². In short, the key issue here would seem to be whether the public and financial markets understand both the process through which each monetary policy decision is reached and the economic and any other reasoning behind each decision.

From the information in Table 5, it is clear how often each central bank “body” normally meets, and the extent to which reasoning for decisions is made transparent.

Neither the RBA nor the MAS publish minutes or transcripts (or votes) of their “committee” meetings. The RBA announces “no change” or a specific change to its

⁴⁰ The board is ultimately accountable to the Parliament of Singapore through the Minister in charge of the MAS.

⁴¹ Fry *et al.* (2000, pp 138-139) report that for the 79 central banks using a committee structure, slightly fewer than half have a procedure for voting, while the remainder take a decision by consensus; six of the 36 voting committees publish the votes of individuals. They also set down strengths and limitations of individual accountability, in the light of Bank of England experience. Svensson (2001, pp 5-6, 61-62), in his review of RBNZ monetary policy governance procedures, also canvassed *pro* and *contra* arguments, in recommending “Named votes and non-attributed minutes of the [internal] MPC should be published with a short lag.” This recommendation was not accepted by the Government.

⁴² Eijfnger and Geraats (2002, p 12) have suggested that “Although decision-making by committee makes it harder to achieve procedural transparency, the Bank of England shows that this need not be an insurmountable problem, ...”. They also are of the view that, for the RBNZ single decision-maker model, voting records (of the MPC) are immaterial, and that “... minutes are substituted by comprehensive explanations of [the Governor’s] decisions, including forward-looking analysis.”

Target Cash Rate, and in the case of decisions to change provides reasons. It provides detailed information, a limited amount of it broadly forward looking, in its quarterly published statements. Since January 2002, at semi-annual intervals, the MAS has published simultaneously its short MPS, and its more detailed Macroeconomic Review, providing reasoning for its current broad S\$NEER objective, and very brief forward-looking information.

The two single decision-maker economies are therefore considerably more transparent and timely on reasoning and explanations. The RBNZ does not support its Official Cash Rate (OCR) decisions through publishing votes and minutes. Rather, this purpose is served through providing its decisions and explanations simultaneously. Brief media-release reasons are provided for “between-MPS” decisions. Comprehensive Monetary Policy Statements, which include considerable forward-looking information, are provided quarterly. The RBNZ is the only one of the four to publish quarterly medium-term numerical projections, conditional (perhaps still uniquely for central banks) on endogenous interest rate (and exchange rate) paths. The HKMA has also had for some time, an explicit public commitment to increasing the transparency of what it does⁴³. In the context of its inherently transparent, rule-based currency board system, it publishes on its website within a few weeks, both the “Report on Currency Board Operations” and a “Record of Discussion of Meeting” of its EFAC Sub-committee on Currency Board Operations. Importantly, the short preface to the Currency Board Operations Report contains the accountability statement: “In accordance with currency board principles, changes in the Monetary Base were fully matched by corresponding changes in foreign reserves.”

Hence, the nature of the monetary policy decision-making processes, and the communication of decisions reached, is well understood for each of our four central banks. They have, however, displayed very different degrees of commitment to providing reasons why particular decisions have been reached, and to providing self-assessment of material differences from targets. The RBNZ has the longest standing commitment to transparency, as required by its Statute, and releases the most comprehensive set of information. The RBA and HKMA have progressively and materially upgraded the sets of information provided for their monetary frameworks. The MAS’s increased transparency in this area is relatively recent.

Accountability to “Parliament” and to the public, for the monetary policy decisions reached

The RBA, RBNZ, and HKMA clearly see it as an important responsibility and a valuable opportunity to appear at agreed intervals before their respective “Parliamentary Committees”. The MAS does not appear to provide accountability in this form⁴⁴.

All four central banks provide formal published material, self-reviewing their conduct of monetary policy decisions and performance. They provide this with differing speeds, at different intervals, and in differing degrees of depth. For example, the

⁴³ See recent years’ HKMA Annual Reports.

⁴⁴ Members of Parliament can, however, raise questions on MAS performance with the Minister of Finance.

HKMA's EFAC Sub-Committee Report on Currency Board Operations is available within a few weeks, 11 times yearly, to complement other daily and monthly information; the RBNZ releases its MPS quarterly, simultaneously with its OCR announcement; the RBA provides a quarterly MPS, and the MAS provides formal review material semi-annually.

Hence, each central bank has further enhanced in recent years, the degree of transparency of its monetary policy decision-making process. The RBA, RBNZ, and HKMA, but apparently not the MAS, have regularly scheduled processes, for their legislative bodies to hold them accountable for monetary policy performance relative to their objective. The RBNZ and the RBA, as is appropriate for inflation targeting central banks, provide the greater forward-looking information, though limited self-appraisal of projection errors. The HKMA and MAS, as exchange rate-targeting central banks, also face greater real time accountability from financial markets.

4.3 Selected Corporate Governance Issues for Central Banks

The information presented in Table 6 covers: how governance is currently treated in Annual Reports; several important aspects of financial accountability; and what procedures currently exist in the area of "chief executive risk".

Governance reporting

It is not ideal for central banks to continue reporting on governance in a largely piecemeal manner. Overall central bank credibility is affected by the quality of governance across the monetary policy, financial system stability, and corporate governance areas. That suggests it would be advantageous to have a "one stop shop" for governance, with coverage quite early on in each central bank's Annual Report.

The RBA, HKMA and MAS each provide key corporate governance and monetary policy governance material in a piecemeal fashion⁴⁵. Since 2001 the RBNZ have chosen a considerably higher profile, integrated summary of monetary policy and corporate governance procedures early in its Annual Reports, and an integrated non-executive directors' "governance" annual report later on. This RBNZ governance reporting framework came as a natural extension of Lars Svensson recommending in his *Independent Review* (2001, pp 6, 57, 65), that the RBNZ accountability structure should be strengthened, through the Board of Directors publishing an annual report with its evaluation of Bank's monetary policy.

Financial accountability

Extensive Annual Financial Statements are provided by all four central banks in their Annual Reports. For the HKMA, these statements are termed accounts of the *Exchange Fund*. However, as these accounts cover financial activity associated with the HKMA as a whole, there would seem to be considerable value, especially for those not familiar with the HKSAR, in giving this fact greater prominence.

⁴⁵ The HKMA's Annual Report of 2002, released on 29 April 2003, has recently provided an upfront summary of its legal mandate, its high degree of accountability and transparency, and its advisory and other committees, including EFAC and its Sub-Committee on Currency Board Operations (HKMA, 2002, pp 10-13).

In all cases, as it should be, the underlying authority for distribution of central bank surplus (or profit) can be found in legislation. The person or body having the ultimate decision-making authority, and the specific destinations for the funds are also made either precisely clear or, in the case of the HKMA, “primarily” clear⁴⁶.

The twofold justification for both the distribution of surplus and the funding method being made clear in statute, is so that central banks cannot retain for operational purposes net surplus monies from seigniorage, and so that strong financial accountabilities can be transparently maintained over the long term.

Funding methods are not, however, immediately clear for all four central banks, thereby providing scope for further strengthened accountability. For example, a simple, clear and potentially very strongly accountable method is the “Funding Agreement” model, under which the RBNZ has operated successfully for well over a decade. The authority for this comes from the RBNZ Act, the agreement is between the Governor and the Treasurer/ Minister of Finance, and through its multi-year form, it is designed to strike an appropriate balance between the need for the central bank to maintain the degree of operational independence authorised under the Act, while simultaneously ensuring strong financial accountability⁴⁷.

Chief executive risk

Whether a central bank has operational independence or not, and whether it operates a single decision maker model or not, the qualities and performance of the chief executive are clearly crucial to each central bank’s monetary policy performance and overall credibility⁴⁸. So, are the procedures for appointment, performance assessment, and completion of term of office specified in legislation?

Appointment procedures for CE’s of the RBA, RBNZ, HKMA and MAS are all specified in statute. The RBNZ and MAS Acts have the extra safeguard of a “double veto” procedure⁴⁹.

The statutory underpinning for evaluating CE performance varies by central bank. The RBNZ and MAS Acts require, respectively, that the Board “keep under constant review” the performance of the Governor, and that the Managing Director “be accountable to the Board for acts and decisions”. The performance of the Monetary Authority (CE HKMA) is formally reviewed by EFAC against objectives set annually. There is no explicit provision in the RBA Act or other formal requirement for evaluation of the Governor’s performance.

⁴⁶ Further on the HKMA case, though, see also Latter (2003, p 9), who considers “A huge amount of confusion arises from the fact that the Exchange Fund serves simultaneously as the repository of the fiscal reserves, the holder of Hong Kong’s foreign exchange reserves, the *de facto* balance sheet of HKMA and the HKMA’s sole source of finance for its ongoing activities.”

⁴⁷ See Non-executive directors (2000, p 154). In New Zealand’s case, the funding period is for five consecutive financial years.

⁴⁸ Svensson’s (2001) *Independent Review* pays particular attention to potential CE risk, in New Zealand’s single decision-maker context.

⁴⁹ There is also a “double veto” process allowed for during appointment of the HKSAR’s Financial Secretary, who is responsible for “setting” the monetary policy objective.

4.4 Some Assessments

It is clear, from the conceptual and empirical material presented above, that there is no ideal model for best practice central bank governance, and no one-to-one correspondence between excellence in monetary policy performance and excellence in governance. It can be sustained, however, that there are key governance principles (or basic *common elements*), which should underpin excellence in central bank governance; also that the individual economy frameworks should then allow for their different political systems, constitutional and legal frameworks, commercial and financial institutional structures, and attitudes of the public at large (i.e. for *different models*). The common elements and different models should also be seen in the context of each of our four central banks having maintained strongly credible monetary policy performance over the past decade.

Common elements

From section 2, we have seen that, while ideally each central bank's primary monetary policy objective should be transparent from statute, in practice this clarity has had to be achieved through a mix of statutory and publicly prominent clarifying documents. Ultimate monetary policy targets are clear in all cases, but the degree of numeric guidance provided for each central bank's monitoring body varies considerably. For example, the HKMA fixed-link target is precise, whereas the MAS intermediate target is a S\$NEER band of undisclosed width and its ultimate objective of "price stability" is not quantified. Specific inflation target bands are provided for the RBA and the RBNZ, but the time horizon over which the targets have to be achieved on average, is the relatively generic "medium term".

Each central bank has considerable operational independence. This is clear from statute for the RBNZ, and it is clarified by other means for the RBA, the HKMA and MAS. The degree of government involvement in the monetary policy decision-making process varies from nil (RBNZ, HKMA, MAS) to limited (RBA).

Governing board arrangements are generally clear from statute, though in the case of the HKMA are clarified by additional public documents and involve a relatively complex combination of checks and balances.

The procedures for accountability to "Parliament" and to the public, on both monetary policy and corporate governance matters, are transparent and strong for the RBA, RBNZ and HKMA, but considerably less comprehensive for the MAS.

In the financial accountability areas of corporate governance, presentations of financial statements are transparent, and best practice or better procedures have been the norm. The underlying authority for distribution of central bank surplus can, in all cases, be found in statutes.

Different models

Differences in governance models have emerged, partly through our having examined two inflation-targeting central banks, and two central banks which place major emphasis on exchange rate stability. The RBA and RBNZ operate broadly similar

inflation targeting regimes, under very different governance structures. The HKMA and MAS operate very different exchange rate regimes. The HKSAR's rule-based currency board system brings strong *inherent* transparencies and accountabilities, and these are complemented by strong, publicly expressed commitments to transparency through traditional means. But both the MAS's nominal effective exchange rate intermediate-target band regime, and the HKSAR's US\$ linked fixed exchange rate system carry exchange rate risk, as an exchange rate target or band can be the subject of financial attack in a way that an inflation target cannot. Governance arrangements necessarily differ, to reflect this.

Different governance models also emerge once an economy has chosen a single person decision-maker model rather than a "committee" decision-making model.

Governing board arrangements exhibit differing degrees of simplicity and transparency. They also show differing degrees of independence between the board and management, and between the board and government.

The nature of the monetary policy decision-making processes, and the communication of decisions reached, is well understood for each of our four central banks. They have, however, displayed very different degrees of commitment to providing reasons *why* particular decisions have been reached, and to providing *self-assessment* of material differences from targets. New Zealand and the HKSAR formulate monetary policy through single person decision-maker frameworks, counterbalanced by strong accountability requirements and significant advisory processes. The RBA and the MAS have "committee models". To date, the two single decision-maker economies have been considerably more transparent and timely on reasoning behind decisions. The RBNZ has the longest standing commitment to transparency, and releases the most comprehensive set of information. This includes a great deal which is forward-looking in nature and exhibits significant self-assessment. The HKMA states publicly it "...pursues a policy of transparency and accessibility ... [making it now] one of the most transparent of its kind in the world."⁵⁰ The RBA and HKMA have progressively and materially refined the sets of information provided for their particular monetary frameworks. The MAS's increased transparency in this area is relatively recent.

Governance reporting differs in prominence and degree of integration. The RBA, HKMA and MAS provide key corporate governance and monetary policy governance material in a piecemeal fashion in their Annual Reports; the RBNZ provide a considerably higher profile for governance, an integrated summary of monetary policy and corporate governance procedures, and an integrated non-executive directors' governance report.

Funding methods for operational expenditures are not immediately clear in all cases, thereby providing scope for further strengthened accountability.

In the area of "chief executive risk", while appointment procedures for CE's are specified clearly in all cases in statute, there are varying degrees of transparency on performance monitoring processes and terms of appointment for CE's.

⁵⁰ *The HKMA's Role and its Policy Objectives*, HKMA Fact Sheets 1999, Fact Sheet 1, www.info.gov.hk/hkma/eng/public/fs99/toc_index.htm

Some specific recommendations

Governance reporting: The RBA, HKMA and MAS provide key corporate governance and monetary policy governance material in a piecemeal fashion in their Annual Reports. It could be further advantageous for them to have both a considerably higher profile, integrated summary of monetary policy and corporate governance procedures early in their Annual Reports, and a short independently provided *evaluative* “governance report”.

Funding of operational expenditure: Funding methods for operational expenditure are not immediately clear in all cases. Consideration could be given to some form of statute-based, multi-year “Funding Agreement”, designed to strike an appropriate balance between the need for the central bank to maintain the degree of operational independence authorised under its Statute, while simultaneously ensuring strong financial accountability.

5. Concluding Comments

This paper has focussed on central bank governance as it relates to monetary policy objectives and performance, and some closely related corporate governance issues.

Each of our four small, open economy central banks has had considerable success over the past decade in achieving its monetary policy objectives. It has also been argued that the most valid criteria for judging each central bank’s monetary policy performance is its publicly declared monetary policy objective, rather than the economy’s overall macroeconomic performance.

Economic research has had some success in establishing robust quantitative linkages amongst the broad concepts of central bank independence, credibility, transparency and accountability, especially from samples dominated by inflation targeting central banks. But partly due to smaller sample sizes for exchange rate targeting central banks, and partly due to each concept not having a unique meaning, more widespread robust linkages have not been established.

It is clear, however, from sample survey information and conceptual reasoning, that operational monetary policy independence is a particularly crucial requirement for central bankers to achieve their mandated monetary policy objectives. Equally importantly, central bankers and monitoring bodies recognise that operational independence must be counterbalanced by strong transparency and accountability. Transparency is necessary for effective accountability. The combination of operational independence, transparency and accountability goes a considerable distance towards building and maintaining credibility in monetary policy operation and corporate governance.

The development of strong central bank governance has been a relatively recent, but steadily evolving process. In some cases, a central bank’s path to desired excellence has been slowed by the nature of the economy’s constitutional and parliamentary frameworks, and the speed of public understanding of key issues.

It has been shown that the RBA, RBNZ, HKMA and MAS have in common, a considerable number of the elements seen as necessary for excellent governance. These include relevant statutory underpinnings, clarity of primary monetary policy objectives, commitment to improved transparency and accountability for monetary policy decision-making, and ongoing financial statement accountability. It is also clear that there are significant differences in principle and in their operating procedures, and hence in both their monetary policy and corporate governance frameworks, i.e. they operate different models. The differences can be associated with different primary objectives; different constitutional environments; the RBNZ and the HKMA operating strongly accountable single decision-maker models, and the RBA and MAS utilising “committee” decision-making models; and the central banks having proceeded at different speeds to recognise the need to commit fully to optimal accountability and transparency.

There is “no one size fits all” best practice framework for central bank monetary policy and corporate governance. However, the key desirable principles set down in section 4.1 should be adhered to, and the two specific suggestions in section 4.4 on governance reporting and funding agreements should be considered.

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Table 1. Central Bank Objectives and Independence

	Legislated objectives	Legislation	Monetary policy objective	Date adopted	Operational/instrument Independence
Reserve Bank of Australia (RBA)	To ensure that monetary and banking policy . . . will best contribute to: (a) the stability of the currency of Australia; (b) the maintenance of full employment in Australia; (c) the economic prosperity and welfare of the people of Australia.	Reserve Bank Act 1959	Underlying inflation of 2-3%, on average over the cycle.	1993	Independent to determine monetary policy, to achieve the inflation target agreed with the Treasurer.
Reserve Bank of New Zealand (RBNZ)	Primary function to formulate and implement monetary policy aimed at achieving and maintaining stability in the general level of prices.	RBNZ Act 1989	Inflation target of 0-2% adopted 1988; 0-3% from Dec. 1996; 1-3% from Sept. 2002, on average over the medium term.	1988	Independent to pursue an inflation target agreed by the Governor and the Treasurer.
Hong Kong Monetary Authority (HKMA)	To maintain currency stability, within the framework of the linked exchange rate system, through sound management of the Exchange Fund, monetary policy operations and other means deemed necessary.	Exchange Fund Ordinance 1992	To maintain a rule-based Currency Board system, fixed to the US\$ at the rate of HK\$7.80 (from 12 Aug. 2000)	17 Oct. 1983	The Monetary Authority on his own has day-to-day responsibility for achieving the monetary policy objective, set by the Financial Secretary.
Monetary Authority of Singapore (MAS)	To promote, within the context of the general economic policy of Govt., monetary stability and credit and exchange conditions conducive to growth of the economy.	MAS Act 1970	To manage the S\$NEER within a periodically revised, undisclosed policy band, so as to promote price stability.	1981	Considerable operational autonomy.

Sources for Governance Tables 1, 3 and 4: For the RBA and RBNZ, updated and amended information from Archibald (2001); for the HKMA and MAS, from their Annual Reports, official web-sites and other documents.

Table 2. Macroeconomic and Monetary Performance March 1990 to June 2002

	Australia	New Zealand	Hong Kong	Singapore
CPI Inflation Rate, %				
Mean	3.0	2.4	4.6	1.7
Standard Deviation	1.3	1.1	5.7	1.4
Highest	6.9	5.6	12.0	3.9
Lowest	1.1	0.9	-5.9	-1.5
Real GDP Growth Rate, %				
Mean	3.4	2.8	4.0	6.9
Standard Deviation	1.7	2.4	3.9	4.8
Highest	6.3	7.4	13.6	14.7
Lowest	-1.1	-2.2	-6.7	-6.6
Nominal Effective Exchange Rate (Base: Sample average = 100)				
Mean	100.0	100.0	100.0	100.0
Standard Deviation	7.0	9.4	8.8	7.1
Highest	115.4	121.7	112.3	111.2
Lowest	88.2	84.1	85.4	84.6
Real Effective Exchange Rate (Base: Sample average = 100)				
Mean	100.0	100.0	100.0	100.0
Standard Deviation	8.2	9.6	12.7	4.9
Highest	116.7	121.1	121.8	110.0
Lowest	88.0	83.4	75.1	90.6

Figure 1: CPI Inflation Rates (annual % change)

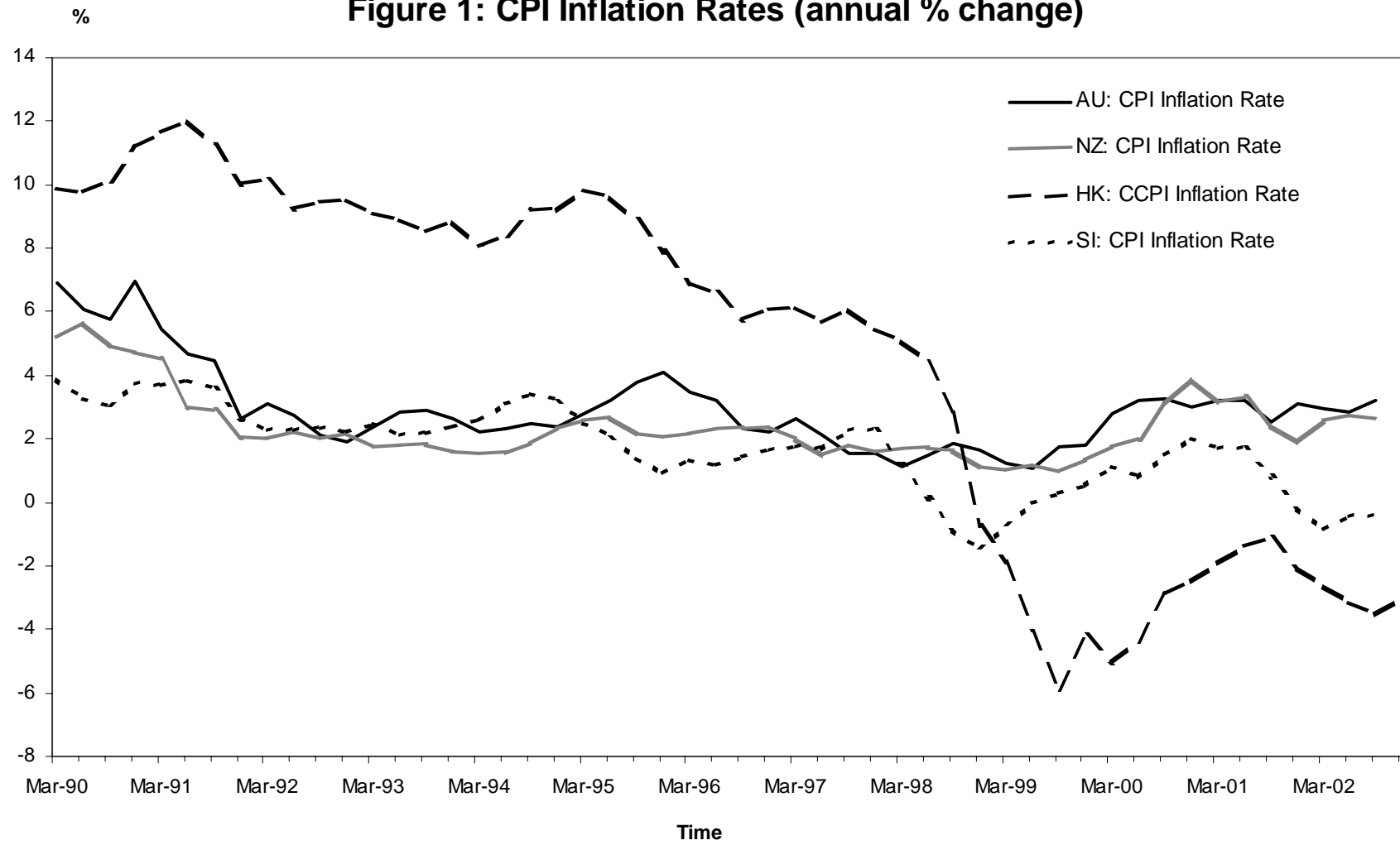


Table 3. Board of Central Banks

	RBA	RBNZ	HKMA	MAS
1. Composition of the governing board	Reserve Bank Board: consists of Governor, Deputy Governor, Secretary of Treasury, 6 other ¹	Board of Directors: consists of Governor, up to 7 non-executive directors	Financial Secretary , in consultation with the Exchange Fund Advisory Committee (EFAC) ²	Board of Directors: consists of Chairman, from 4 to 9 others (one the Deputy Chair)
2. Appointed by	The Treasurer	The Treasurer	Fin. Sec. nominated by HKSAR Chief Exec. ^{3a} ; EFAC members appointed by Fin. Sec. (FS) ^{3b}	The President. The President appoints the Chair on the recommendation of Cabinet
3. Length of term	Governors – 7 years; Others – 5 years	5 years	FS – 5 years EFAC – 2 years	3 years
4. Duties of board	The Reserve Bank Board is responsible for all Bank policies, except payment systems stability and efficiency (oversight by RBA’s Payments System Board).	To monitor the Governor’s and the Bank’s performance. To advise the Treasurer on the Governor’s and the Bank’s performance	EFAC advises on HKMA governance; EFAC sub-Committee (Chair, CE of HKMA) monitors and reports on Currency Board Operations	The Board is responsible for all MAS policies, MAS having authority to regulate all elements of monetary, banking and financial aspects of Singapore
5. Governing board formulate monetary policy?	Yes	No	Yes ⁴	No ⁵

¹ Note that at least 5 of the 6 “other” board members must be from outside the RBA or the Australian public service.

² EFAC has 13 members (including the Financial Secretary as Chairman), the majority (8 of 13) from the non-banking sector.

^{3a} For appointment by the Central People’s Government (CPG); ^{3b} under authority delegated by CE of the HKSAR.

⁴ The Financial Secretary is responsible for determining the monetary policy objective (including the currency board system, currency to be linked to, and rate for the linkage); the Monetary Authority on his own is responsible for achieving the monetary policy objective, including determining the strategy, instrument and operational means for doing so.

⁵ The MAS’ Economic Policy Department (EPD) formulates monetary policy. Board has ultimate responsibility.

Table 4. Responsibility for Monetary Policy Formulation

	RBA	RBNZ	HKMA	MAS
1. Monetary policy decision making body	Reserve Bank Board. (Decision by vote)	Governor	Rule-based currency board system strictly links monetary base and foreign currency flows ¹	Monetary Policy Division (MPD) of EPD, and Monetary Investment Policy Meeting (MIPM)
2. Length of term	Governors – 7 years; others – 5 years	5 years	FS – see Table 3 CE, HKMA – see Table 6	N/A
3. Appointed by	Treasurer	Treasurer, on the recommendation of the Board of Directors	FS – see Table 4 CE, HKMA – see Table 6	N/A
4. Government representative on body?	Secretary of Treasury	No	FS	N/A for MPD, MIPM. Board: 4 Ministers, Solicitor –General, 2 Permanent Secs.
5. Advisory structures	Bank staff	Monetary Policy Committee has governors and senior bank staff. OCR advisory group has governor, deputy governor(s), 6 other members of Bank staff and 1 or 2 external advisors	EFAC; EFAC Sub-Committee on Currency Board Operations; CE/HKMA’s Committee; HKMA staff	Authority staff

¹The FS determines the currency board system, currency and rate for the linkage; the CE, HKMA determines the strategy, instrument and operational means to achieve this.

Table 5. Transparency

	RBA	RBNZ	HKMA	MAS
1. “Monetary policy decision body” meetings <i>How often?</i>	Monthly	8 times a year ¹	EFAC meets 11 times a year	MIPM meets weekly; Board at least once in 3 months
<i>Minutes published?</i>	No	N/A ²	EFAC Sub-Cttee. on Currency Board Ops.	No
<i>Transcripts published?</i>	No	N/A ²	Record of Discussions within weeks	No
2. How often does a senior executive appear before parliament on issues of monetary policy?	Twice yearly	Normally up to 4 times a year	CE HKMA 3 times a year	Accountability via Minister in charge of MAS
3. Numerical forecasts published?	No: Quarterly descriptive outlook only	Yes: Quarterly	N/A Rule-based currency board	No: Semi-annual, mainly descriptive (except CPI)
4. Review of the conduct of monetary policy published?	Quarterly	Quarterly	11 times yearly ³	Semi-annual

Sources: Information for the RBA and RBNZ is taken, with updates and amendments, from an unpublished RBNZ Table prepared for Archibald (2001). Information for the HKMA and MAS comes from their Annual Reports, official web-sites and other documents.

¹ More accurately, MPC meets weekly. While the RBNZ reserves the right to change monetary policy settings at anytime, there are 8 pre-announced decision dates per year. Four of these are accompanied by a MPS.

² At the RBNZ the Governor holds formal responsibility for monetary policy; the MPC has no legislative basis – an entirely different situation to a legislated body that is formally responsible for monetary policy.

³ EFAC Sub-Committee Report on Currency Board Operations; also, daily publication of size of Monetary Base and its components, monthly publication of Currency Board Account, and disclosure on a virtually real-time basis of Aggregate Balance (component of the monetary base) of clearing accounts maintained by banks with the HKMA.

Table 6. Corporate Governance

	RBA	RBNZ	HKMA	MAS
1. Statements on Governance in Annual Report?	Section on RBA Board and Governance. Key Corporate Governance material provided	Summary descriptive and evaluative statements, by Bank and by non-exec. directors	Summary descriptive Governance material. Key Corporate Governance material provided	Key Corporate Governance material provided
2. Funding method for Central Bank?	Underlying (mainly interest) earnings, valuation gains or losses (fin. assets and for. exch.)	Five-year Funding Agreement between Governor and Minister of Finance	HKMA budget prepared annually by the HKMA, for approval by the FS on the advice of EFAC	Net operating and non-operating income
3. Distribution of Surplus				
Formal authority?	RBA Act. Determined by Treasurer, after consultation with Board	RBNZ Act. Determined by Min. of Finance, after consultation with Board	Exchange Fund Ordinance. Det. by FS, after consult. with EFAC	MAS Act. Determined by Board, in context of s 6(4) of the Act
Destination?	Reserves, dividend to Commonwealth	Surplus of income over Fund Agreement operating exp. to Crown (or Bank equity); expend. savings to Bank's equity	Exch. Fund to be used <i>primarily</i> for purposes affecting the exchange value of the currency of Hong Kong ¹	Board determined proportion of net profit to General Reserve Fund; remainder to Government
4. Explicit procedures for appointing Chief Executive?	RBA Act. Appointed by Treasurer	RBNZ Act. Appointed by Minister of Finance, on recommendation of the Board	Exchange Fund Ordinance. Appointed by Financial Secretary. No explicit term.	MAS Act. Appointed by President, if agrees with advice or rec. of Public Service Commission.
5. Explicit procedures for monitoring Chief Executive Performance?	No legal or other formal requirement. Ongoing Board evaluation.	RBNZ Act. Board required to constantly review the performance of the Governor. Formal annual review by Board.	Formal annual performance review by EFAC, against objectives set annually.	MAS Act. Managing Director shall be accountable to the Board for acts and decisions.

Sources: Annual Reports, official web-sites and other documents

¹ Additional to the use of it for its primary purpose, the Fund may be used "...with a view to maintaining Hong Kong as an international financial centre,...to maintain the stability and integrity of the monetary and financial systems of Hong Kong."; under specifically restricted conditions, transfers from the Fund may also be made to the general revenue or other funds of the Government.