

A Critical Analysis of Central Bank Independence and Governance in Australia and Bangladesh

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Abstract

This study examines central bank independence and governance (CBIG) in Bangladesh and Australia. It applies a unique index model of Ahsan, Skully and Wickramanayake (2008) to assess their respective legal, political, price stability objectives, exchange rate policies, monetary policy and deficit financing practices, transparency and accountability positions from 1991 to 2008. While the model shows CBIG is much weaker in Bangladesh than in Australia, the Bangladesh Bank's CBIG shown considerable improvement over the period. These findings suggest that the Government of Bangladesh might learn from Australia's experience with Reserve Bank of Australia and delegate further power and authority to Bangladesh Bank as well as lessen its political interference.

Key words: Central bank independence, governance, index-model, Australia and Bangladesh

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Introduction

The general view is that an independent and better governed central bank promotes macroeconomic stability, orderly economic growth and a stable regulatory environment. Thus in recent years many countries have strengthened their central banks accordingly. While Bangladesh and Australia have quite different socio-economic and political backgrounds, some lessons might still be gained by comparing their current and past approaches to this important matter.

In terms of economic performance, Bangladesh (developing country) and Australia (developed country) show major differences both in respect to inflation and GDP per capita levels (See Table 1). So, our primary objective is to investigate whether a developed country (Australia) with a higher GDP per capita and lower inflation might also have a higher level of CBIG compared to a developing country (Bangladesh). The secondary objective is to compare these two countries; and identify the possible areas of improvements for a developing country (Bangladesh).

Table 1. Inflation and GDP of Bangladesh and Australia

Year	Australia		Bangladesh	
	Inflation (%) [*]	GDP per capita (USD) [†]	Inflation (%) [*]	GDP per capita (USD) [†]
2008	2.8 [^]	44515 [^]	6.3 [^]	473 [^]
2007	2.3 [^]	42553 [^]	7.2 [^]	445 [^]
2006	3.5 [^]	36595 [^]	6.5 [^]	416 [^]
2005	2.7	34942 [^]	7.0	399 [^]
2004	2.3	31743 [^]	6.1	392
2003	2.8	26502	5.4	369
2002	3.0	20991	3.7	342
2001	4.4	18936	1.9	332
2000	4.5	20328	2.5	338
1999	1.5	21195	6.2	341
1998	0.9	19911	8.6	334
1997	0.3	22545	5.0	330
1996	2.6	22762	2.5	323
1995	4.6	20499	10.1	314
1994	1.9	19424	6.1	290
1993	1.8	17223	3.0	273
1992	1.0	17892	3.6	266
1991	3.2	18485	8.3	272

Note: [^]IMF staff estimates, ^{*}Data for inflation are averages for the year, not end-of-period data. [†]GDP is expressed in current U.S. dollars per person. Data are derived by first converting GDP in national currency to U.S. dollars and then dividing it by total population.

Source: World Economic Outlook Database, IMF.

The measurement of the relative CBIG within one country is a challenging task but cross country studies are even more difficult. Several authors have constructed their own CBIG indices to do so. Unfortunately these indices are not consistent in their respective definitions and selected variables. Furthermore, they do not comprehensively cover all the aspects of CBIG: economic, political, legal, accountability and transparency independences. To address this inconsistency and coverage problems, a comprehensive index-model of CBIG and its corresponding indices as developed by Ahsan, Skully and Wickramanayake (2006; 2008). So, the motivation here is to apply this index to Bangladesh and Australia and identify any changes in CBIG as well as compare their overall positions.

The remainder of this paper is organised as follows. Next follows a brief outline of the background of the two central banks. The third section provides the literature review. This is preceded by a discussion of the study's data and methodology, which leads into the analysis of the CBIG positions in Bangladesh and Australia, and finally, the conclusion of the paper.

Background

The Bangladesh Bank (BB) is the central bank of Bangladesh. It was established by the Bangladesh Bank Order (1972) following the country's independence in 1971⁴. It initially functioned like a government department but this changed gradually over time. The first significant move came in 1989 when the Government of Bangladesh (GOB) adopted a comprehensive Financial Sector Reform Program (FSRP). This was a transformation in 1990 from direct quantitative monetary controls to an indirect method of monetary management⁵. More recently the Bangladesh Bank (Amendment) Act, 2003 reduced the governor's term of office from five to four years as well as improved CBIG in other areas, for example, it specified that four directors (who are not government officials⁶) be appointed to the central bank's management board, placed an emphasis of its role in domestic price stability, introduced a floating exchange rate, and formed a coordination council, to align the central bank's policies with those of the government. Another major impact of the 2003 amendments was to introduce a specific set of objectives for the central bank; something which was absent in the 1972 legislation. These objectives include: to regulate the issue of the currency and the keeping of reserves; to manage the monetary and credit system of Bangladesh with a view to stabilizing domestic monetary value; to preserve the par value of the Bangladesh Taka; and to promote and maintain a high level of production, employment and real income in Bangladesh; and to foster growth and development of the country's productive resources for the national interest. These at least suggest that the central bank should seek local price and foreign exchange rate stability. Bangladesh Bank's CBIG level further improved in 2003 after implementing the Central Bank Strengthening Project (CBSP). As an initiative of the CBSP, a Policy Analysis Unit (PAU) was established in July 2005 to upgrade the Bangladesh Bank's capacity for research and policy analysis. Since January 2006, the central bank now provides half yearly monetary policy statements as well as its own research papers to enhance its transparency. These publications highlight price stability as the main objective of the central bank's monetary policy and as well as explain its monetary policy strategy and implementation tools.

The Reserve Bank of Australia (RBA) is the central bank of Australia. It was established by the Reserve Bank Act 1959. Previously, Australia's central banking activities were conducted by the

⁴ Central banking in Bangladesh dates to the British colonial period with the establishment of the Reserve bank of India in 1935. Its functions were assumed by the State Bank of Pakistan in 1948. With Bangladesh's independence, the Dhaka branch of the State bank of Pakistan was recognised as the Bangladesh Bank under the Bangladesh bank Order 1972. Interestingly, this took place retrospectively as the bank actually commenced operations on 16 December 1972.

⁵ A full-fledged new monetary management department and a technical unit has been assigned with the responsibility of formulating monetary, credit and reserve money programs, interest and exchange rate policies. The Unit also monitors the developments in the fields of money and banking. A separate department was set up to oversee the activities of the non-bank financial institutions. A credit information bureau (CIB) was set up to provide ready information on default borrowers to the banks. The following steps were taken to strengthen the institutional capability of the BB: The BB has been empowered to issue licenses, monitor and supervise the activities of the non-bank financial institutions under the Financial Institutions Act (1993); the appointments of chief executives of PCBs have been made subject to the approval of the BB, and the BB has been given the power to remove directors/board of directors of PCBs under the Bank Companies Act (1991); the appointments of chairmen, managing directors and directors of NCBs and government-owned financial institutions have been made subject to the approval of the BB, and the BB has been given the authority to recommend the removal of members of the board of directors of NCBs; approval of the BB is made necessary in cases of large loan exposures of the banks and other financial institutions; the BB has been empowered to impose penalty without resorting to court proceedings.

⁶ Bangladesh Bank Order 1972 does not specify, whether these directors are government officials or non-officials.

central banking division of the then wholly government owned, Commonwealth Bank of Australia⁷. The RBA's objectives include: the stability of the currency of Australia; the maintenance of full employment in Australia; and the economic prosperity and welfare of the Australian people. While the RBA had reasonable independence in the 1959 legislation; amendments in the late 1980s and 1990s further strengthened its position. These included: the separation of public debt management responsibility from RBA in 1986; the official announcement of price stability as a RBA's objective in 1993; and an agreement between the governor and the Treasurer in 1996 formally recognizing the RBA's independence. Since 1997, RBA releases quarterly monetary policy statements documenting its views on the economy and course of action, and the separation of the RBA's supervisory and regulatory responsibility of commercial banks to the newly created Australian Prudential Regulatory Authority (APRA) in 1998. During the ten years term of governor Ian Macfarlane (1996-2006), the RBA showed considerable CBIG improvement. RBA's CBIG has improved further in 2007 when the government signed the statement on the conduct of monetary policy with the RBA; this raised the statutory independence of the governor and deputy governor to be equal to that of the Commissioner of Taxation and the Australian Statistician as well as set new guidelines to increase its transparency. Under the new agreement the governor and deputy governor's appointments are to be made by the Governor-General in Council, and can be terminated only with the approval of each House of the Parliament in the same session of Parliament; earlier this could be done by the government alone (Reserve Bank of Australia 2007). Finally, since 6 November 2007, RBA has published its board meeting's minutes. The RBA's cash rate announcement has also made at a fixed time since February 2008 and is accompanied by a short statement explaining bank's decision, even if the interest rate is left unchanged.

As the backgrounds of these two countries central banks are different, their initiative and approaches for full CBIG would be different. The next step is to consider the literature associated with CBIG, quantify the level of CBIG and then compare them.

Literature Review

A central bank's "independence" means the freedom to pursue its monetary policies without political or other external influences. Some authors explained this in the context of legal, political or other types of independence, but it was hard to find a comprehensive definition reflecting all these aspects. This problem was addressed by Ahsan, Skully and Wickramanayake (2006, p.60) – "CBIG means that a bank has the legal power to protect itself from external influence, has the freedom to set its monetary policy and can implement its objectives without any political interference, can select the appropriate instruments to control the price, inflation, exchange rate stability and limited accountability to the parliament of the country to keep its activities transparent". Besides being comprehensive this unique CBIG model addresses most of the problems present in previous CBI indices, such as, fewer variables⁸, overlaps⁹, governance¹⁰, subjectivity¹¹ and the focus of the

⁷ While the Reserve Bank of Australia commenced operations under the Reserve Bank Act 1959 officially on 14 January 1960, central banking activities before then were conducted by the central banking division of the then Australian government owned, Commonwealth Bank of Australia. Though it might be logical then to date central banking in Australia back to the Commonwealth Bank Act 1911, the Commonwealth Bank only assumed the note issuing functions from the Treasury in 1920 and not formally until 1924. Its other functions also developed gradually and its regulatory functions were not formalized until the Commonwealth Bank Act 1945.

⁸ This suggests that the highest number of variables in any previous study was 16 (Cukierman, Webb and Neyapti 1992), whereas Ahsan, Skully and Wickramanayake (2008) has 26 variables in their index.

⁹ This indicates to the use of some common variable(s) by different authors in their CBI indices. They may have named their indices differently however created an overlap due to use of common variables (Ahsan, Skully and Wickramanayake 2008).

indices¹². A brief analysis of the few main papers is presented below on the key aspects: legal, political, price stability objective, foreign exchange rate policy, monetary policy and deficit financing, accountability and transparency.

CBIG (legal) aspect measures the independence a central bank is granted in its acts. The laws passed by the parliament to make governor of the central bank independent and separation of legal obligation to regulate commercial banks are important issues of legal CBIG (Ahsan, Skully and Wickramanayake 2008). This is very important for a central bank as CBIG (legal) ensures a legal basis for a code of good governance (Amentbrink 2004). The CBIG (legal) may also improve when the supervision of financial institutions is placed outside the central bank (Masciandaro, Quintyn and Taylor 2007) and governor's turnover rate is low (Moser and Dreher 2007).

CBIG (political) measures the government's political influence on a central bank. Political independence lessens when a government has higher number of representatives in the central bank board; or the governor holds a position in the government; or is replaced whenever a new government is elected (Ahsan, Skully and Wickramanayake 2008). Political instability adversely affects central bank's activities (Grilli, Masciandaro and Tabellini 1991; Cukierman 1993; Cukierman and Webb 1995). The overall CBIG may have increased in general but still one of the weakest area is political autonomy (Arnone, Laurens, Segalotto and Sommer 2007).

CBIG (price stability objectives) guides a central bank to maintain price stability as its main monetary policy objective. An independent inflation target and timely interest rate revisions would contribute the central bank achieving its price stability target (Ahsan, Skully and Wickramanayake 2008). Strong relationship has been found between CBIG and inflation in developed countries (Cukierman, Webb and Neyapti 1992; Kuttner and Posen 2001; Brumm 2006), but no association has been found in some countries as well (Bade and Parkin 1988).

CBIG (exchange rate policy) addresses the role of a central bank under a fixed and a floating rate system. The currency market intervention and regulation formulation should be done by the central bank (Ahsan, Skully and Wickramanayake 2008). An independent central bank can better maintain a stable exchange rate system (Kuttner and Posen 2001). The evidence suggests that a flexible exchange rate regime, coupled with an independent monetary authority and inflation targeting, may also perform better than a harder regime (de Souza 2002).

CBIG (monetary policy and deficit financing) identifies the central bank's role in formulating monetary policy, choosing its final goal and managing government budget financing (Ahsan, Skully and Wickramanayake 2008). The ability to make all the monetary policy decisions increases its CBIG (Eijffinger and Schaling 1992; 1993). Depending on the financial market development, a government's deficit budget may have negative impact on economy as well as CBIG (Neyapti 2003).

¹⁰ It refers to the absence of governance indicators in the previous indices as they focused on CBI only. But in this index Ahsan, Skully and Wickramanayake (2008) have combined independence and governance indicators and named the index as CBIG.

¹¹ This specifies the robustness of the index constructed. There are some subjective decisions making involved in index construction process. Ahsan, Skully and Wickramanayake (2009) measure content validity and reliability of their indices to identify its robustness. They calculated Lawshe's (1975) content validity ratio (CVR); test-retest and Cronbach alpha; in all cases the CBIG index was found highly content valid and reliable. For further details please contact the lead author.

¹² This CBIG index has six sub-indices and one overall index. The six sub-indices focus on six different aspects whereas the overall index measures the entire performance.

CBIG (accountability and transparency) examines the disclosure requirements of a central bank. Regular communication with the public on policy changes, monetary policy statements, accountability of the governor and auditing of bank's activities are essential elements (Ahsan, Skully and Wickramanayake 2008). There is disagreement about the type of the autonomy to be delegated (Lybek and Morris 2004); and the essentiality of accountability and transparency (de Haan, Amentbrink and Eijffinger 1999). But in general, they are considered important for effective governance, recommended to be specified in the central bank's own legislation (Lybek 2004).

An analysis of two different types countries may help to compare their positions in all six aspects of CBIG. Previous studies mostly compared developed, transition and developing countries (Sinclair 2000). Some studies have compared developed and developing countries (Cukierman, Webb and Neyapti 1992); or among the developed countries (Bade and Parkin 1988). In this study a developed (Australia) and a developing country (Bangladesh) is compared. The relevant methodology for the study is explained in the following section.

Data and Methodology

Sources of Data: The primary sources of data for CBIG index are the two country's central bank acts (includes amendments, annual reports, web sites, circulars, media releases and other central bank publications) and Morgan Stanley Central Bank Directory. The macroeconomic data are collected from International Monetary Fund (IMF)'s World Economic Outlook Database.

Index Model: The CBIG indices are constructed following Ahsan, Skully and Wickramanayake (2008) index-model for the period 1991 to 2008. The detailed index construction procedure is shown in Appendix 1 and 2. The main equation to calculate CBIG overall index is explained by equation (1). This overall CBIG index (CBIG_{Overall}) in constructed with the six sub-indices: 1. Legal (CBIG_{Leg}) 2. Political (CBIG_{Pol}) 3. Price stability objectives (CBIG_{PStab}) 4. Exchange rate Policy (CBIG_{Forx}) 5. Monetary policy and deficit financing (CBIG_{MonPol}) 6. Transparency and accountability (CBIG_{AccTrans}).

$$CBIG_{Overall} = w_1CBIG_{Leg} + w_2CBIG_{Pol} + w_3CBIG_{PStab} + w_4CBIG_{Forx} + w_5CBIG_{MonPol} + w_6CBIG_{AccTrans} \quad (1)$$

Where,

CBIG_{Leg} = Legal Index of CBIG

CBIG_{Pol} = Political Index of CBIG

CBIG_{PStab} = Price Stability Objectives Index of CBIG

CBIG_{Forx} = Exchange Rate Policy Index of CBIG

CBIG_{MonPol} = Monetary Policy and Deficit Financing Index of CBIG

CBIG_{AccTrans} = Accountability and Transparency Index of CBIG

Weight = $w_1=5/26; w_2=3/26; w_3=3/26; w_4=3/26; w_5=6/26; w_6=6/26.$

The variables are equally weighted¹³ to construct the sub-indices and the overall index. The proportional weights of the sub-indices in the overall index reflect the actual number of variables in each divided by the total number of variables (26)¹⁴. Differing weights might have been used but Factor Analysis failed to identify any meaningful relative weighting. So they were set as equal to avoid any subjective decision. The value of each index is between 0.0 to 1.0, where 0= lowest and 1= highest. The index construction details for BB and RBA are shown in Appendix 1 and 2.

The BB's legal index was 0.32 until 2003. The Bangladesh bank (amendment) act 2003 then changed the governor's term of office from five years to four years reducing the index to only 0.28. In contrast the RBA's legal index (0.67) increased in 2008 as the governor is no longer dismissible by the government but instead requires the approval of each House of the Parliament in the same session (Reserve Bank of Australia 2007) (See column 2 of Table 2). The RBA's previous legal index had been stable (0.60) for 10 years (1998-2007). The term of office of governor/CEO in RBA is much higher (7 years) compared to BB (4 years). If the term is longer than that of an elected politician (Australia 3 years and Bangladesh 5 years), then the politicians will have less influence (Eggertsson and Borgne 2003). The legal power to appoint governor/CEO is same in both country but the recent change (6 December 2007) in the Australian dismissal process gives the RBA a much higher status. The separation of commercial bank regulation and supervision from the central bank was done in Australia in 1998 but not as yet in Bangladesh. So, all these factors lead to a low legal index score for BB.

The political CBIG index of BB started at 0.89 in 1991 but dropped to 0.56 in 1996 and 2001 due to government's influence to change the governor in those particular years¹⁵. The value reached 1.00 after the BB charter was amended in 2003. RBA gets highest score (1.00) because of no political influence in Australia (See column 3 of Table 2). The BB score is low because it must consult and seek approval from the Ministry of Finance (MOF) on any important decision, such as monetary policy, licensing new banks and determining staff compensation. The governor's turnover rate in Bangladesh is also highly related with changes in government and the government representation on the BB's board is also higher than in Australia (See Table 3). The 2003 BB amendment addressed this by specifying that at least four directors should be non-government officials. So, the overall structure of the RBA board has the least government involvement.

The price stability objectives index of Australia is highest (1.00). This has been the RBA's main objective since 1993. Inflation targeting and interest rate forecasting are now major monetary and macroeconomic tools in Australia. Even though BB introduced inflation targeting jointly with the government in 1994, the BB's charter lacked this objective (price stability). It was not until 2003 that price stability objective was included in the BB charter, taking its score to its highest at 0.56 (See column 4 of Table 2). Though included in the BB charter, price stability is still not its only objective like with the RBA.

¹³ The alternative outcome of each variable in the index was weighted from highest to lowest contribution towards CBIG in a Likert scale 0 to 1.

¹⁴ The number of variables in the sub-indices are: five in legal; three in political, three in price stability objectives, three in exchange rate policy; six in monetary policy and deficit financing; and finally six in accountability and transparency indices.

¹⁵ The governor's turn over indicates the government's intervention in the dismissal process. In the year the government changes the governor that gets low score to capture its effect. If that change occurred after six months, one year, or more, then the value of the index suffers accordingly. Both in 1996 and 2001 the governor was replaced within six months after the incumbent government left office (Ahsan, Skully and Wickramanayake 2008).

Table: 2 RBA and Bangladesh Bank's CBIG Index Scores (1991 – 2008)

Year	CBIG(Leg)	CBIG(Pol)	CBIG(Pstab)	CBIG(Frx)	CBIG(Monpol)	CBIG(Acctrns)	CBIG(Overall)
Reserve Bank of Australia, Australia							
2008	0.67	1.00	1.00	0.67	0.83	0.95	0.85
2007	0.60	1.00	1.00	0.67	0.83	0.95	0.84
2006	0.60	1.00	1.00	0.67	0.83	0.86	0.83
2005	0.60	1.00	1.00	0.67	0.83	0.86	0.83
2004	0.60	1.00	1.00	0.67	0.83	0.86	0.83
2003	0.60	1.00	1.00	0.67	0.83	0.86	0.83
2002	0.60	1.00	1.00	0.67	0.83	0.86	0.83
2001	0.60	1.00	1.00	0.67	0.83	0.86	0.83
2000	0.60	1.00	1.00	0.67	0.83	0.86	0.83
1999	0.60	1.00	1.00	0.67	0.83	0.86	0.83
1998	0.60	1.00	1.00	0.67	0.83	0.86	0.83
1997	0.40	1.00	1.00	0.67	0.83	0.86	0.79
1996	0.40	1.00	1.00	0.67	0.83	0.86	0.79
1995	0.40	1.00	1.00	0.67	0.83	0.86	0.79
1994	0.40	1.00	1.00	0.67	0.83	0.86	0.79
1993	0.40	1.00	1.00	0.67	0.83	0.86	0.79
1992	0.40	1.00	0.56	0.67	0.83	0.86	0.72
1991	0.40	1.00	0.56	0.67	0.83	0.86	0.72
Average	0.53	1.00	0.95	0.67	0.83	0.87	0.81
Bangladesh Bank, Bangladesh							
2008	0.28	1.00	0.56	0.33	0.42	0.72	0.55
2007	0.28	1.00	0.56	0.33	0.42	0.72	0.55
2006	0.28	1.00	0.56	0.33	0.42	0.72	0.55
2005	0.28	1.00	0.56	0.33	0.42	0.39	0.50
2004	0.28	1.00	0.56	0.33	0.42	0.39	0.50
2003	0.32	1.00	0.56	0.33	0.42	0.39	0.50
2002	0.32	0.89	0.44	0.00	0.22	0.17	0.34
2001	0.32	0.56	0.44	0.00	0.22	0.17	0.28
2000	0.32	0.89	0.44	0.00	0.22	0.17	0.34
1999	0.32	0.89	0.44	0.00	0.22	0.17	0.34
1998	0.32	0.89	0.44	0.00	0.22	0.17	0.34
1997	0.32	0.89	0.44	0.00	0.22	0.17	0.34
1996	0.32	0.56	0.44	0.00	0.22	0.17	0.28
1995	0.32	0.89	0.44	0.00	0.22	0.17	0.34
1994	0.32	0.89	0.44	0.00	0.22	0.17	0.34
1993	0.32	0.89	0.28	0.00	0.22	0.17	0.31
1992	0.32	0.89	0.28	0.00	0.22	0.17	0.31
1991	0.32	0.89	0.28	0.00	0.22	0.17	0.31
Average	0.31	0.89	0.45	0.11	0.29	0.30	0.39

Note: 2008 data of BB and RBA are based on the policy information available till the first part of 2008.

Source: Authors' calculation

The exchange rate policy index of BB has increased to 0.33 in 2003 from its previous zero score (See column 5 of Table 2). In Bangladesh, floating exchange rate was introduced in 2003 and BB now has limited exchange rate policy powers as the government still retains some control. In contrast, the RBA has managed Australia's foreign exchange policy since the dollar was floated in 1983. RBA's ability to intervene and stabilize exchange movements contributed to the relatively high score of 0.67.

Table: 3 Central bank management board of Bangladesh and Australia

Management board	Australia	Bangladesh
Chairperson	Governor	Governor
Size of the board (No of members)	9	9
Governor	1	1
Deputy Governor	1	1
Non government official directors	5	4*
Officials or Government official	1	3
Representative of Government	1	-

Source: Authors' calculation

* since 2003

The monetary policy and deficit financing index for the BB was only 0.22 until 2003 as it had to follow direct orders from the MOF and had a very low level of operational independence (See column 6 of Table 2). The formation of a Coordination Council, which the Minister of Finance chairs and the BB governor is a member, has increased the communication and eased the settlement of conflicts between the government and the BB. The 2003 amendment also introduced monetary policy formulation as a central bank's function. In contrast, the RBA was 0.83 since 1991 showing its high level of monetary policy and deficit financing independence. The main reason is that RBA is not allowed to lend money to the government and has the full responsibility of monetary policy. In Australia, any unresolved differences in opinion between the governor and the Treasurer¹⁶ are referred to Governor-General for final decision.

The accountability and transparency index of BB has increased from 0.17 in 2002 to 0.39 in 2003 and 0.72 in 2006 (See column 7 of Table 2). The main reasons behind CBIG improvement are that the Bangladesh bank amendment act 2003 has introduced written objectives of BB; the governor's accountability to the parliament¹⁷; and since 2006 BB publishes regular monetary policy reports. It also put price stability as its main monetary policy objective and has communicated to the public. The level of accountability and transparency of RBA stood at 0.86 till 2006 but increased to 0.95 in 2007. This is because it now publishes its board meeting's minutes and explains any cash rate decisions.

The overall CBIG index for BB and RBA (See column 8 of Table 2) shows that BB's overall performance is much lower than the RBA. Initially BB had low level (0.31) of CBIG (1991-1993), but this increased to 0.34 (1994-2002) except 1996 (0.28) and 2001 (0.28). After the amendment of Bangladesh Bank Order (Central Bank Act) and implementation of CBSP in 2003, it improved to 0.50 and then settled at 0.55 in 2006. On the other hand, RBA's 0.72 (1991-1992) was elevated to a higher level (0.79) in 1993 after price stability was announced as the RBA's only objective. RBA's transfer of direct bank prudential regulation responsibility to the Australian Prudential Regulation Authority (APRA) in 1998 further enhance its score to 0.83. Finally, it has increased to 0.84 in 2007 and 0.85 in 2008 after the newly elected government agreed to even higher CBIG.

Conclusion

This paper examined the CBIG positions of two central banks, the Bangladesh Bank and the Reserve Bank of Australia, by applying Ahsan, Skully and Wickramanayake (2008) CBIG index-model. This index tracked their respective positions over 1991 to 2008 to identify any relative improvements as

¹⁶ The Treasurer in Australia is the second most senior cabinet position in the Australian government and heads the Department of Treasury. This position and department is the equivalent of the minister of finance and the ministry of finance in most countries. Ironically, Australia also has both titles but these serve more of accounting and budget implementation role and have much less power and status accordingly.

¹⁷ The Governor shall at least once a year or at any other instance, if so summoned appear before the Parliamentary Committee on Finance to report on the monetary policy and of other activities of the Bank and to answer questions Bangladesh Bank Amendment Act, 2003, Section 38 A.

well as their relative performance. The results indicated that CBIG in both countries has improved with BB's index score increased from 0.31 (1991) to 0.55 (2008). In contrast, RBA started with a much higher ranking of 0.72 (1991), then continued its improvements of 0.79 (1993), 0.83 (1998), 0.84 (2007) and finally to 0.85 (2008).

While BB consistently scored poorer than RBA, its improvements are nevertheless noteworthy. A great interest in CBIG in Bangladesh is reflected in better legislation, a more flexible exchange rate policy and in implementing of its central bank strengthening project. Even so, Australia's experience offers some ideas for further improvement. In particular, BB's CBIG could be greatly enhanced by extending the governor's term of office; shifting the power to appoint and dismiss its governor from the government to the parliament; assigning its prudential supervision of commercial banks to a separate independent agency; and reducing the government representation on the central bank board. Similarly, RBA's model of an independent monetary policy, better communication and reporting strategies and its accountability to the parliament may also enhance the CBIG in BB.

So, while there are considerable differences between Bangladesh and Australia, the RBA's operation nevertheless offers a number of ideas which would be useful for the government of Bangladesh to consider.

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Appendix: 1 CBIG Index Construction of Bangladesh Bank (1991-2008)

1.	Legal		Year	Code																																											
a.	Term of office of governor/CEO																																														
	5 years and reappointment [(Bangladesh Bank 1972a), Section 10 (5)]		1991	0.60																																											
	4 years and reappointment [(Bangladesh Bank Amendment Act (BBAA), 2003, Section 10 (5))(Bangladesh Bank 2003)]		2003	0.40																																											
			2008	0.40																																											
b.	Legal power to appoint of Governor/ CEO		1991	0.00																																											
	By the government [BBO, 1972, Section 10(3)]		2008	0.00																																											
c.	Dismissal of Governor/ CEO		1991	0.00																																											
	By the government [BBO, 1972, Section 15 (1) a]		2008	0.00																																											
d.	Regulatory body has been separated from central bank		1991	0.00																																											
	No, Central Bank only		2008	0.00																																											
	Besides, BBO 1972, Bank Company Act 1991 empowers the Bangladesh Bank to regulate and supervise the banking sector of the country. The Financial Institutions Act 1993 also empowers the central bank to regulate and supervise Non Bank Financial Institutions (NBFIs)-the investment, leasing and finance companies. [BBAA, 2003, Section 7A (e)] (Bangladesh Bank 2003)																																														
2.	Political																																														
a.	Turnover of Governor / CEO																																														
	<table border="1"> <thead> <tr> <th>Governor</th> <th>Term as Governor</th> <th>Prime Minister</th> <th>Term</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Dr. Salehuddin Ahmed</td> <td>May 02, 2005- Present</td> <td>Dr. Fakhruddin Ahmed</td> <td>11/01/06 to 5/01/09</td> <td>1991</td> <td>1.00</td> </tr> <tr> <td>Dr. Fakhruddin Ahmed</td> <td>Nov 29, 2001 - April 30, 2005</td> <td>Begum Khaleda Zia</td> <td>10/10/01 to 29/10/06</td> <td>1996</td> <td>0.00</td> </tr> <tr> <td>Dr. Mohammed Farashuddin</td> <td>Nov 24, 1998 - Nov 22, 2001</td> <td>Latifur Rahman</td> <td>15/7/01 to 10/10/01</td> <td>1997</td> <td>1.00</td> </tr> <tr> <td>Mr. Lutfar Rahman Sarkar</td> <td>Nov 21, 1996 - Nov 21, 1998</td> <td>Sheikh Hasina Wazed</td> <td>23/6/96 to 15/7/01</td> <td>2001</td> <td>0.00</td> </tr> <tr> <td>Mr. Khorshed Alam</td> <td>Dec 20, 1992 - Nov 21, 1996</td> <td>Habibur Rahman</td> <td>30/3/96 to 23/6/96</td> <td>2002</td> <td>1.00</td> </tr> <tr> <td>Mr. Shegufta Bakht Chaudhuri</td> <td>April 12, 1987 - Dec 19, 1992</td> <td>Begum Khaleda Zia</td> <td>20/3/91 to 30/3/96</td> <td>2005</td> <td>1.00</td> </tr> </tbody> </table>	Governor	Term as Governor	Prime Minister	Term			Dr. Salehuddin Ahmed	May 02, 2005- Present	Dr. Fakhruddin Ahmed	11/01/06 to 5/01/09	1991	1.00	Dr. Fakhruddin Ahmed	Nov 29, 2001 - April 30, 2005	Begum Khaleda Zia	10/10/01 to 29/10/06	1996	0.00	Dr. Mohammed Farashuddin	Nov 24, 1998 - Nov 22, 2001	Latifur Rahman	15/7/01 to 10/10/01	1997	1.00	Mr. Lutfar Rahman Sarkar	Nov 21, 1996 - Nov 21, 1998	Sheikh Hasina Wazed	23/6/96 to 15/7/01	2001	0.00	Mr. Khorshed Alam	Dec 20, 1992 - Nov 21, 1996	Habibur Rahman	30/3/96 to 23/6/96	2002	1.00	Mr. Shegufta Bakht Chaudhuri	April 12, 1987 - Dec 19, 1992	Begum Khaleda Zia	20/3/91 to 30/3/96	2005	1.00				
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b.	Members of the Management board of the Bank		1991	0.67																																											
	Not mentioned in the law up to 2002		2003	1.00																																											
	Non government official since 2003		2008	1.00																																											
	(3) The Board shall consist of— (a) the Governor; (b) a Deputy Governor to be nominated by the Government;																																														
	(c) [four Directors who will not be Government officials] ⁵ to be nominated by the Government, from amongst persons who, in the opinion of the Government, have had experience and shown capacity in the field of banking, trade, commerce, industry, or agriculture; (d) three Government officials to be nominated by the Government.																																														
	In BBO, 1972, it was not mentioned in 3 (c) above that whether four directors should be non government or not. In BBAA, 2003 it was included that [four Directors who will not be Government officials]																																														
c.	CEO/Governor hold other office in the government?		1991	1.00																																											
	No, it does not. [BBO, 1972 Section 13 (1)]		2008	1.00																																											
3.	Price stability objective																																														
a.	Bank Objective(s)		1991	0.33																																											
	No objectives stated in the bank charter prior to 2003		2003	0.67																																											
	Price stability is one objective with other compatible objectives, since 2003.		2008	0.67																																											
	The broad objectives of the Bank are: a) To regulate the issue of the currency and the keeping of reserves; b) To manage the monetary and credit system of Bangladesh with a view to stabilizing domestic monetary value; c) To preserve the par value of the Bangladesh Taka; d) To promote and maintain a high level of production, employment and real income in Bangladesh; and to foster growth and development of the country's productive resources for the national interest; [BBAA, 2003].																																														
b.	Inflation targeting		1991	0.00																																											
	Jointly CB & Government (as there were coordination council between government and CB)		1994	0.50																																											
	Inflation targeting since 1994 (Sterne 2002)		2008	0.50																																											
c.	Interest rate setting		1991	0.50																																											
	Jointly CB & Government (as there were coordination council between government and CB)		2008	0.50																																											
	The Financial system explanation of Bangladesh Bank explains that the new interest rate policy became effective in January 1990, and made all deposit rates decontrolled. Lending rates are all freely determined by the market, except for exports. [http://www.Bangladesh-bank.org/fnansvs/fnansvs.html] (Bangladesh Bank 1972b)																																														
4.	Exchange Rate Policy																																														
a.	Intervention of foreign exchange market done by whom?		1991	0.00																																											
	Central Bank since 2003		2003	1.00																																											

	Taka (Bangladesh currency) was floated against all major currencies in June 2003. Bangladesh Bank managed the transition successfully. Move to floating exchange rate regime done without volatility in exchange rate. [(Ahmed 2005) and BBAA, 2003, Section 7 A (b)]	2008	1.00
b.	Foreign exchange market regulations done by whom?	1991	0.00
	Government	2008	0.00
	Section 11 to section 18 of the regulation act explains the government's power to control and regulate. [Foreign exchange regulation Act, 1947 (modified up to 1996) Section 11 to section 18](Government of Bangladesh 1996)		
c.	Who decides borrowings in foreign exchange?	1991	0.00
	Government	2008	0.00
	There is no evidence of central bank having any power to borrow foreign currency, so it is assumed about government.		
5. Monetary policy and deficit financing			
a.	Who is responsible for monetary policy formulation?	1991	0.00
	Bank participates, but has little influence	2003	0.67
	The main functions of the bank shall be: (a) to formulate and implement monetary policy; was added to the Bangladesh Bank Act by BBAA, 2003, Section 7 A (a) in 2003. Prior to that bank did not have any say in formulation of monetary policy of Bangladesh. But section 9 A of BBAA, 2003 adds role of a co-ordination council which curtails the power of the central bank in formulating the monetary policy as it says in Section 9 A (3) The Bangladesh Bank shall ensure that the macroeconomic framework as coordinated by coordination council is reflected in the policies of the Bangladesh Bank. Which means that the Bank participates, but has little influence.	2008	0.67
b.	Who has the final word in resolution of conflict?	1991	0.00
	Government, prior to 2003	2003	0.50
	A council of the central bank, executive branch, and legislative branch since 2003	2008	0.50
	Government had the power to give any direction it considers necessary after consulting with the governor. BBO, 1972 (Up dated till 1995), Section 9 (1). It gave the power to the government to do anything, even at the time of resolution of conflict. The participation of central bank in resolution of conflict has been improved by including a council for the co-ordination of fiscal, monetary and exchange rate policies, BBAA, 2003, Section 9 A.		
c.	Lending to the government		
I.	Provision of Lending	1991	0.00
	Yes permitted and there is no legal limit mentioned.	2008	0.00
	BBO, 1972, Section 16 (9) and (18) (e) mentions about the loan and public debt management but does not mention any limit. Also in 2003 amendments it is mentioned that The Co-ordination council shall—meet for the purpose of clauses (a) and (b) before the finalization of the budget to determine the extent of public sector borrowing taking into account.....BBAA, 2003, Section 9 (2) (c)		
II.	Terms of lending	1991	0.00
	The coordination council shall--.....consider limits of the government borrowing as revised from time to time in the meetings to be held before and after passage of the annual budget. BBAA, 2003, Section 9 A (2) (e). But, in section 20 (2) (c) and (3) it refers that in case of public debt management the decision of the government shall be final	2008	0.00
III.	Maturity of loans	1991	1.00
	Within six months	2008	1.00
	the making to the Government of advances repayable in each case not later than three months from the date of the making of the advance; [BBO, 1972, Section 16 (9)]		
IV.	Interest rates on loan	1991	0.33
	Interest rate on loan is not mentioned. This situation is considered better than no interest on loan.	2008	0.33
6. Transparency and Accountability			
a.	Objectives of the bank has the following features		
	i. Written objective	1991	0.00
	Since 2003, the bank has written objectives.	2003	1.00
	The broad objectives of the Bank are: a) To regulate the issue of the currency and the keeping of reserves; b) To manage the monetary and credit system of Bangladesh with a view to stabilizing domestic monetary value; c) To preserve the par value of the Bangladesh Taka; d) To promote and maintain a high level of production, employment and real income in Bangladesh; and to foster growth and development of the country's productive resources for the national interest; [BBAA, 2003].	2008	1.00
	ii. Clear priority in the objectives	1991	0.00
	There was no priority among the objectives of BB, however since 2006 it has slowly focused on price stability as the most important objective.	2006	1.00
		2008	1.00
b.	Communication strategy		
	i. Policy Explanation	1991	0.00
	Providing policy explanation in public is not a regular event for BB, however, since the end of 2006 the governor has regularly briefed media on different issues. One important information should be taken into consideration here is that the two years (2006-2008) the governor spoke to the media; there was a non-political (caretaker) government in power.	2006	1.00
		2008	1.00
	ii. Publication of minutes	1991	0.00

	The minutes of any meeting of BB has never been published and there is no legal requirements as such. [www.Bangladesh-bank.org]	2008	0.00
c.	Accountability of the Governor/ CEO	1991	0.00
	Government prior to 2003	2003	0.33
	Government and Parliament since 2003	2008	0.33
	Being a member of the Co-ordination council, the governor is accountable to the government. Though its accountability status has been improved slightly as...The Governor shall at least once a year or at any other instance, if so summoned appear before the Parliamentary Committee on Finance to report on the monetary policy and of other activities of the Bank and to answer questions BBAA, 2003, Section 38 A.		
d.	Is the central bank activities are audited?	1991	1.0
	Yes, External auditor	2008	1.0
	Not less than two Auditors shall be appointed and their remuneration fixed by the government. Should hold office not exceeding one year and eligible for reappointment. BBO, 1972, Section 65 (1) and (2). Government may at any time appoint the Comptroller and Audit General or such Auditors as it deems fit to examine and report upon the accounts of the Bank. BBO, 1972, Section 66		

Source: Authors' calculation

Appendix: 2 CBIG Index Construction of Reserve Bank of Australia (1991-2008)

		Year	Code																																				
1.	Legal																																						
a.	Term of office of governor/CEO	1991	1.00																																				
	7 years and eligible for reappointment (Reserve Bank of Australia 1959e) [RBA Act 1959, Section 24 (1) (b)]	2008	1.00																																				
b.	Legal power to appoint Governor/ CEO	1991	0.00																																				
	Appointed by Treasurer [RBA Act 1959, Section 24 (1) (a)]	2008	0.00																																				
	The Governor and Deputy Governor their appointments will be made by the Governor-General in Council, and could be terminated only with the approval of each House of the Parliament in the same session of Parliament (Reserve Bank of Australia 2007).																																						
c.	Dismissal of Governor/ CEO	1991	0.00																																				
	Dismissed by Treasurer up to 6 December 2007	2007	0.00																																				
	[RBA Act 1959, Section 25]	2008	0.33																																				
	The position of the Governor and Deputy Governor will have their level of statutory independence raised to be equal to that of the Commissioner of Taxation and the Australian Statistician. As such, their appointments will be made by the Governor-General in Council, and could be terminated only with the approval of each House of the Parliament in the same session of Parliament (Reserve Bank of Australia 2007).																																						
d.	Reappointment of Governor	1991	1.00																																				
	Yes, there is provision of reappointment of Governor	2008	1.00																																				
e.	Regulatory body has been separated from central bank	1991	0.00																																				
	Yes, but prior to 1998 RBA was responsible for supervising the activities of all deposit taking institutions. In July 1998, the responsibility was transferred to Australian Prudential Regulatory Authority (APRA). [http://www.rba.gov.au/AboutTheRBA/History](Reserve Bank of Australia 1959d)	1998	1.00																																				
		2008	1.00																																				
2.	Political																																						
a.	Turnover of Governor / CEO	1991	1.00																																				
	Not political, since 1960 all governors completed their 7 years term of office. The turnover of the Governor is not related to the turnover of the government. See table below.	2008	1.00																																				
	<table border="1"> <thead> <tr> <th>Governor</th> <th>Term as Governor</th> <th>Election</th> <th>Government in Power</th> </tr> </thead> <tbody> <tr> <td>GR Stevens</td> <td>Sept 2006- Present</td> <td></td> <td></td> </tr> <tr> <td>IJ Macfarlane</td> <td>Sept 2003- Sept 2006</td> <td>42nd</td> <td>24-11-07</td> </tr> <tr> <td>IJ Macfarlane</td> <td>Sept 1996 – Sept 2003</td> <td>41st</td> <td>09-Oct-04</td> </tr> <tr> <td>BW Fraser</td> <td>Sept 1989 – Sept 1996</td> <td>40th</td> <td>10-Nov-01</td> </tr> <tr> <td>RA Johnston</td> <td>Aug 1982 – July 1989</td> <td>39th</td> <td>03-Oct-98</td> </tr> <tr> <td>HM Knight</td> <td>July 1975 – Aug 1982</td> <td>38th</td> <td>02-Mar-96</td> </tr> <tr> <td>JG Phillips</td> <td>July 1968 – July 1975</td> <td>37th</td> <td>13-Mar-93</td> </tr> <tr> <td>HC Coombs</td> <td>Jan 1960 – July 1968</td> <td>36th</td> <td>24-Mar-90</td> </tr> </tbody> </table>	Governor	Term as Governor	Election	Government in Power	GR Stevens	Sept 2006- Present			IJ Macfarlane	Sept 2003- Sept 2006	42nd	24-11-07	IJ Macfarlane	Sept 1996 – Sept 2003	41st	09-Oct-04	BW Fraser	Sept 1989 – Sept 1996	40th	10-Nov-01	RA Johnston	Aug 1982 – July 1989	39th	03-Oct-98	HM Knight	July 1975 – Aug 1982	38th	02-Mar-96	JG Phillips	July 1968 – July 1975	37th	13-Mar-93	HC Coombs	Jan 1960 – July 1968	36th	24-Mar-90		
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b.	Members of the Management board of the Bank	1991	1.00																																				
	Out of the total 9 members, 2 are government officials [RBA Act 1959, Section 14 (1)]	2008	1.00																																				
c.	Does CEO/Governor hold other office in the government?	1991	1.00																																				
	No, he/she does not [RBA Act 1959, Section 25]	2008	1.00																																				
3.	Price stability objective																																						
a.	Bank Objective(s)	1991	0.67																																				
	It is the major or only objective of the bank since 1993	1993	1.00																																				
	Price stability was one objective with other compatible objectives prior to 1993. In 1993, the objective of price stability was outlined publicly by the then Governor, Mr Bernie Fraser, as a rate of inflation, which was held to an average of 2-3 per cent over a period of years (Stevens 1999) and [RBA Act 1959, Section 10(2)]	2008	1.00																																				

and “Price stability is a crucial precondition for sustained growth in economic activity and employment”
[Statement on the conduct of monetary policy, 1996]

b.	Inflation targeting	1991	0.00
	Yes, Independently by CB since 1993	1993	1.00
	Hence I remain happy to claim that inflation targeting in Australia began about ten years ago in the first half of 1993. (Stevens 2003). The central bank then got more aggressive in 1988-89 and raised rates (interest) to 18% to fight an economic boom and asset price inflation in the property sector which landed the economy in a deep recession, the reserve bank made a critical decision to keep rates higher for longer and to keep the economy running “at a subdued pace”, as the then governor, Bernie Fraser, put it, in order to “grind inflation out of the system” (Paul Keating’s description) (Bell 2004).	2008	1.00
c.	Interest rate setting	1991	1.00
	Yes, targeting done (Bell 2004). Decision of the Bank Board to change interest rates are communicated publicly, usually on the day following the meeting. [http://www.rba.gov.au/MonetaryPolicy/about_monetary_policy.html] (Reserve Bank of Australia 1959a)	2008	1.00
4.	Exchange Rate Policy		
a.	Intervention of foreign exchange market done by whom?	1991	1.00
	Central bank [http://www.rba.gov.au/Education/exchange_rate.html] (Reserve Bank of Australia 1959b)	2008	1.00
b.	Foreign exchange market regulation done by whom?	1991	0.00
	Government [http://www.rba.gov.au/Education/exchange_rate.html] (Reserve Bank of Australia 1959b)	2008	0.00
c.	Who decides borrowings in foreign exchange?	1991	1.00
	Central bank [http://www.rba.gov.au/Education/exchange_rate.html] (Reserve Bank of Australia 1959b)	2008	1.00
5.	Monetary policy and deficit financing		
a.	Who is responsible for monetary policy formulation?	1991	1.0
	The formulation of monetary policy is the primary responsibility of the Reserve Bank Board. [http://www.rba.gov.au/MonetaryPolicy/about_monetary_policy.html]	2008	1.0
b.	Who has the final word in resolution of conflict?	1991	0.0
	Government (Governor –General) has the final word. Difference of opinion with Government on questions of Policy (1) The Government is to be informed of the Bank’s policy as follows: (a) the Reserve Bank Board is to inform the Government, from time to time, of the Bank’s monetary and banking policy; (b) the Payments System Board is to inform the Government, from time to time, of the Bank’s payments system policy. (2) In the event of a difference of opinion between the Government and one of the Boards (the relevant Board) about whether a policy determined by the relevant Board is directed to the greatest advantage of the people of Australia, the Treasurer and the relevant Board shall endeavour to reach agreement.(3) If the Treasurer and the relevant Board are unable to reach agreement, the relevant Board shall forthwith furnish to the Treasurer a statement in relation to the matter in respect of which the difference of opinion has arisen. (4) The Treasurer may then submit a recommendation to the Governor-General, and the Governor-General, acting with the advice of the Federal Executive Council, may, by order, determine the policy to be adopted by the bank. [RBA Act 1959, Section 11].	2008	0.0
c.	Lending to the government	1991	4.0
I.	Provision of Lending	2008	4.0
II.	Terms of lending		
III.	Maturity of loans		
IV.	Interest rates on loan		
	There is an agreement in 1986 between the Treasury and Reserve Bank about not to borrow from central bank. This agreement means that there is a separation between monetary policy and the Government’s debt management.....It is not possible to ensure that the Australian government’s need for funds are exactly matched day-by-day by issue of securities to the market. For one thing, issues generally occur only weekly. To overcome this mismatch between daily spending and financing, the Treasury keeps cash balances with the Reserve Bank that act as a buffer. The Reserve bank also provides an overdraft facility for the Government that is used to cover periods when an unexpectedly large mismatch exhausts cash as well as imposing a market related interest rate on the facility. The overdraft is used infrequently, generally to cover unforeseen shortfalls in cash balances, and is extinguished at the next Treasury note.		
	[1. http://www.rba.gov.au/MonetaryPolicy/about_monetary_policy.html (Reserve Bank of Australia 1959a), 2. The Separation of Debt Management and Monetary Policy, (Reserve Bank of Australia 1993)] This short term day to day credit overdraft facility is extinguished within a week is not considered as credit to the government.		

6. Transparency and Accountability		
a.	Objectives of the bank has the following features	
	i. Written Missions/Goals/Functions/Objectives	1991 1.00
	Yes	2008 1.00
	ii. Clear priority in the objectives	1991 1.00
	Yes	2008 1.00
	Reserve Bank Board's obligations with respect to monetary policy are laid out in Sections 10(2) and 11(1) of the Act. Section 10(2) of the Act, which is often referred to as the Bank's 'charter', says: 'It is the duty of the Reserve Bank Board, within the limits of its powers, to ensure that the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia and that the powers of the Bank ... are exercised in such a manner as, in the opinion of the Reserve Bank Board, will best contribute to: (a) the stability of the currency of Australia;(b) the maintenance of full employment in Australia; and (c) the economic prosperity and welfare of the people of Australia.' (Overview of Functions and Operations, RBA)	
	In 1993, the objective of price stability was outlined publicly by the then Governor, Mr. Bernie Fraser, as a rate of inflation, which was held to an average of 2-3 per cent over a period of years (Stevens 1999).	
b.	Communication strategy	
	i. Policy Explanation	1991 1.00
	Yes	2008 1.00
	ii. Publication of minutes	1991 0.50
	Minutes are kept but not published	2006 0.50
	The minutes of RBA board meeting held on 2 October 2007 were first published in 6 November, 2007 (Rserve Bank of Australia 2007)	2008 1.00
	Since, January 1990, each policy has been announced by a media release which set out the change on the cash rate target and the http://www.rba.gov.au/AboutTheRBA/governance and accountability of the rba.html] (Reserve Bank of Australia 1959c)	
c.	Accountability of the Governor/ CEO	1991 0.00
	The Reserve Bank of Australia is accountable to the Parliament. Since 1996, the Governor and senior officers have appeared twice yearly before the House of Representative. [http://www.rba.gov.au/AboutTheRBA/governance and accountability of the rba.html]	1996 0.67
	The bank's (RBA's) governor began appearing before a parliamentary committee annually in 1991, and bi-annually from 1996, as part of the process of greater openness and disclosure) (Beeson and Bell 2004)	2008 0.67
d.	Is the central bank activities are audited?	1991 1.00
	External auditor audits the activities of RBA	2008 1.00
	Source: Authors' calculation	