



Private Shareholding and Public Interest: An Analysis of an Eclectic Group of Central Banks

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Private shareholding and public interest: An analysis of an eclectic group of central banks*

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Abstract

Although the title seems to be a *contradictio in terminis*, this paper shows that there are a small eclectic number of central banks with private shareholders. This paper reviews this selected group of central banks on which surprisingly little has been published. The first challenge is to identify these central banks, as no “generally accepted” or standardised list of such central banks exists, and very little has been published that identifies or compares them.

JEL codes: E02; E40; E49; E50; E58

Key words: central banks, central bank shareholding, institutional structure of central banks, recapitalisation of the Bank of Italy, shareholders,

1 Introduction

The title of this paper seems to be somewhat of a *contradictio in terminis* as it gives rise to the question whether there are indeed central banks with private shareholders. This paper reviews this selected group of central banks on which surprisingly little has been published. The first challenge is to identify these central banks, as there is no “generally accepted” or standardised list of such central banks, and very little has been published that identifies or compares them.

As a review of these central banks shows considerable divergence between these institutions, central banks with shareholders identified from available literature were approached with the request to complete questionnaires on their structures. This paper reports the information obtained from these questionnaires.

The policy conduct of central banks, comparisons of such conduct and policy options of central banks receive considerable attention in the literature on central banking and monetary policy. In contrast, little has been published on the

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institutional structures of central banks. This paper contributes to a specific aspect of this under-researched area of central banking.

The rest of this paper is organised as follows: Section 2 reviews the literature on central banks with shareholding. Section 3 describes the salient features of a questionnaire on shareholding of central banks. Section 4 compares central banks with shareholding and reports the survey results received from the central banks. The conclusions follow in Section 5.

2 Literature review¹

The available literature shows the ownership structure of central banks to have been the subject of considerable change over time. Recent literature on this topic is limited to two papers by Rossouw and Breytenbach (Rossouw and Breytenbach 2011a; Rossouw and Breytenbach 2011b), while various editions of the book *Central Banking* by M H de Kock (see for instance De Kock, 1939; De Kock, 1956; or De Kock 1974) also cover these institutions. De Kock served as Deputy Governor (1932 to 1945) and as Governor (1945 to 1962) of the SA Reserve Bank. *Central Banking*, first published in 1939, was regarded as one of the first comprehensive text books on this topic and was translated into Spanish, Portuguese, Japanese, Hindi and Gujarati.

De Kock (1939:298) classified at the time the following seven different groups into which the ownership of the capital of central banks can be divided:

1. All shares held by the government
2. All shares held by private shareholders (juristic persons and the general public)
3. All shares held by banks
4. Shares held by the government and private shareholders
5. Shares held by the government and banks
6. Shares held by the government, banks and private shareholders
7. All shares held by banks and private shareholders

This paper focuses on central banks with shareholding in any combinations of ii to vii above. In the case where banks are not specifically identified in ii to vii above (i.e. ii and iv), this does not imply a prohibition on such shareholding, but merely indicates that banks are not under any obligation to hold shares in the central bank. De Kock (1939:299) states in respect of ii and iv above that “... banks may be found amongst the shareholders of some of these central banks, but not because they were originally required to subscribe to the capital

¹This section draws on Rossouw and Breytenbach, 2011a.

of the central bank . . .”. In the case of iii, v, vi and vii, banks have an obligation to hold shares in the central bank as a prerequisite of their licensing conditions.

De Kock (1939:298) identified the central banks in Australia, Bulgaria, China, Costa Rica, Finland, Latvia, Russia, Sweden and Uruguay as institutions where all shares were held by the government by 1935 (i.e. in group i above). Sole ownership by the government was therefore the exception at the time, rather than the rule as is currently the case, as central banks² were to be found in 40 countries by 1935.

Central banks other than those identified in the preceding paragraph had any combinations of shareholder structures described by ii to vii above (see Rossouw and Breytenbach, 2011a:S125 for details of these institutions). This group of central banks includes the 12 Federal Reserve Banks in the United States of America as one institution. Some of the central banks in this group ceased to exist or were replaced by other institutions, e.g. the Reichsbank of Germany was replaced by the Bundesbank, while the central banking functions of the Commonwealth Bank of Australia were taken over by the Reserve Bank of Australia in 1950.

The ownership structures of central banks started changing from 1935. Exactly when a central bank was first nationalised is debatable. Rossouw and Breytenbach (2011a:S125 and 2011b:85) state that the Reserve Bank of New Zealand was nationalised in 1935. This nationalisation is confirmed by Reserve Bank of New Zealand (2009). Nationalisation was part of an approach of “big government” in the aftermath of the Great Depression in New Zealand, when the state accepted responsibility for a wide range of functions in the economy (Reserve Bank of New Zealand, 2009).

In contrast, De Kock (1956) identifies Denmark as the first country where a central bank was nationalised, stating that this happened in 1936. The objective of nationalising the central bank was to give the Danish parliament and government greater insight into its policies and activities. It is therefore debatable when the first nationalisation of a central bank took place.

Naturally nationalisation is not a precondition for greater insight; this objective can be achieved in a number of different ways. Examples of ways in which this objective can be achieved irrespective of the ownership structure of the central bank include a requirement that the Governor of a central bank appears periodically before a standing or select committee of parliament and/or a requirement that the annual report of the central bank is tabled in parliament for debate.

As shown below, De Kock was somewhat of a visionary in 1939 in stating that “ . . . a definite trend in the direction of greater state intervention in the ownership and administration of central banks is to be observed in recent changes in central bank statutes . . .” (De Kock, 1939:324). De Kock (1939:324) adds that the League of Nations stated on page 81 of its *Monetary Review* of 1937-38 that “(i)n the statutes as drawn up or amended in recent years, the State

²Some of these institutions were initially known as banks of issue, i.e. institutions entrusted by the government with the monopoly power to issue banknotes.

has generally assumed a more important role both in respect of the ownership and management of central banks”.

In De Kock’s assessment, “(t)his trend towards increased State intervention ... commenced in 1930 under the stress of the world-wide depression ... and was accentuated by the suspension of the gold standard ... ” (De Kock, 1939:325). De Kock adds that “(i)n many cases central banks were virtually obliged to provide the financial facilities demanded by the State” (1939:325).

After the Second World War, nationalisation of central banks gained momentum (De Kock, 1956:319), and with the exception of the Central Bank of Pakistan³, no central banks established after the War had any shareholders since their inception (De Kock, 1956:319). By 1974, 25 central banks had some form of private shareholding (De Kock, 1974:305) in terms of the definitions in ii to vii above. At that time, the central banks of Greece, Italy, South Africa, Switzerland and the 12 Federal Reserve Banks in the United States had no shareholding by their respective governments. In Chile, Colombia, Ecuador and Portugal, the respective governments held a minority shareholding (De Kock, 1974:305). In Belgium, Japan, Mexico, Pakistan, Turkey and Venezuela, the respective governments held at least 50 per cent of the share capital (De Kock, 1974:305).

De Kock (1974:306 and 306) draws attention to the imminent nationalisation of the central bank of Colombia, but the central banks of Chile, Ecuador, Portugal, Mexico, Pakistan and Venezuela were also nationalised in 1974 and 1975. No information in English could be obtained elucidating nationalisation during that period, but the nationalisation of the central bank of Portugal might be linked to a change in government in that country that resulted, *inter alia*, in the independence of its provinces abroad (Angola and Mozambique). Reasons for this “wave” of central bank nationalisation, particularly in South America, could be an area of further research into this topic.

Rossouw (2004) stated incorrectly that “the Reserve Bank ... (in South Africa) ... the Belgium National Bank and the Swiss National Bank are the only central banks left with the public as shareholders” by 2004. Lybek and Morris (2004:7) mistakenly identified the central banks of Austria, Belgium, Greece, Italy, Japan, Pakistan, South Africa, Switzerland and the Federal Reserve Banks in United States as the complete list of institutions with shareholders. The Turkish central bank also has shareholders and should be added to their list, while the central bank of Pakistan was nationalised in 1975 and should be deleted from their list.

By 2004, therefore, central banks with shareholders were to be found in Austria, Belgium, Greece, Italy, Japan, South Africa, Switzerland and Turkey, while the 12 Federal Reserve Banks in United States also had shareholders at that time.

This changed in 2010, when the central bank of Austria was nationalised. This nationalisation received very little attention at the time, perhaps because no shares were held by the general public. Only the Austrian Government (with 70,27 per cent of the share capital) and Austrian banks held shares in

³As is shown below, the Central Bank of Pakistan was subsequently nationalised.

the Austrian National Bank before its nationalisation. The objectives of the nationalisation were to (i) improve government supervision over the central bank and (ii) avoid possible conflict of interests, as banks supervised by the Austrian National Bank were also its shareholders and appointed its governing board (EN Publishing [S.a.]).

Remaining central banks with shareholders are therefore those in Belgium, Greece, Italy, Japan, South Africa, Switzerland and Turkey, and the 12 Federal Reserve Banks in the United States.

The wisdom of retaining a system of private shareholders for this selected group of central banks is questioned from time to time. Such questioning is indeed justified, given the recent nationalisation of the Austrian central bank. Central banks in private ownership are to a certain extent a relic of the past, given that this system of ownership was not adopted (with the exception of Pakistan) for central banks established after the Second World War. Despite views that it might be a superfluous relic, a private ownership structure adds to the transparency and accountability of central banks. As an example, the Bank of Italy states that shareholders enhance governance, but they “... have limited voting rights ... they cannot influence ... banking supervision ... (or) ... monetary policy implementation” (Banco D’Italia, 2014:3). Although the system of private shareholders does not impact directly on monetary policy decision-making processes at these institutions, these central banks report on these decisions to their shareholders (see, for instance, SA Reserve Bank, 2014: 12; 22 to 27). Nothing is therefore lost by retaining this extra layer of control, thus enhancing governance, accountability and transparency. In this regard, the Bank of Italy states that “(t)his privately-owned, shareholder-based governance model should be preserved. Foremost is the fact that the current ownership and governance structure has guaranteed for decades the full independence of the Bank, shielding it from political influence” (Banca D’Italia, 2014:1).

3 Questionnaire on shareholding of central banks

The literature reports little on the organisational and institutional structures of central banks and even less on central banks with shareholders. By means of summary, the research shows considerable differences in shareholding between this eclectic group of central banks, ranging from:

- government shareholding combined with institutional shareholding;
- only commercial banks as shareholders, with these institutions obliged to hold such shares;
- commercial banks with an obligation to hold central bank shares, combined with shareholding by private individuals, and
- private shareholding only (which can include institutions such as commercial banks), but with no party obliged to hold such shares.

Likewise, the research shows that the rights of the shareholders in these institutions can differ considerably, while their dividend policies and practices also show considerable differences. Particular challenges in this regard are:

- conditions of private shareholding differ, e.g., any number of possible combinations of government and/or private shareholding, where the latter may be limited to commercial banks (with or without a legal obligation to hold such shares), or may include any business enterprise any private individuals;
- eligibility for shareholding differs, e.g., only institutions domiciled in and/or citizens of the country where the central bank is located are eligible for shareholding; and
- powers of shareholders differ, e.g., the voting (if applicable) attached to shares and/or preconditions for exercising voting rights.

In an effort to overcome these difficulties and to foster a common understanding of private shareholding in central banks, a questionnaire was compiled and distributed to the company secretaries of the central banks of Belgium, Greece, Italy, Japan, Switzerland and Turkey. In the case of the United States copies of the questionnaire were distributed to the Secretary of the Board of Governors of the Federal Reserve System in Washington (the Fed) and to the Federal Reserve Bank of Atlanta.

The questionnaire distributed to central banks with shareholders comprised the following questions:

1. Registered name of institution:.....
2. Establishment date (first business day):.....
3. Number of authorised shares:.....
4. Number of shares issued:.....
5. Arrangements for issuing of additional shares (if applicable):.....
6. Percentage of shares held by:
 - 6.1 Government:.....
 - 6.2 Individuals:.....
 - 6.3 Institutions (natural persons):.....
 - 6.4 Please describe any legal obligations (if applicable) on institutions (e.g. commercial banks) to hold central bank shares:.....
7. Limitations on shareholding by:
 - 7.1 Government:.....

- 7.2 Individuals:.....
- 7.3 Institutions:.....
- 7.4 Non-residents:.....
- 7.5 Please describe any other limitations on shareholders (if applicable):.....
- 8 Transfer of shares:
 - 8.1 Can shares be transferred freely between existing and new shareholders:.....
 - 8.2 If the answer to 8.1 is yes, please describe the mechanism used for such transfer, and the determination of prices in the event of such transfers:.....
 - 8.3 Latest share price in local currency and in US dollar (if applicable):.....
- 9 Distribution of profits:
 - 9.1 Is company tax payable:
 - 9.2 If yes, at which rate:
 - 9.3 Are dividends paid to shareholders:.....
 - 9.4 If yes, at which rate or formula:.....
 - 9.5 How is the formula in 9.4 determined:.....
 - 9.6 Please provide the dividend yield calculated as a percentage of the most recent price of the shares:.....
 - 9.7 Are dividends taxable (if applicable):.....
 - 9.8 Please describe the distribution of any additional/remaining profit(s):...
- 10 Rights and obligations of shareholders:
 - 10.1 Is an annual meeting of shareholders standard practice:.....
 - 10.2 If yes, are all shareholders invited to the annual meeting:.....
 - 10.3 If the answer to 10.2 above is no, who are excluded:.....
 - 10.4 Can shareholders elect any board members:.....
 - 10.5 If yes, how many and which percentage of the Board:.....
 - 10.6 If yes, please state service period of shareholder-elected board members:...
 - 10.7 Number of terms a shareholder-elected Board member may serve:.....
 - 10.8 Are external auditors appointed by shareholders:.....

- 10.9 Is the *Annual Report* (financial statements) approved by shareholders:.....
- 10.10 Any other powers/duties of shareholders:.....
- 10.11 Please provide a list of documentation distributed to shareholders:.....
 - 11 Formal meetings/contact with shareholders other than at annual meetings:.....
 - 12 Any provisions in legislation to nationalise the central bank:.....
 - 13 If yes, please describe:.....
 - 14 Please describe monetary policy in terms of:
 - 14.1 Monetary policy framework:.....
 - 14.2 Framework specification:.....
 - 14.3 Responsibility for setting the framework:.....
 - 14.4 Is monetary policy influenced by the shareholding structure:.....
 - 15 Please describe the reporting structure of the central bank:.....
 - 16 Please describe the control mechanisms of the government over the central bank, if any:.....
 - 17 Please comment on the benefits, if any, of retaining central bank shareholders:
 - 18 Please comment on the reasons why shareholders keep their shares:.....
 - 19 Other comment or remarks:.....
 - 20 Contact details for further enquiries:.....
 - 21 Please indicate whether a copy of the summarised research should be distributed to your institution:.....

Responses were received from the central banks in Italy, Switzerland and Turkey. In the case of the South African Reserve Bank, the questionnaire was completed by Rossouw, one of the authors of Rossouw and Breytenbach (2011a; 2011b), who served as Secretary of the Bank on two occasions (1994 to 2000 and 2010 to 2011). The responses are analysed in the next section, while salient features of central banks in other countries are compared with the information obtained from the questionnaires.

4 Comparison of central banks with private shareholders

This section analyses salient features of the central banks identified above. However, the 12 Federal Reserve Banks in the United States deserve special mention, as is explained below. The central banks with shareholders can be classified as follows, in terms of the classification by De Kock (1939:298) highlighted above:

- All shares held by private shareholders (juristic persons and the general public, which can include banks, but with no obligation on banks to hold such shares): Greece and South Africa
- All shares held by banks: Italy and the 12 Federal Reserve Banks
- Shares held by the government and private shareholders (which can include banks, but with no obligation on banks to hold such shares): Belgium and Japan
- Shares held by the government and banks: no examples
- Shares held by the government, banks and private shareholders: Turkey and Switzerland
- All shares held by banks and private shareholders: no examples.

4.1 Federal Reserve Bank in the United States

The 12 Federal Reserve Banks in the United States form part of the Federal Reserve System. The 12 Federal Reserve Banks have commercial banks in their Federal Reserve districts as shareholders. No questionnaires were received from the Fed or from the Federal Reserve Bank. The analysis in this section is therefore based on available literature.

The establishment of the Federal Reserve System (the Fed) in 1913 followed the failure of two earlier central banks in the United States. The First Bank of the United States was chartered by the US Congress on 25 February 1791. The charter was valid for 20 years and was not renewed by Congress when it expired in 1811. In 1816 the Second Bank of the United States was chartered by Congress, also for a period of 20 years until 1836. When a bill was introduced in 1832 to renew the bank's charter, it was not passed by Congress, resulting in the bank's ultimate demise.

Consequently, in the establishment of the Fed, particular care was taken to avoid certain perceived shortcomings that had contributed to opposition to the renewal of the charters of the two earlier banks. Critics of the initiative to establish a central bank were, *inter alia*, opposed to entrusting too much centralised power to a single institution. The name *reserve system*, rather than *central bank*, was therefore used, and a decentralised structure with federal reserve banks was adopted. *Reserve bank*, rather than the more conventional *central*

bank, was subsequently also used in the names of the central banks of South Africa (1921), Peru (in Spanish, *Reserva*), established in 1922; New Zealand, established in 1933; El Salvador (in Spanish, *Reserva*), established in 1934; India (1935); Australia (1950); Malawi (1964); Zimbabwe (originally the central bank of Rhodesia) (1964); Fiji (1973); Vanuatu (1980); and Tonga (1989) (Rossouw, 2010:2 and 3).

The Federal Reserve Act provides for a Board of Governors to act as a federal government agency which has, *inter alia*, broad oversight responsibility for the operations and activities of the 12 Federal Reserve Banks. The 12 Federal Reserve Banks are in control of Federal Reserve districts, spread in a seemingly random fashion throughout the United States. However, the choice of the location of Federal Reserve Banks was deliberate, rather than random. At the time of the establishment of the 12 Federal Reserve Banks, one of the stated objectives of these banks was to prevent failures of commercial banks. Consequently, the location of Federal Reserve Banks was decided on the basis that no member bank should be further than “... one night’s train ride ...” (Rauchway, 2006:30) away from a Federal Reserve Bank. This was a precautionary measure. It implied that any member bank could lodge securities with a Federal Reserve Bank on an overnight basis, while any member bank could also be supplied with banknotes by a Federal Reserve Bank on an overnight basis.

Section 5.1 of the Federal Reserve Act stipulates that “(t)he capital stock of each Federal Reserve Bank shall be divided into shares of \$100 each. The outstanding capital stock shall be increased from time to time as member banks increase their capital stock and surplus or as additional banks become members, and may be decreased as member banks reduce their capital stock or surplus or cease to be members. Shares of the capital stock of Federal Reserve Banks owned by member banks shall not be transferred or hypothecated” (Federal Reserve Act; see also Board of Governors, 1974).

The Federal Reserve Act stipulates in section 5.1 that “(w)hen a member bank increases its capital stock or surplus, it shall thereupon subscribe for an additional amount of capital stock of the Federal Reserve Bank of its district equal to 6 per centum of the said increase ... (and) ... (w)hen a member bank reduces its capital stock or surplus it shall surrender a proportionate amount of its holdings in the capital stock ...” (see also Board of Governors, 2005).

However, Section 2.8 of the Federal Reserve Act authorises any federal reserve bank to offer stock to the public should stock subscription by member banks be insufficient to provide the required amount of capital. Although this provision has been in the Act since its inception, it has fallen in disuse. Attempts to ascertain whether it was ever used were unsuccessful.

Section 7.1(A) of the Federal Reserve Act stipulates that *stockholders* (own emphasis) of the federal reserve banks are entitled to an annual dividend of 6 percent on the paid-in capital *stock* (own emphasis) that they hold in federal reserve banks (see also Board of Governors, 1974; Board of Governors, 2005).

This assessment leaves the impression that the interests of member banks in the federal reserve banks show many elements of bondholding, rather than shareholding, although the Federal Reserve Act makes explicit provision in sec-

tion 7.1(A) for the payment of a dividend, rather than any interest, on this holding (see also Board of Governors, 2005). A case can therefore be made that the shareholding in the Federal Reserve Banks differs considerably from the shareholding of other central banks identified above. The 12 Federal Reserve Banks are therefore not included in the further analysis in this paper.

4.2 Salient features of other central banks

The remaining central banks with shareholders identified above have shareholders in the conventional sense of the word, but the research shows that the rights of the shareholders in these institutions can differ considerably, while their dividend policies and practices also show considerable differences.

4.2.1 Belgium

The Belgian central bank (official English name is the National Bank of Belgium) has an issued share capital amounting to €10 million, represented by 400 000 shares (each with a nominal value of €25). The Belgian state holds 50 per cent of these shares, while the remaining shares are listed on NYSE Euronext and is held by companies and private individuals. The price was €3 175,00 per share at the beginning of 2014.

Each share confers the right to one vote at the general meeting of shareholders, and the Statute of the bank does not limit shareholding or voting in any way, despite a provision in section 63 that “... shareholders who are registered have the right to vote”. This provision deals with the holders of bearer shares, who have to prove that they can vote such shares as the beneficial owners.

The bank pays shareholders a first dividend of 6 per cent of the share capital (amounting to €1,5 per share on the nominal value of €25 per share) and a second dividend calculated as 50 per cent of the net proceeds from the portfolio of assets which the bank holds as counterpart to its total reserves, after deduction of corporate tax. In 2013 total dividends amounted to €115,53 per share after withholding tax. This is an increase of 8,7 per cent over the dividend per share paid in 2012. The annual rate of growth in dividends was 7,96 per cent since 2001, when the dividend after withholding tax amounted to €46,10. The current dividend yield is 3,6 per cent.

4.2.2 Greece

The Greek central bank (official English name is the Bank of Greece) has an issued share capital amounting to €111 243 362,00, represented by 19 864 886 shares. The nominal value of each share is €5,60. By law, the Greek government and public enterprises may not hold more than 35 per cent of the nominal issued share capital of the bank. Shares are held by companies and private individuals.

Every shareholder who owns at least 75 shares and has been registered as a shareholder for not less than three months prior to the general meeting of

shareholders can vote at the meeting, on condition that the shareholder has Greek citizenship or is a company registered in Greece.

The bank pays an annual first dividend equal to 12 per cent of the nominal value of the shares, amounting to €0,67 per share per annum, profits permitting. A supplementary second dividend is determined annually by the General Council (Board) of the bank, also dependent on the profitability of the bank. Total dividend per share amounted to only €0,5376 per share before withholding tax of 25 per cent in 2012. This implies that the bank could not even afford to pay the first dividend of €0,67 that year. Dividend information for 2013 has not yet been published. The dividend payment in 2012 is considerably lower than the payment in 2007, amounting to €3,20. Although no specific reason for this decline is provided, the profitability of the central bank has declined since the financial crisis of 2008.

The shares trade on the Athens Exchange and the share price was €15,57 at the beginning of 2014. This is a substantial decline from its level of €30,67 at the beginning of 2011. The current dividend yield is 2,6 per cent.

4.2.3 Italy

The Italian central bank (official English name is the Bank of Italy) previously had an issued share capital amounting to €156 000, represented by 300 000 shares. The nominal value of each share was €0,52. This changed in 2014, when the capital of the bank was revalued to €7,5 billion, which is a more accurate reflection of the underlying value of the capital and reserves of the bank (Central Banking, 2014; Investor Active, 2014). This revaluation resulted in an improvement of the capital position of Italian banks holding shares in the central bank.

The Bank of Italy provides a number of reasons for the revaluation of its capital (Banca D'Italia, 2014:2 and 3). First, this buttresses the central bank against possible adverse consequences of legislation promulgated by the Italian Parliament in 2005 (albeit never implemented) that envisages the possible transfer of the ownership of the capital of the Bank of Italy to the State, thereby ensuring the Bank's independence and maintaining its ability to withstand political pressures. Secondly, it confirms that shareholders have no claim on the part of the Bank's reserves stemming from seigniorage.⁴ Thirdly, it aligns the rules governing the distribution of profits to those of other central banks with shareholders (Banco D'Italia, 2014:1 and 2).

At the time of the revaluation of its share capital, the Bank of Italy had reserves amounting to €23 billion, but the full amount could not be used to increase the share capital (Banco D'Italia, 2014:3). Some of these reserves accrued from seigniorage and were therefore not available for redistribution. As seigniorage is derived from a public function, namely the monopoly right of a central bank to issue banknotes assigned by legislation to the central bank,

⁴Seigniorage is the difference between interest earned by central banks on securities acquired in exchange for bank notes and the costs of producing and distributing those notes (Bank of Canada, 2013).

the assessment of the Bank of Italy was that shareholders should not share in reserves emanating from this public-function right (Banco D'Italia, 2014:3).

Accordingly, the Bank of Italy had to derive a valuation formula to assess which portion of the revaluation of its share capital should accrue to shareholders. The Bank of Italy used a “dividend discount model” (DDM) to calculate the value of the increase in the share capital. In the DDM the risk-free rate was set equal to the average of the 10-year rate on the German Bund⁵ in the last three months, the liquidity discount was set as 20 per cent, the growth rate of dividends was set at 5 per cent in an initial period and 3 per cent afterwards⁶, the equity risk premium was set at 7 per cent and the beta coefficient was set at 0,4 (Banco D'Italia, 2014:4). Based on this model, the increase in share capital was estimated at between €5 billion and €7,5 billion, as “the specification of the DDM entails some elements of judgement and is surrounded by significant uncertainty” (Banco D'Italia, 2014:3), thus resulting in a range, rather than a specific value.

Following the decision of the Bank of Italy to increase its share capital, the European Commission approved this revaluation of share capital, as it was not viewed as a form of state aid to Italian banks (Guarascio, 2014), although the revaluation has allowed some Italian banks to book significant capital gains. The European Commission acknowledged that “... the Bank of Italy is a central bank and has a very specific ownership structure” (Guarascio, 2014).

However, in Italy this revaluation of share capital met with some resistance. It was called a gift from the government to the banks by the 5-Star Movement, an opposition party (Guarascio, 2014).

The main financial beneficiaries of the revaluation were the two banks with the largest shareholding in the central bank, namely Intesa Sanpaolo and UniCredit CRD.MI (Investor Active, 2014). From an overall perspective, however, the main beneficiaries were Banca Monte dei Paschi Siena⁷ and Banca Carige, two banks with shareholding in the central bank, both of which are experiencing financial difficulties and can show an increase in their asset holdings owing to the revaluation⁸ (*Investor Active*, 2014).

Ownership of the shares is governed by law and the shares may be transferred only with the prior consent of the Board of Directors. All shares are held by Italian banks and similar financial institutions, and the bank has no other companies or private individuals as shareholders.

Shareholders who have held 100 or more shares for at least three months before a meeting of shareholders have the right to attend shareholders' meetings. Shareholders entitled to attend have one vote for every 100 shares held up to 500 shares and one vote for every 500 shares held over and above the first 500,

⁵It is interesting to note that the German Bund rate, rather than a rate derived from Italian bonds, was used. No explanation is provided for this approach.

⁶No distinction in time (months or years) between the initial and subsequent periods is provided.

⁷Banca Monte dei Paschi Siena was founded in 1472 and is the oldest bank in the world.

⁸This is an interesting way of providing emergency liquidity assistance (also known as lender-of-last-resort assistance) to troubled banks.

but voting per shareholder, irrespective of the number of shares held, is limited to a maximum of 50 votes.

The bank pays an annual first dividend equal to 6 per cent of the nominal value of the shares, which amounts to €9 360,00 per annum, a second dividend of 4 per cent per annum of the nominal value of the shares, amounting to €6 240,00 per annum and a third “supplementary” annual dividend not exceeding 4 per cent of the amount of the reserves. An additional amount of €70 026 000,00, equal to 0,50 per cent of the total reserves at 31 December 2012, was paid as third dividend after the end of that year. The total dividend was therefore €700 4178,00 amounting to €233,47 per share, for 2012.

The shares do not trade freely. No current or latest price or dividend yield can therefore be determined.

4.2.4 Japan

The Japanese central bank (official English name is the Bank of Japan) has an issued share capital amounting to ¥100 million, represented by 1 million shares. The nominal value of each share is ¥100. The Government owns 55 per cent of the shares. The shares trade on the JASDAQ Securities Exchange and the price was ¥51 900,00 per share at the beginning of 2014. Companies and private individuals may hold shares in the bank. The bank does not hold an annual general meeting of shareholders.

The bank pays an annual dividend not exceeding 5 per cent of the nominal issue value of the shares, amounting to ¥5 per share per annum. This dividend is prescribed by legislation. At a price of ¥51 900,00 per share, the effective yield is 0,00963 per cent per annum. This yield should be viewed against very low yields on fixed-interest financial instruments currently prevailing in Japan, as well as periods of deflation in that country.

4.2.5 South Africa

The South African central bank (official English name is the South African Reserve Bank) has an issued share capital amounting to R2 million, represented by 2 million shares. The nominal value of each share is R1,00. The South African Government holds no shares in the bank, but can buy shares within the legal prescriptions (e.g. to a maximum of 10 000 shares per shareholder), should it wish to do so. The shares trade on an over-the-counter market and the price was R10,50 per share at the beginning of 2014. Companies and private individuals may hold shares in the bank.

Every shareholder who owns at least 200 shares and has been registered as a shareholder for not less than six months prior to the ordinary general meeting of shareholders can vote at the meeting, on condition that the shareholder is ordinarily resident in South Africa. No shareholder may hold more than 10 000 shares in the bank and shares are held by institutions and individuals. Shareholders have one vote for every 50 shares, with a maximum of 200 votes. The voting rights of company groups with board or ownership control and of

family groups are limited to 200 votes, irrespective of the number of shares they hold over 10 000.

The bank pays an annual dividend equal to 10 per cent of the nominal value of the shares, amounting to R0,10 per share per annum. This dividend is prescribed by legislation and is subject to dividend withholding tax of 15 per cent (hence a net dividend of 8,5 cents per annum). At the prevailing share price, the dividend amounted to a return of 0,81 per cent per annum. This low yield is a function of the level of the share price, which increased considerably during a period in which the central bank experienced difficulties with its shareholders (see, for instance, the minutes of the ordinary general meetings of 2008 and 2009).

The current Governor, who assumed this duty on 9 November 2009, has improved relationships with shareholders considerably (see minutes of the ordinary general meeting of 2010). It is therefore not clear whether the price of shares will remain at this level, or whether it will decline to a level where the dividend yield will become commensurate to yields on other fixed-interest financial instruments in South Africa.

It is interesting to note that the bank initially also had a system of a first and second dividend, as is the case at the central banks of Belgium, Greece, Italy and Turkey. Section 11(1) of the Currency and Banking Act of 1920⁹ stated that “... after payment ... of a cumulative dividend at the rate of six per cent. (*sic*) per annum on the paid-up capital the surplus shall be allocated to reserve fund until such reserve fund is equal to twenty-five per cent. (*sic*) of the paid-up capital of the Bank. Thereafter until the reserve fund is equal to the paid-up capital of the Bank one half of the surplus shall be allocated to the reserve fund, one quarter to the Government and the remaining quarter, not exceeding four per cent. (*sic*) of the paid-up capital, to stockholders ...”. This statement also draws attention to the fact that the Bank’s shareholders were called “stockholders” until 1989. This was changed as the word “stockholder” fell into disuse in South Africa.

4.2.6 Switzerland

The Swiss central bank (official English name is the Swiss National Bank) has an issued share capital amounting to CHF25 million, represented by 100 000 shares with a nominal value of CHF250 each. About 55 per cent of the shares are owned by public institutions like cantons and cantonal banks. The remaining shares are mostly owned by other companies and private individuals. The confederate government does not hold any shares in the bank. Shareholding is limited to a maximum of 100 shares per shareholder, but this provision does not apply to Swiss public-law corporations and to cantonal banks.

The annual dividend may not exceed 6 per cent of the nominal value of the share capital. The shares trade on the Swiss stock exchange and the price was CHF1060,00 per share at the beginning of 2014. The effective yield was

⁹The legislation in terms of which the Bank was originally established.

therefore 1,42 per cent per annum, which should be viewed against the backdrop of prevailing low yields on fixed-interest instruments in Switzerland.

The bank has an annual general meeting of shareholders and any shareholder listed in the share register is eligible to attend the meeting.

4.2.7 Turkey¹⁰

The Turkish central bank (official English name is the Central Bank of the Republic of Turkey) has an issued share capital amounting to TL25 000, represented by 250 000 shares. The shares have a nominal value of TL0,10 each. The bank has four classes of shares. Class A shares are held exclusively by the Turkish Treasury and represent a minimum of 51 per cent of the capital. Class B shares are held by national banks operating in Turkey. A maximum of 15 000 shares can be held as class C shares by banks other than national banks holding shares as Class B shareholders. Class D shares are held by Turkish commercial institutions and companies, and private individuals of Turkish nationality. Shareholding is therefore limited to Turkish citizens and entities. At the bank's annual general meeting of shareholders, shareholders have one vote for every 10 shares held.

The Bank pays an annual first dividend of 6 per cent of the nominal value of its share capital to shareholders, and a second dividend not exceeding 6 per cent per annum of the nominal value of the share capital can also be paid to shareholders, subject to annual approval by the General Assembly (general meeting of shareholders) of the central bank. As a result, maximum annual profit distribution to shareholders is limited to 12 per cent of the nominal value of share capital. This amounts to TL0,012 per share per annum. The shares in the Turkish central bank cannot be transferred freely between shareholders. Consequently, it is impossible to calculate a dividend yield for the share.

However, the central bank has to convert shares from one class to another when requested to do so by shareholders. No commission is charged for such conversion of shares from one class to another, subject to the proviso that the number of class C shares may in no event exceed 15 000 shares as prescribed by legislation. Any sale of any share is subject to the consent of the central bank upon a request to be made through a declaration of seller and purchaser.

Table 1 summarises salient features of the central banks discussed in this section, with the exception of the 12 Federal Reserve Banks, as the shareholding of commercial banks in those banks comprises a reserve holding, rather than shareholding in the true sense of the word as is the case with other central banks discussed in this section. Table 1 shows considerable differences in shareholding between this limited group of central banks. The analysis and the summary in the Table clearly show that shareholding in central banks has different meanings in different jurisdictions. In particular, there are considerable differences in the dividend policies of these central banks.

¹⁰Comments received from Emisyon Müd Ortak Kul of the Turkish National Bank that contributed to an improvement of this section are acknowledged.

5 Conclusions

This paper draws attention to an eclectic group of institutions on which very little has been published: Central banks with shareholders. A number of conclusions can be drawn from this paper.

The organisational and institutional structures of central banks receive very little attention in the literature on monetary policy and central banking. More attention should be focused on this area of research, as central banks can draw on one another's experiences in this regard.

Only a small number of central banks have shareholders and an even smaller number (Belgium, Greece, Japan, South Africa, Switzerland and Turkey) allows shareholding by the general public. While an even smaller group (Belgium, Japan, South Africa and Switzerland) allows for its shares to be held by foreigners, shareholder rights are often limited by conditions such as government shareholding, the number of shares an individual can hold, and/or limitations on voting rights.

The large differences in the approach of central banks with shareholders to the payment of dividends are noteworthy. Dividend policies range from a fixed dividend prescribed by law to a large degree of discretion in the payment of dividends. From an investment perspective, only the central banks of Belgium and Greece (albeit only for residents in the latter instance) can be considered. These are the only central banks where dividends are not capped or otherwise limited, but linked to the profitability and investment returns of the central bank.

The Austrian central bank is the most recent example of nationalisation of a central bank. This nationalisation, the first in some 35 years, received surprisingly little attention and is an area for further research. Likewise, the "wave" of central bank nationalisation in 1974 and 1975 is an area for further research.

Lastly, the question whether private shareholders in central banks still add value to the operations of such institutions should be addressed. This is also a topic for further research, as is the question why members of the public holds shares in central banks that do not pay a market-related dividend.

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	Belgium	Greece	Italy	Japan	South Africa	Switzerland	Turkey
Free trading in shares	Yes	Yes	No	Yes	Yes	Yes	No
Official government shareholding	Yes	No	No	Yes	No	Yes	Yes
Official shareholding by banks	No	No	Yes	No	No	Yes	Yes
General shareholding	Yes	Yes	No	Yes	Yes	Yes	Yes
General ownership limitations (e.g., citizens)*	No	Yes	Yes	No	No	No	Yes
Annual meeting of shareholders	Yes	Yes	Yes	No	Yes	Yes	Yes
Voting limitations	Yes	Yes	Yes	N/A	Yes	Yes	Yes
Dividend payment	6% of nominal value of shares as the first dividend A second dividend, calculated as 50% of the net proceeds after tax from the portfolio of assets which the bank holds as counterpart to its total reserves	12% of nominal value of shares as a first dividend A supplementary second dividend is annually determined by the General Council (Board) of the bank	6% of nominal value of shares as a first dividend 4% of nominal value of shares as a second dividend A third "supplementary" dividend not exceeding four per cent of the amount of the reserves	5% of paid-up capital	10% of issue value of shares	6% of the share capital	6% of nominal value of shares as the first dividend. A second dividend of a maximum of 6% of nominal value of shares approved annually by the General Assembly (general meeting) of the bank

* Some central banks (e.g., the SA Reserve Bank) limits the number of shares that shareholders may own

Sources: Rossouw and Breytenbach, 2011a and used in Rossouw and Breytenbach, 2011b; own research