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New focuses in central banking:

Increased independence, transparency and accountability

In recent years major changes have taken place in the operating structure of central banks in many parts of the world. Firstly, their independence in making decisions on monetary policy has been increased. Secondly, more emphasis has been put on increased transparency of monetary policy and central bank accountability. These reforms are an attempt to incorporate price stability into monetary policy as a formal principle, and to make it easier for the public and elected representatives to monitor their central bank. The following article discusses this global trend and the position of the Central Bank of Iceland within it. It discusses an international study covering the legislation of 94 central banks in many parts of the world, which reveals that Iceland has the least independent central bank among industrialised nations. Its independence is similar to that of the average developing country but is considerably less than that of the average transition economy in Eastern Europe. The Central Bank of Iceland clearly appears to have been left behind in this global development and a fundamental reform of its legislation is needed to bring its status in line with that of most neighbouring countries. Only by such reforms can the structure of the domestic financial system be genuinely regarded as fully comparable with those in the countries with which Iceland traditionally compares itself.

1. Introduction

In recent years there has been a growing understanding of the important role of institutional structure and regulatory framework for the success of economic development (see, e.g., Person and Tabellini, 1994). The fundamental economic principle underlying this trend is increased awareness of the need to provide appropriate incentives for individual, corporate and public sector decision-making, thus promoting the greatest degree of economic efficiency.

The discussion of monetary policy institutional structures is a part of this development. Fighting inflation is generally associated with real costs in the short run, while the benefits of price stability will only emerge over time.[2] Thus, it is necessary to build a long-term view into monetary policy decision-making. Only in such a case can it be ensured that short-term viewpoints which entail long-term cost will not predominate in the monetary policy decision process.

Governments in a growing number of countries have come to the conclusion that the best way to incorporate such incentives into monetary policy decisions is to grant the central bank independence in its application of monetary policy. Theoretical arguments and widespread international experience sug-

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2. In accordance with international convention, price stability refers to a low and stable rate of inflation, around 1-2%.

gest that countries with relatively independent central banks in this respect generally achieve better economic policy outcomes than those with relatively unindependent central banks: lower inflation is achieved without incurring the costs of lower growth or employment levels.

It is therefore no coincidence that many countries around the world have fundamentally reformed their central bank legislation over the past ten years with the aim of strengthening the position of their central banks within central government. Most governments among the industrialised countries, Eastern European transition economies, Latin American countries and many other developing countries, have revised the status of their central banks towards those banks experiencing the highest levels of independence.

This article discusses the arguments for greater central bank independence, the experience of various countries and the global trend in this direction. It addresses where the Central Bank of Iceland stands within this development and what is needed to bring it into line with the norm of most neighbouring countries. Furthermore, it examines the reforms required in order to ensure transparent monetary policy and central bank accountability.

The debate on central bank independence is a relatively recent issue in Iceland and is nowhere near as advanced as in other countries. The author hopes that the following article will contribute to constructive discussion on this important issue.

2. Central bank independence

2.1. The costs of inflation

General consensus appears to prevail among the general public, politicians, central bankers and academics about the harmful effects of inflation. Research shows that higher economic growth cannot be achieved through higher inflation in the long run, although lax monetary policy can boost short-term growth. If anything, studies show that high and variable rates of inflation can be harmful to long-term economic growth. For example, it can make it more difficult for the public to distinguish between general and relative price rises and therefore reduces the information content of the price mechanism. Thus, the private and public sectors will have more trouble in making sensible long-term plans. This serves to curb the efficiency of the market economy, hence damaging the growth potentials of the economy in the long term.

Stable prices are therefore a desirable economic goal in their own right. Most economists today agree that, in the long run, inflation is primarily a monetary phenomenon. Monetary policy therefore only has an impact on inflation in the long run, not on growth or employment. Since central banks have only one instrument and can therefore only achieve a single long-term macroeconomic goal, it is natural to set price stability as the ultimate goal of monetary policy. This is not to say that price stability is a socially more important goal than full employment, but simply that monetary policy instruments are inherently better suited to impacting prices. Through price stability, however, monetary policy can contribute to creating a stable economic environment on which the permanent long-term growth potentials of the economy are based.

2.2. Why an independent central bank?

Likewise, there has been growing understanding of the need to formalise price stability into the monetary policy decision process. The benefit of doing so is to make it much more difficult to deviate from a tight monetary stance in order to serve the short-term interests of a government in office. The approach which industrialised countries, and to a growing extent other countries, have considered most suited for achieving this goal is to grant their central banks formal and unrestricted authority to implement monetary policy aimed at price stability.[3] Thus, the central bank does not need (and in fact has no authorisation) to comply with instructions from the government or individual ministers on monetary actions which run counter to this goal. Such freedom is then formally incorporated into Central Bank legislation and even into the constitution.

The benefit here is the formal and credible severance of all links between day-to-day monetary policy decisions and government, enhancing the credibility of price stability as the main goal of monetary policy.[4] In turn, this reduces the likelihood that the

3. Various theoretical studies demonstrate the benefits of delegating monetary policy to an independent central bank. See, e.g., Rogoff (1985), Persson and Tabellini (1993), Walsh (1995) and Svensson (1997).

government can use the central bank to achieve short-term political aims which in the long term can have damaging inflationary impact. Such short-term aims could include trying to increase economic growth with a lax monetary stance (which could be particularly tempting before general elections). In the long run, however, an independent central bank can secure price stability without needing to diminish the growth potential of the economy.

Another argument in favour of central bank independence is that monetary policy decisions inherently need to take the long-term view, since the lag between monetary policy actions and its effects on inflation are long and variable. This implies that decisions are frequently needed which are seen as having an impact later, although current conditions do not call for them. Given the nature of the political decision-making process, such decisions can prove difficult for politicians to make. It should also be borne in mind that monetary policy decisions differ in many ways from those entrusted to the government. They involve repeated decisions on applying interest rates (raising or lowering them, or leaving them unchanged) under conditions of uncertainty, which might better be left to experts (see, e.g., Gudmundsson, 1999).

It is important to emphasise that this does not necessarily imply that the central bank should decide what the ultimate goal of monetary policy should be. Arguably, such a decision belongs in the hands of the democratically elected representatives of the nation, provided that the central bank is capable of achieving the goal which the elected government sets for it (see, for example, Blinder, 1998). As argued above, this final goal should be price stability.

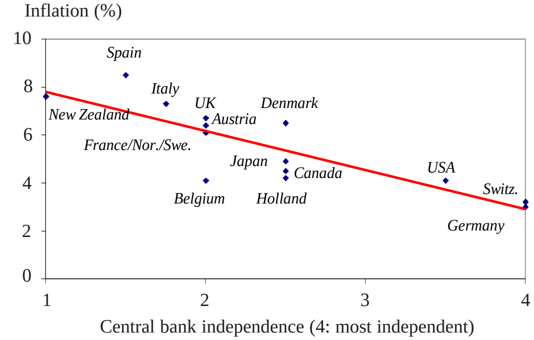
2.3. International experience

The main argument in favour of greater central bank independence, however, is that it works. A large number of international studies show a link between greater central bank independence and a lower rate of inflation, e.g. Grilli et al. (1991), Cukierman (1992) and Alesina and Summers (1993). A recent survey by Berger et al. (2000) of 31 such studies shows that in the overwhelming majority of cases there is a significant negative relation between inflation and central bank independence.

This relationship is shown in Chart 1. It maps average inflation in 16 industrialised countries over the period 1955-1988 against the degree of independence of their central banks, as defined in 1988 using Alesina and Summers' ranking (1993). It can be seen that the greater the central bank's independence, the lower the rate of inflation appears to be.

Chart 1

Central bank independence and inflation 1955-1988



Box 1 shows that this negative relation is statistically significant.[5] However, no statistically significant relation can be found between greater central bank independence and economic growth. This is consistent with theoretical studies which suggest that low inflation need not incur the cost of lower economic growth.

2.4. Widespread shift towards greater independence

As Chart 1 shows, countries with an independent central bank, such as Germany, the USA and Switzerland, achieved much better outcomes in combating inflation than those with relatively unindependent ones, like the Nordic countries, the UK and New

4. One way in which this greater credibility manifests itself is in lower inflation expectations. Spiegel (1998) concludes, for example, that inflation expectations (measured as the inflation premium on unindexed over indexed bonds) fell by an average of 0.6 percentage points for the bonds' duration after the increased independence of the Bank of England on May 6, 1997.

5. It is impossible to state unequivocally, on the basis of these data, in which direction the causation operates (see, e.g. Posen, 1993). Theoretical findings and those of Spiegel (1998), however, suggest that the causation runs from central bank independence to inflation.

Box 1 Inflation, economic growth and central bank independence

The relation between inflation and central bank independence can be assessed using regression analysis (using data from Alesina and Summers, 1993). Statistical analysis produces the following result (figures in parentheses are *t*-values)

$$\underset{}{Inflation} = \underset{(13.6)}{9.44} - \underset{(5.9)}{1.64} \times Independence \quad R^2 = 0.71$$

This shows a statistically significant relation between average inflation in the industrialised countries from 1955-1988 and the independence of their central banks, whereby different frameworks for central bank independence explain 70% of the average inflation rate over the period. The statistical relation suggests that countries with the least independent central banks over the period experienced an inflation rate of just under 8% on average, while those with the most independent central banks recorded average inflation of just under 3%.

However, no comparable relation is found between central bank independence and economic growth during the period

$$Growth = \underset{(5.1)}{3.98} - \underset{(0.5)}{0.15} \times Independence \quad R^2 = 0.02$$

Thus greater central bank independence, and thereby lower inflation, does not incur the cost of lower economic growth, which is consistent with theory.

Zealand. In recent years, however, a major shift towards greater central bank independence has been taking place around the world.

Industrial nations have brought their frameworks into line with those already in place in the countries which had the most independent central banks. These include the 11 member banks of the European Central Bank (ECB), which is based on the Bundesbank legislation, plus the central banks of Sweden, Denmark, Australia, New Zealand, the UK and Japan. To illustrate the rapid trend towards greater central bank independence among industrialised nations in recent years, the Swiss Central Bank, which some ten years ago was one of the most independent (see Chart 1), now ranks in the middle (see, e.g., Gehrig, 2000).

Sweeping reforms have also been made by other countries in very recent years. These include Argentina, Chile, Ecuador, Columbia, Peru, Venezuela and Mexico in Latin America, and Albania, Armenia, Bulgaria, Croatia, Latvia, the Czech Republic, Slovakia, Slovenia, Estonia, Hungary, Poland and Romania in Eastern Europe (see, e.g., Loungani and Sheets, 1995). Many of them have even directly adopted Germany's Bundesbank legislation as their own.[6]

The same trend has also been taking place among developing countries. For example, India, South Africa and Uganda have extended the independence of their central banks considerably in recent years. Today, developments have reached the point where the central banks of the Czech Republic and Latvia are today considered the most independent in the world, according to Bank of England assessment (CCBS, see Fry et al., 2000). The Riksbank of Sweden ranks third and the Central Bank of Ecuador fourth, followed by the central banks of Chile, Japan and the ECB member states.

2.5. Measures of central bank independence

This article draws upon the study made by Fry et al. (2000), which was based on earlier well-known studies by Grilli et al. (1991) and Cukierman (1992). The reason for this choice is that this is the most extensive study based on data from 1998, covering 94 countries around the world (including Iceland), which in most cases are the most recent available. However, figures for EMU members were updated in line with the ECB legislation which went into effect at the beginning of 1999.

The Fry et al. study is based on comparing a

6. However, it is questionable how descriptive the letter of the law actually is for the real operating environment of central banks in some of these countries, cf. the study by Cukierman (1992) on the relation between central bank independence and inflation in developing countries.

broad range of factors which are considered to play a key role in determining the independence of central banks and can be fairly reliably quantified. These are the following:

Emphasis on price stability
This criterion measures the emphasis on price stability among the formal goals of monetary policy, as stated in central bank legislation. A distinction is made between goals which are considered compatible with price stability, such as the stability of the financial system, and those which are considered incompatible with it, for example employment or economic growth, unless a qualification is made that they may only be attained if the price stability goal is not jeopardised.

Goal independence
A distinction is often made between various forms of central bank independence. Goal independence assesses the extent of the central bank's role in deciding what the ultimate goal of monetary policy should be. As discussed above, entrusting this decision to the central bank alone is not necessarily a good arrange-

Box 2 Criteria for central bank independence

Criterion (weight in total score)	*Scores*	
The extent to which statutory objectives provide the central bank with a clear focus on price stability (1)	10.0	Only goal is price stability
	7.5	Sole goal together with financial stability and non-conflicting monetary stability objectives
	5.0	Price stability and incompatible goals
	2.5	No formal goals
	0.0	Other goals than price stability
The extent to which the central bank determines the setting of policy targets (1)	10.0	Central bank decides alone or monetary policy has no explicit goals
	5.0	Joint decision of central bank and government
	0.0	Central bank has no role in decisions
The extent to which the central bank determines the adjustment of monetary policy instruments (2)	10.0	Central bank decides alone
	6.7	Central bank decides alone but a government representative attends decision meetings as an observer
	3.3	Central bank and government have a role in decisions
	0.0	Central bank role in decisions is limited
The extent to which treasury funding through the central bank is prohibited (2)	10.0	Prohibited, never used or negligible sums involved
	7.5	Narrow, well enforced limits exist
	5.0	Limits exist that are usually enforced
	2.5	Wide limits exist
	0.0	No limits or little enforcement
The length of the governor's term of office (0.5)	10.0	8 years or above
	8.6	7 years
	7.1	6 years
	5.7	5 years
	4.3	4 years
	2.9	3 years
	1.4	Term of office beyond 3 years not guaranteed

ment. There are many grounds for arguing that this decision should be in the hands of the government and the central bank, or the government alone.

Instrument independence

The extent to which the central bank can determine the adjustment of its monetary policy instruments, without the interference of the government, is seen as one of the most important forms of central bank independence (see, e.g., Berger et al., 2000). This criterion ranks the central banks with respect to the importance of their role in deciding the adjustment of monetary policy instruments.

Treasury access to central bank credit facilities

Unlimited treasury access to central bank credit facilities is generally regarded as an important explanation for high inflation in many parts of the world, particularly in the developing countries but also in the industrialised ones (for example hyperinflation in Central Europe during the 1920s, see Sargent, 1983). This criterion assesses how limited access the treasury has to direct funding from the central bank.

Term of appointment of the central bank governors

Finally, the study considers the term of appointment of central bank governors. The idea behind this criterion is that the longer the term of office, the more difficult it is for a government to appoint governors of whom it approves. All things being equal, the probability that governors will be manipulated by the government and ministers ought to diminish. According to Cukierman (1992) the governors' term of appointment is far more crucial in developing countries than industrialised ones. He identifies much closer links between term of appointment and inflation in developing countries than between the legal independence of the central bank and the rate of inflation. The opposite applies in the industrial countries. The reason appears to be less compliance with the letter of the law in developing countries than industrial ones.

Various approaches have been used in assigning relative weightings to these factors (and sometimes others) in order to produce a comprehensive assessment of central bank independence. Box 2 shows the structure of the study made by Fry et al. (2000), and the relative weight of each criterion based on its importance for central bank independence.

The difficulties in measuring the independence of central banks is well known in the literature. Not only is independence determined by the letter of the law, but also no less by the informal relations between the government and the central bank and other factors which are difficult to quantify (see, e.g., Cukierman, 1992, and Berger et al., 2000). Criteria for central bank independence will thus always be based to some extent on the judgement of researchers. The same applies to the study on which this article is based. While the exact scores attained may be debated, the overall picture produced should be fairly accurate

2.6. Measures of central bank independence today

Table 1 shows an overview of central bank independence in various countries in the latter part of 1998, according to the findings of Fry et al. (2000).

The table shows that the Central Bank of Iceland appears to have little independence compared to other central banks. The status of the Bank is similar to that of the Central Bank of Norway, but far behind the three other Nordic nations. In comparison with other industrialised countries, it can also be seen that the Central Bank of Iceland ranks well below the average, in 27th place of 28. Only the Norwegian Central Bank receives a lower total score. Compared with all 94 countries, the same pattern emerges: Iceland ranks 74th of the 94 countries sampled. The Central Bank of Iceland's total score is similar to the average score of developing countries, but much lower than the average score of transition economies.

Compared with the position at the end of the 1980s as shown in Chart 1, the Central Bank of Iceland has apparently been left behind in the trend which has taken place among other industrialised countries. If the Central Bank of Iceland had been included in the survey made by Alesina and Summers (1993) it would probably have been assessed as having a similar degree of independence to the central banks of the UK, Sweden and various other European countries. These countries, along with other industrialised countries and a fairly large number of transition economies and developing countries, have since reformed their central bank legislation towards independence, while no such changes have taken place in Iceland.

Table 1 Central bank independence in selected countries in 1998[1]

	Emphasis on price stability	*Goal independence*	*Instrument independence*	*Access to Treasury funding*	*Governor's term of office*	*Total independence*
USA	7.5	10.0	10.0	10.0	4.3	9.2
UK	7.5	0.0	10.0	10.0	5.7	7.7
ECB	7.5	10.0	10.0	10.0	5.7	9.3
Japan	7.5	10.0	10.0	10.0	5.7	9.3
Industrialised countries	7.3	7.1	9.5	9.6	5.7	8.6
Transition economies	8.5	5.9	9.1	7.8	7.0	8.0
Developing countries	7.1	5.8	7.1	6.1	5.1	6.5
Denmark	7.5	5.0	10.0	10.0	10.0	8.8
Finland	7.5	10.0	10.0	10.0	5.7	9.3
Norway	0.0	0.0	6.7	10.0	7.1	5.7
Sweden	10.0	10.0	10.0	10.0	5.7	9.7
Iceland	5.0	5.0	3.3	10.0	5.7	6.1
Iceland's rank among industrialised countries	25.-27.	16.-25.	28.	1.-26.	7.-23.	27.
Iceland's rank among all countries	79.-90.	36.-81.	79.-89.	1.-45.	30.-74.	74.

1. Assessment is based on the position in late 1998. However, EMU members have been updated from the scores given by Fry et al. (2000) to match the position of the ECB. No figures for Denmark were given by Fry et al. The maximum rating is 10. There are 27 industrialised countries in all and a total of 93 countries

Sources: Fry *et al*. (2000) and various central bank websites.

Emphasis on price stability

A look at the central banks' different emphases on price stability reveals that the overwhelming majority of countries have this as the sole goal of monetary policy or its main goal together with compatible ones, for example involving the stability of the financial system. Of the 94 countries surveyed, 78 are in this category. The Central Bank of Iceland is today in a group of 16 countries which have other, possibly conflicting mandatory goals. Thus Iceland ranks 25th-27th among industrialised countries and 79th-90th among the 94 countries covered by the survey.

On an international comparison Iceland's central bank legislation therefore does not seem to stipulate the main goal of monetary policy clearly enough, and since it provides for other and possibly incompatible goals, there appears to be a lack of prioritisation. By law, the role of the Central Bank of Iceland is to ensure price stability, full and efficient utilisation of the productive capacity of the economy, to preserve and strengthen foreign exchange reserves sufficient to ensure free trade with other countries, etc. Goals are therefore involved here which could be fundamentally contradictory and are even outside the Central Bank's sphere of influence.

If these provisions are to be brought into line with other industrialised countries' frameworks, two main approaches seem possible. Firstly, the approach taken in Sweden, Canada, New Zealand and some other countries, whereby price stability alone is stipulated as the goal of monetary policy. Another option would be the approach taken, for example, in the UK and ECB, whose legislation states that the main goal of monetary policy is price stability, but that the central bank should also promote general economic development, *if it does not regard this as jeopardising price stability.*

It should be underlined that in practice there is little difference between these two approaches. For example, the central banks in Sweden, Canada and New Zealand do not pay any less heed to real economic developments and financial system stability than other countries (see, for example, Pétursson, 2000).

Goal independence

Countries differ somewhat as to whether their central banks are involved in determining the ultimate goal of monetary policy. In the ECB, the USA and Japan, this decision rests with the central bank (although it is then incorporated into law passed by the legislature), while in the UK and Norway it is solely in the hands of the government. Many other countries like New Zealand, Austria and Canada fall in between.

In Iceland, the decision rests with the government but is made in consultation with the Central Bank. As mentioned earlier, there is a good case for not leaving this decision solely at the discretion of the central bank, on which grounds there does not seem to be any urgent need to change the present arrangement in Iceland.

Instrument independence

In terms of the central bank's ability to adjust its monetary policy instruments without the interference of the government, which is widely considered one of the most important forms of independence, Iceland compares badly with other countries. It ranks last among the 28 industrialised nations and 79th-89th of the 94 in the whole sample.

The Central Bank of Iceland's rating reflects the weakness of its legal position towards the elected government. By law, the Bank's main role is to contribute to the attainment of the government's economic policy aims, even if this policy conflicts with the Bank's own views or the price stability goal. This fundamentally weakens the independence of the Bank to adjust its monetary policy instruments. Even though the Central Bank of Iceland has considerable scope for applying its instruments today, its real independence in the event of a dispute with the government can be seriously questioned.

A closer look at the legislation of all 94 central banks reveals that Iceland and Norway are the only industrialised countries where such a provision is found (Fry et al., 2000).[7] Elsewhere, the central bank is generally formally and legally prohibited from seeking or accepting instructions from the government on monetary policy issues. At the same time, these countries' governments are legally prohibited from trying to influence central bank monetary policy decisions (e.g. legislation of the Bank of England, the Swedish Riksbank and ECB).

If it is decided to adapt the legal position of the Central Bank of Iceland to the norm in these countries, two main approaches seem feasible. The first would be the course taken in Sweden and the EMU countries, i.e. an absolute legal ban on government attempts to influence Central Bank monetary policy decisions, and on the Bank's accepting and seeking such instructions. The other approach is to incorporate an escape clause into the legislation whereby the government may intervene in the bank's decisions under exceptional circumstances which are classified as "extreme economic circumstances". There would need to be a clearly defined process for handling such decisions through official channels, which ought to prove politically difficult for a government in office if these are not obviously justifiable.

Treasury access to central bank credit facilities

Fry et al. (2000) consider treasury access to central bank funding sufficiently restricted in Iceland to award it full marks, one of 26 industrialised countries and 45 countries in all to achieve the highest rating on this point. Most countries explicitly prohibit such funding in their central bank legislation. Iceland, however, does not prohibit this by law, but an agreement is in effect between the Minister of Finance and the Central Bank from 1992, which has subsequently been renewed three times, that treasury funding will not take place directly through the Central Bank. This provision must be regarded as weaker than those in most other industrial countries. The problem is that the Minister of Finance may cancel this agreement, despite the fact that such a decision would probably entail considerable political cost. For this reason it may be argued that the score for Iceland is too high.

Term of appointment of the central bank governors

The term of office of the governors of the Central Bank of Iceland is five years, as in nine industrialised countries and 37 countries in all. This emerges as the most common term of appointment: shorter terms are very rare, there are several cases in which governors are appointed for 6 years, but rarely for longer than that.

7. According to this, Norway should be given the same rating as Iceland for independence of instruments in Table 1, ranking these two countries lowest among the industrialised nations.

3. Monetary policy transparency and central bank accountability

3.1. Is central bank independence undemocratic?

An important argument against central bank independence is that such delegation of monetary policy may be undemocratic. The monetary policy decision-making power, the argument goes, is thereby taken out of the hands of the democratically elected representatives of the nation, and assigned to technocrats who make monetary policy decisions regardless of the government's will. Monetary policy decisions are therefore no longer subject to adequate monitoring or necessary accountability towards the public and elected government.

Before continuing, it is necessary to reiterate that greater central bank independence does not necessarily imply the authority to determine the ultimate goal of monetary policy without government intervention. It may be argued that such a transfer of authority can be undesirable from democratic viewpoints, as discussed earlier. What central bank independence implies is that the bank is granted full and unrestricted authority to apply its instruments in the way that it considers most suitable to achieve the aims which the elected government has set it.

Nonetheless, this type of delegation of monetary policy decision-making power to a politically independent central bank unquestionably represents a transfer of authority from the elected government. Politicians are no longer able to influence day-to-day handling of monetary policy. They only choose the ultimate monetary goal. The way in which this ultimate goal is achieved is then assigned to a politically independent body, i.e. the central bank.

To claim that such a delegation of authority is undemocratic, however, appears to be an excessively narrow interpretation of the concept of democracy (see, e.g., Apel and Viotti, 1998). While the elected government should have the ultimate authority in political decisions, this is not to say that politicians should make all public sector decisions. An example of a similar delegation of authority to selected experts is the judicial system. It is obvious that in a democratic society, tasks should be divided whereby the elected government sets the regulatory framework for the judicial system by law, and by formulating the criteria for competence and impartiality of those who run the judicial system. Then it is up to the courts to interpret and comply with those laws, without the intervention of elected government. No one would consider it normal for politicians to intervene in the day-to-day decision-making of the judicial system.

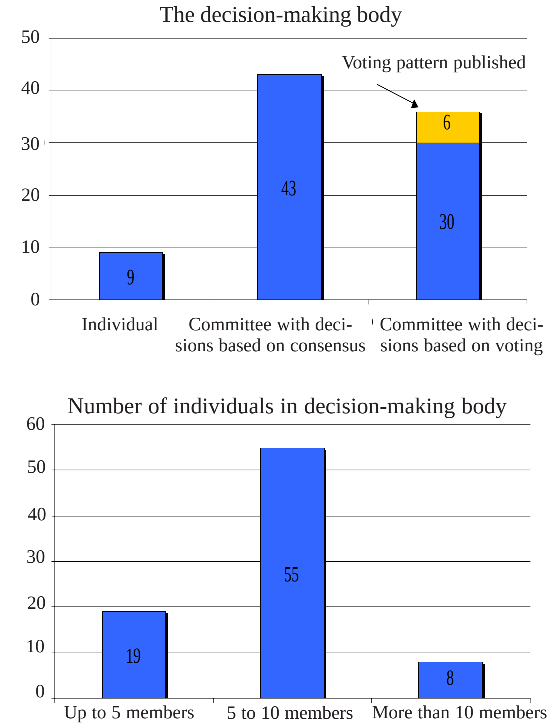
In effect the delegation of monetary policy to an independent central bank is similar. The government sets the monetary policy framework by determining the ultimate goal of monetary policy. It is then up to the central bank to achieve this goal without the intervention of the government. Such a division of tasks is more likely to secure successful implementation of economic policy, as discussed above, and thereby strengthen the democratic decision-making process rather than weaken it (Apel and Viotti, 1998).

3.2. The monetary policy decision-making body

If an independent central bank is to be granted unrestricted authority for making monetary policy deci-

Chart 2

The monetary policy decision-making body



sions, a decision-making body consisting of a number of people is usually preferred to a single individual (see, e.g., Berg and Lindberg, 2000). Although the overwhelming majority of central banks have only one governor, it is very rare for him to be the only person involved in the monetary policy decision process.

As Chart 2 shows, there are only nine examples of monetary policy decisions being made by one person (Fry et al., 2000). In most cases the decision is made by a composite board of governors (as in Iceland, Switzerland and Denmark) or by a collegial board that generally comprises a central bank governor (who also serves as its chairman), deputy governors and other high-ranking central bank officials such as the chief economist and the head of market operations. In several instances outside advice is also sought, e.g. from renowned professors of economics, for example in Australia and the UK (see Box 3).

The chart also shows that such a board is generally comprised of between five and ten members. In cases where these are fewer, the central bank generally has more than one governor and the board of governors alone makes monetary decisions (for

Box 3 Transparency and accountability of Bank of England

Inflation target

The Bank of England has an inflation target of 2½%, a target set by the government. The Bank is allowed a divergence of ±1%, among other things to reflect its incomplete control over inflation (for further discussion on inflation targets, see Pétursson, 2000).

Monetary Policy Committee

The government has appointed a nine-member Monetary Policy Committee (MPC) which makes decisions on monetary policy. The MPC comprises the Governor, two Deputy Governors, the Chief Economist and the Head of Market Operations, together with four members nominated by the government. These four are selected solely on the basis of academic qualifications in monetary economics and major central bank issues. In practice, most have been well-known professors at British universities. Each is appointed for a term of three years. A Treasury representative attends the MPC's meetings in a non-voting capacity.

Minutes of MPC meetings

The MPC meets monthly according to a pre-announced timetable. Decisions are based on a simple majority. Results of meetings are announced immediately afterwards and the minutes and results of voting are officially published two weeks after each meeting.

Inflation forecasts and accountability towards the public

All decisions by the MPC are based on the Bank's inflation forecast. This forecast, together with an assessment of the forecast uncertainty and forecasts for other key variables which are considered to have an impact on inflation are published in an in-depth quarterly Inflation Report. The aim of publishing the MPC's minutes and record of voting, alongside its regular publication of the Inflation Report, is to make the Bank's policy as transparent as possible and thereby fulfil its accountability towards the public.

Open letter to the government

Each time inflation exceeds the threshold ±1% value, the Bank of England is required to write an open letter to the Chancellor stating the reason for the deviation from target, what actions the Bank plans to take to get inflation back to target, how long it will take and how this is compatible with the Bank's remit. The Bank is required to write another letter three months later if it has still not succeeded in bringing inflation back to target.

The government's response to such a letter will depend on the economic situation at the time. It needs to take into account that a variety of reasons may underlie a failure to hit the inflation target at all times. In some cases, for example if the economy suffers serious supply shocks, hitting the target at all cost may even be undesirable.

Accountability towards parliament

Members of the MPC are required to meet the Treasury Select Committee quarterly, answering questions about the Bank's monetary policy and explaining its actions. Furthermore, the Bank's annual report is debated in parliament every year.

The bank is also made accountable towards the Court of the Bank which comprises the Governor and two Deputy Governors, plus 16 non-Executive Members, representing the views of British industry, commerce and finance.

example in Iceland, Switzerland and Denmark). There are also several instances of more than ten members, usually in large countries or unions (e.g. the USA and ECB).

3.3. Increased demand for transparency and accountability

Even though greater central bank independence is not undemocratic, it is necessary to ensure transparency of monetary policy to enable the general public and elected government to follow and assess the central bank's decision-making process easily, and to formalise legal and informal channels for making the bank accountable for its decisions. Such arrangements are likely to enhance the bank's monetary policy even further, with increased public support and understanding, as well as respecting the democratic principle on the relationship between authority and responsibility. This view is, for example, reflected in comprehensive rules on monetary policy transparency approved by the International Monetary Fund in the autumn of 1999 (see Fridriksson, 2000).

Increased demand for transparency and accountability require the central bank to explain its actions clearly and be ready to justify its decisions to the public and government. It is therefore no coincidence that the countries which have increased their central banks' independence in recent years have correspondingly increased transparency and accountability of the monetary policy decision-making process. Box 3 describes in more detail how the Bank of England's transparency and accountability have been secured with a widely applauded framework which is generally regarded as the most open and accountable monetary policy in the world.

3.4. Measures of monetary policy transparency

Fry et al. (2000) also attempt to measure the transparency of monetary policy in the 94 countries covered by their study with an attempt to assess the extent to which the central banks strive to explain their actions to the public.

The first score reflects how well and timely monetary policy decisions are explained. This takes into account whether policy decisions are announced the same day, whether decisions on an unchanged policy are reported, the frequency of published assessments of the monetary policy position, and whether the minutes of policy meetings and voting patterns are made public. Secondly, a score is given for the bank's emphasis on forward-looking analysis of economic developments and the clarity of its inflation forecasts. The score depends on whether such forecasts are published, whether they explain the risks to the forecast and whether past forecasting errors are discussed. Finally, a score is given for the frequency of published assessments of economic developments.

Table 2 gives an overview of the results. Scores for the 11 EMU members are updated to match the ECB structure. The Central Bank of Iceland obtains a score of 6.5 which is close to the average for industrialised countries. The banks with the most transparent monetary policy are the Bank of England, the

Table 2 Monetary policy transparency in selected countries[1]

Country	*Explanations of policy decisions*	*Published forward-looking analysis*	*Assessment and analysis*	*Total*
USA	9.4	9.1	10.0	9.5
UK	9.7	10.0	10.0	9.9
ECB	7.2	4.3	10.0	7.2
Japan	9.4	4.3	8.7	7.5
Industrialised countries	6.8	5.3	9.5	6.9
Transition economies	6.0	3.4	7.7	5.7
Developing countries	4.7	3.9	6.8	5.1
Denmark	...	...	...	...
Finland	7.2	4.3	10.0	7.2
Norway	6.6	10.0	10.0	8.9
Sweden	8.5	10.0	10.0	9.5
Iceland	4.7	8.2	6.7	6.5
Iceland's rank				
among industrialised countries	24	7	26	23
among all countries	61-65	8	58-64	40

1. Assessment is based on the position in late 1998. However, EMU members have been updated from the scores given by Fry et al. (2000) to match the position of the ECB. No figures for Denmark were given by Fry et al. The maximum rating is 10. There are 27 industrialised countries in all and a total of 93 countries.

Sources: Fry *et al*. (2000) and various central bank websites.

Riksbank in Sweden, the Federal Reserve System in the USA and the Reserve Bank of New Zealand. The ECB gets a lower score and has been criticised for its lack of transparency.

The Central Bank of Iceland is considered to perform fairly well in presentation of its inflation forecast, but less so by the other two criteria. The explanation for the relatively low rating for explanation of policy decisions is that the minutes of monetary policy meetings are not recorded in the first place and therefore cannot be made public, and that decisions on unchanged policy are not reported separately, since there is no fixed timetable for discussing possible actions. The main factor bringing down the score for frequency of economic assessment and analysis, according to the study, is the relatively small number of published speeches on economic issues by the Bank's senior staff. However, the Bank receives a good score for its frequency of published research.

Thus the Central Bank of Iceland's policy appears to be relatively transparent in comparison with other countries, although there is doubtless scope for improvement. One way to increase the accountability of the Bank is to establish a formal process that would be triggered if the Central Bank fails to achieve its set goal. This could involve a similar process as in Sweden and the UK, and would serve to make monetary policy even more transparent and ensure its accountability.

4. Conclusion

Over the past decade, the Icelandic government has engineered major reforms in domestic financial markets, largely bringing its operating environment in line with that of most neighbouring countries and the European Economic Area. Restrictions on capital movements to and from Iceland have been abolished, regulations of domestic financial companies have been brought into line with international standards, domestic financial companies under state ownership have been partly sold in the open market and will probably be entirely privatised within a very few years, and regulations for the Icelandic Stock Exchange and securities trading have been harmonised with international norms. All these moves have represented major advances which will deliver an even better-functioning economy in the future. One area, however, has been neglected. Legislation on the Central Bank, the key institution within the financial system, has remained virtually unchanged since the 1980s when the structure of the domestic financial system was fundamentally different from today.

This article discusses various arguments for granting central banks greater autonomy in monetary policy decisions. It presents international experience which suggests that countries with relatively independent central banks generally have greater economic success than countries with relatively unindependent central banks: they achieve a lower average rate of inflation without incurring the cost of lower economic growth or employment.

It is therefore no coincidence that many countries around the world have fundamentally reformed their central bank legislation over the past ten years, with the aim of strengthening the position of the central bank relative to the government. Most industrialised countries, the Eastern European transition economies, Latin American countries and many other developing countries have increased the independence of their central banks.

Legislation on the Central Bank of Iceland has not followed this international trend and the point has now been reached where in terms of legal independence it ranks with the average developing country and lags considerably behind the average transition economy. Iceland is the only industrialised country apart from Norway where central bank independence has not been formally incorporated into law. It seems therefore that a fundamental revision of the Central Bank Act is needed, in order to complete the task of bringing the structure of the domestic financial system fully in line with most other countries.

The main reforms which need to be made are, firstly, to change the goals set for the Bank and give greater priority to price stability. Goals which are potentially inconsistent with the goal of price stability, and even lie outside the Central Bank's sphere of influence, must be removed. Price stability needs to be made the main goal of monetary policy. Other goals which do not conflict with price stability, such as the stability of the financial system, could also be included. Likewise, real economy goals can be referred to, provided that it is stated that the Central

Bank can only work towards them if it does not see them as contradicting its main goal of price stability.

Secondly, a legal amendment is needed removing the Bank's requirement to comply with government instructions on monetary policy in cases where it considers them contrary to the goal of price stability. Legislation would need to stipulate that elected government authorities may not instruct the Bank on monetary policy and that the Bank may not seek such instructions. It would be possible to follow the course taken by some other countries and authorise the government to intervene in monetary decisions in the case of "extreme economic circumstances". There would need to be a clearly defined process for handling such decisions through official channels, which ought to prove difficult for a government in office to pursue unless the justification for intervention is obvious.

Thirdly, an amendment is needed formally prohibiting treasury funding through the Central Bank. Today, an agreement is in effect between the Minister of Finance and the Central Bank not to channel treasury funding through the Bank. Completely prohibiting such funding in the Central Bank Act would dispel all doubt that political pressure to cancel this agreement could develop in the future.

Finally, increased independence and a clearer focus on long-term views in monetary policy may call for changes in the Bank's monetary decision-making process and senior management structure. The benefits of establishing a collegial board chaired by a single governor, to decide the Bank's monetary policy, would need to be examined.

Such reforms would formally establish price stability as the main goal of monetary policy in Iceland. At the same time, however, it would be necessary to ensure the transparency of monetary policy and the Bank's accountability towards government and the general public. This would safeguard that the transfer of authority from elected representatives to expert staff at the Bank would not be viewed as undemocratic.

Only after these reforms have been made to the legislation of the Central Bank of Iceland will the structure of the domestic financial system be fully in line with those in neighbouring countries.

Bibliography

Alesina, A. and L. Summers (1993), "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence", *Journal of Money, Credit, and Banking*, 25, 153-162.

Apel, M. and S. Viotti (1998), "Why is an Independent Central Bank a Good Idea?", *Quarterly Review*, Sveriges Riksbank, 1998/2.

Berg, C. and H. Lindberg (2000), "Conducting Monetary Policy with a Collegial Board: The New Swedish Legislation One Year On", Central Bank Independence: The Economic Foundations, the Constitutional Implications and Democratic Accountability, conference paper, March 2000.

Berger, H., J. de Haan and S. Eijffinger (2000), "Central Bank Independence: An Update of Theory and Evidence", *CEPR Discussion Papers*, no. 2353.

Blinder, A. (1998), *Central Banking in Theory and Practice*, Cambridge: MIT Press.

Cuikerman, A. (1992), *Central Bank Strategy, Credibility and Independence*, Cambridge: MIT Press.

Fridriksson, Ingimundur (2000), "Code of Good Practices on Transparency in Monetary and Financial Policies", *Monetary Bulletin*, Central Bank of Iceland, 2000/3, 31-36.

Fry, M., D. Julius, L. Mahadeva, S. Roger and G. Sterne (2000), "Key Issues in the Choice of Monetary Policy Framework", in *Monetary Policy Frameworks in a Global Context*, eds. L. Mahadeva and G. Sterne. Routledge, Centre for Central Banking Studies, Bank of England.

Gehrig, B. (2000), "Monetary Policy in a Changing World", Swiss Society for Financial Market Research, conference paper, April 2000.

Grilli, V., D. Masciandro and G. Tabellini (1991), "Institutions and Policies", *Economic Policy*, 6, 341-392.

Gudmundsson, Már (1999), "Hlutverk og skipulag nútímaseðlabanka" [The Role and Organisation of Modern Central Banks], *Vísbending*, no. 29, vol. 17.

Loungani, P. and N. Sheets (1995), "Central Bank Independence, Inflation and Growth in Transition Economies", *International Finance Discussion Papers*, Federal Reserve System, no. 519.

Persson, T. and G. Tabellini (1993), "Designing Institutions for Monetary Stability", *Carnegie-Rochester Conference Series on Public Policy*, 39, 53-84.

Persson, T. and G. Tabellini, eds., (1994), *Monetary and Fiscal Policy, Volume I: Credibility, Volume II: Politics*. MIT Press.

Pétursson, Thórarinn G. (2000), "Exchange Rate or Inflation Targeting in Monetary Policy?", *Monetary Bulletin*, Central Bank of Iceland, 2000/1, 36-45.

Posen, A. (1993), “Why Central Bank Independence Does Not Cause Low Inflation”, *Central Banking*, 51-63.

Rogoff, K. (1985), “The Optimal Degree of Commitment to an Intermediate Monetary Target”, *Quarterly Journal of Economics*, 100, 1169-1190.

Sargent, T. (1983), “The Ends of Four Big Inflations”, in *Inflation: Causes and Effects*, ed. Robert Hall.

Spiegel, M. (1998), “Central Bank Independence and Inflation Expectations: Evidence from British Index-linked Gilts”, Federal Reserve Bank of San Francisco, *Economic Review*, 1, 3-14.

Svensson, L. E. O. (1997), “Optimal Inflation Targets, ‘Conservative’ Central Banks and Linear Inflation Contracts”, *American Economic Review*, 87, 98-114.

Walsh, C. (1995), “Optimal Contracts for Central Bankers”, *American Economic Review*, 85, 150-167.