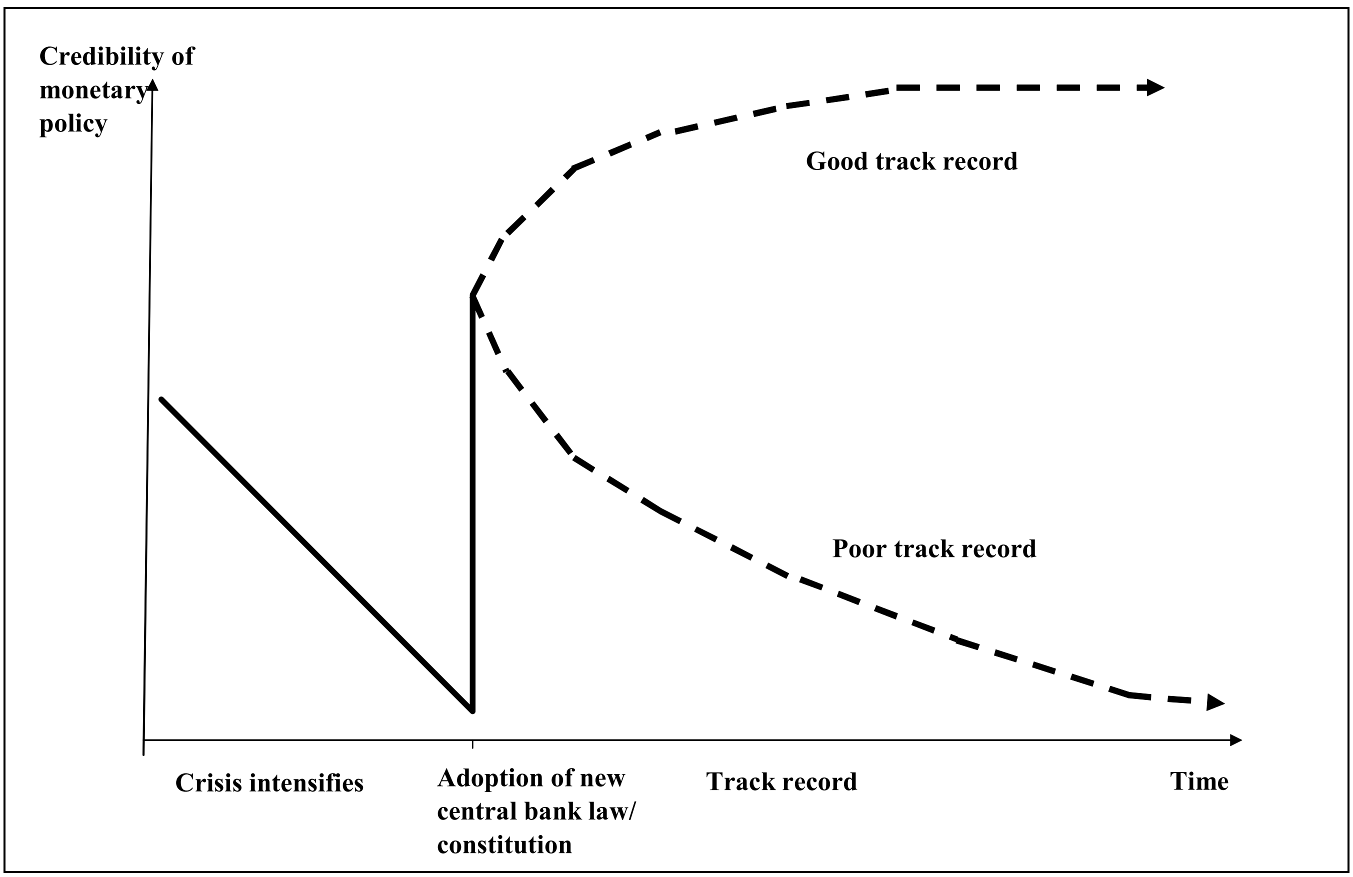
Central Bank Autonomy, Accountability, and Governance: Conceptual Framework prepared by Tonny Lybek[1]

The International Monetary Fund (IMF) supports central bank autonomy and accountability, since it facilitates price and financial sector stability, which are conducive to sustainable economic growth. In the literature, *autonomy* is sometimes preferred to the frequently used term *independence*, as autonomy entails operational freedom, while independence indicates a lack of institutional constraints. A central bank must have clearly defined and prioritized objectives, sufficient authority to achieve these objectives and be autonomous to remain credible. At the same time, it must be accountable for the authority delegated to it to ensure checks and balances. Reforming the legislative framework for a central bank—often after a crisis—can help boost the credibility of monetary policy. This reduces the perceived inflation bias and thus the real interest rate, which advances sustainable economic growth. However, a consistent reform of the legislative framework must be supported by commitment to establish a good track record, as illustrated by Figure 1.

Figure 1. Credibility of Monetary Policy and Reform of Central Bank Legislation



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Good central bank governance means that the objectives and tasks delegated to an institution are performed effectively and efficiently, thus avoiding misuse of resources, which is crucial for establishing a good track record. While the concept of central bank autonomy has prevailed, the last decade has focused more on accountability and transparency, but recently, the focus has moved toward good governance (see, e.g., Schiffman, 2004). Alleged infringements by directors and officers in a few countries have also advanced this trend. Good governance will only be achieved if the directors and officers are persons of great integrity, ability, and willingness to live up to their fiduciary responsibilities. For central banks, the nomination and appointment procedures, together with appropriate safeguards against undue influence, are likely to be more important for good governance and performance than performance enhancing incentives that may move priorities from fiduciary responsibilities to personal motives, as evidenced by recent corporate scandals.

This paper summarizes the main premises behind the policy of delegating autonomy, authority, and accountability to a central bank with clearly defined and prioritized objectives, tasks, and functions, and briefly surveys the experience. The Appendix sums up the main recommendations for a good central bank law.[2]

A. The Importance of Central Bank Autonomy and Accountability

Both price and financial sector stability are important for achieving sustainable real economic growth. Inflation—particularly variable inflation—over a certain threshold impedes sustainable economic growth. The effectiveness of the price mechanism to allocate scarce resources is impinged by the noise created by inflation. Investment and savings decisions are distorted, as people are trying to protect themselves against inflation. Moreover, inflation redistributes wealth—mainly from the poor to the wealthy owning land, real estate, or stocks. Furthermore, although governments may be tempted to use the inflation tax, high inflation also affects the budget negatively due to higher interest rates and lags in tax collection. Although it is tempting to use inflation—which now is generally accepted to be primarily a monetary phenomenon—to "solve" short-term problems, it will hamper sustainable real economic growth by postponing addressing the underlying structural challenges.

It is the prerogative of the state to conduct monetary policy, but it may not be credible if done by the government. In the short run, the government has many competing objectives, including being reelected. Even if the government states that it will pursue price stability, the general public knows that it has incentives to compromise—the so-called time-inconsistency problem (Kydland and Prescott, 1977). The public will accordingly require a risk-premium in the form of higher interest rates, which impede sustainable economic growth. The delegation of authority to conduct monetary policy to an autonomous and accountable central bank with clearly defined objectives can enhance both credibility and flexibility. As long as there is short-term price stickiness, it may, according to Rogoff (1985), be optimal to have a "conservative central banker" weighting price stability higher than the social objective function to neutralize the myopic behavior of the government (Blinder, 1998), and the ability

[2] For a more detailed discussion of central bank autonomy, see for instance, Lybek and Morris (forthcoming), Cukierman (2002, 1994, and 1992); Berger, de Haan, and Eijfinger (2000); Lybek (1998), Fischer (1995a and 1995b).

to better utilize new information (Romer and Romer, 1997). In addition to price stability, financial sector stability—that is a sound and stable financial system including an efficient payment system—is also important for a market economy to realize its full potential. An autonomous and accountable central bank may help prevent that undue influence adversely affects the financial sector.

The degree of autonomy delegated to the central bank affects the design of the structure of the governing bodies and the accountability provisions. Strong accountability provisions are needed with increased autonomy to ensure the authority delegated to the central bank is actually used as intended (Fischer, 1995a, and Guitián, 1995a and 1995b). Although a new legal framework—de jure autonomy and accountability—can facilitate sustainable economic growth, the track record—the de facto autonomy and accountability—is the litmus test.

B. Different Types of Central Bank Autonomy

A distinction can be made between the following kinds of autonomy: (i) goal autonomy, (ii) target autonomy, (iii) instrument autonomy and (iv) limited autonomy, where the central bank basically is a government agency.[3] [4]

Goal autonomy entrusts the central bank with responsibility for determining the monetary policy and exchange rate regime, or simply the monetary policy if the exchange rate is floating. Goal autonomy, in principle, gives the central bank authority to determine its primary objective from among several objectives included in the central bank law or, rarely to determine the objective if there is no clearly defined objective. Thus goal autonomy is the broadest degree of autonomy and authority. A case in point is the Federal Reserve System in the United States, which includes both full employment and price stability among several potentially competing objectives.[5]

Target autonomy also entrusts the central bank or monetary authority with responsibility for determining monetary policy and the exchange rate regime, or simply monetary policy where the exchange rate is floating. In contrast to goal autonomy, target autonomy has one clearly defined primary objective stipulated in the law. The Statute of the European Central Bank

[3] Debelle and Fischer (1994) and other literature only distinguish between goal/target autonomy and instrument autonomy, but Lybek (1999 and 1998) also distinguishes between goal and target autonomy.

[4] The European Monetary Institute, the predecessor to the European Central Bank (ECB), used the following categories to assess whether the respective central banks were sufficiently autonomous: institutional independence, functional independence, organizational independence, and financial independence as discussed by Amtenbrink (1999), for example. These terms all cover important aspects of autonomy, but they are not different types of autonomy, but rather different elements of autonomy.

[5] According to Sec. 2A of the Federal Reserve Act: "The Board of Governors of the Federal Reserve System and the Federal Open Market Committee (FOMC) shall maintain long-run growth of the monetary and credit aggregates commensurate with the economy's long-run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."

(ECB) is one example where the primary objective is price stability with the target determined by the ECB.[6]

Instrument autonomy implies that the government or the legislature decides the monetary policy or target, in agreement with the central bank and the exchange rate regime, but the central bank retains sufficient authority to implement the monetary policy target using the instruments it sees fit. One example is the Reserve Bank Act of New Zealand.[7] There may also be a contract or an agreement between the government and the central bank that is not explicitly stipulated in the central bank law, as for example in Canada and Norway. Usually currency board arrangements will also be considered having some degree of instrument autonomy, unless the central bank has the authority to determine that a currency board arrangement shall be the monetary anchor.

Limited or no autonomy means that the central bank is almost a government agency. The government determines the policies (objectives and targets) as well as influences the implementation. The latter is the case mainly in centrally planned economies and in some developing countries.

Goal autonomy is the broadest concept, since, in principle, it gives the central bank authority to determine its primary objective among several competing objectives included in the central bank law. Target autonomy allows the central bank to decide a specific target for achieving the primary objective, which is stipulated in the law, such as price stability. Goal and target autonomy are perceived as strong degrees of autonomy, but they also raise the question why central bankers, who are not elected by the general public, should have the authority to decide the short-term tradeoff between the rate of inflation and employment. Instrument autonomy implies that the cabinet or the legislature actually decides the target, in agreement with the central bank, but the central bank retains sufficient authority to implement the target using the instruments it sees fit.

While instrument autonomy reduces the potential risk of the government manipulating monetary policy in the short run, it will not fully diminish the risk premium unless the agreement covers a long period, as the targeting horizon becomes relevant, or the target is defined by excluding seasonal and other short run factors. It does, however, eliminate the democracy question. If the primary motivation for central bank autonomy is the fact that central bankers are better informed, rather than time-inconsistency, instrument autonomy is

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[6] Article 2 of the Protocol of the Statute of the European System of Central Banks and of the European Central Bank: “In accordance with Article 105(1) of this Treaty, the primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, it shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2 of this Treaty. The ESCB shall act in accordance with the principle of an open market economy with free competition, favoring an efficient allocation of resources, and in compliance with the principles set out in Article 3a of this Treaty.”

[7] Article 8 of the Reserve Bank Act of New Zealand stipulates: “...The primary function of the Bank is to formulate and implement monetary policy directed to the economic objective of achieving and maintaining stability in the general level of prices.” Article 9(1) stipulates: “The Minister shall, before appointing, or reappointing, any person as Governor, fix, in agreement with that person, policy targets for the carrying out by the Bank of its primary function during that person’s term of office, or next term of office, as Governor.”

not sufficient to achieve an optimal solution. Provided the paradigm that price stability is the best contribution monetary policy can make to sustainable growth is acknowledged, target autonomy should be chosen, and the central bank should have achieve and maintain price stability as its primary objective. If this paradigm is not accepted and more emphasis instead is put on the sacrifice ratio, but it is still accepted that specialized central bankers can best utilize the available information to avoid futile efforts to push output above its potential, it is sensible to adopt goal autonomy.

C. Clearly Defined and Prioritized Objectives, Tasks and Functions

The establishment of a single objective for the central bank or, at a minimum, a clearly defined primary objective, provides a more precise basis for delegating authority to the central bank and holding it accountable for its policy outcomes and its financial condition. Multiple objectives, in contrast, can hamper central bank effectiveness, dilute accountability, and complicate the coordination of economic policies with the government.

Economic Policy (Macro) Objectives

Achieving and maintaining *domestic* price stability should be the primary objective of a central bank, since price stability is the best contribution monetary policy can make to sustainable economic growth. This follows from the analytical view that monetary policy is best suited to achieve medium-term control over inflation, while its output and employment effects are not seen as either sufficiently predictable or permanent to increase economic activity and lower unemployment. Therefore, if other macroeconomic objectives are not made subsidiary to price stability, they can weaken the credibility of monetary policy by eroding clarity and transparency. Some small open economies have decided that maintaining domestic price stability can best be achieved by pursuing a fixed exchange rate policy, which presumes that the economy and the anchor currency are affected similarly by exogenous shocks and there is a political commitment to make the necessary adjustments of the real sector.

Financial System (Micro) Objectives

The objectives of ensuring both price stability and a sound financial system are mutually consistent, at least in the longer run. While inadequate monetary policies could lead to inflation and contribute to a shaky financial system, an unsound financial system could lead to a systemic financial crisis and impinge on monetary policy and, thereafter, on price stability. In general, recent central bank laws thus prescribe the soundness of the financial system as an objective that is subordinated to medium-term price stability. To avoid possible conflicts of interest, it is important that the laws specify the central bank's role regarding:

- **Lender of last resort:** The central bank should only support illiquid—but solvent—banks that are of systemic importance. It should only be authorized to do so against clearly defined collateral, which could include government guarantees;

- **Payment systems:** The design of the payment systems is crucial for reducing systemic risk and, thus, the likelihood of the central bank having to function as a lender of last resort. Accordingly the central bank should have the authority to oversee key aspects of the payment system; and

- **Banking supervision:** There is a potential conflict between conducting monetary policy and banking supervision. A central bank could be tempted to relax monetary policy to address financial sector problems that might have arisen because of weaknesses in its supervision instead of addressing the underlying structural problems. This, combined with the growing integration of financial service providers, is viewed by some as a good reason to separate the responsibility for prudential supervision from the central bank and to entrust it to an autonomous specialized agency. On the other hand, a government agency in charge of banking supervision may be more prone to political pressures to license weak banks and not to enforce prudential regulation—particularly for state-owned banks. This may undermine monetary policy more than an autonomous central bank in charge of banking supervision. In some countries, the central bank may be the only institution with adequate resources and sufficient strength to withstand potential government interference on supervisory matters. It is just as crucial that the same guiding principles ensuring consistency between objectives, authority, autonomy, and accountability for monetary policy also be used for the delegation of authority to supervise the financial sector.[8]

D. Authority

Monetary Policy

A central bank should have sufficient authority to formulate and implement monetary policy within the constraints stipulated by its objectives and the autonomy delegated to it. A central bank should be able to control its balance sheet to influence liquidity conditions in the banking system, and thus ultimately influence price stability. The specific allocation of credit should be left to the commercial banks, or the government and the legislature to the extent they want to influence credit allocation via tax and investment incentives. If the financial markets are underdeveloped, the central bank may need to rely on direct monetary instruments; it then becomes even more important to fully isolate the central bank from undue external influence, since such measures usually affect credit allocation.

Credit to the government

Restrictions on the central bank's direct monetary financing of the government make it possible to separate monetary and fiscal policy, leaving more authority to the central bank. While a target for monetary policy implicitly sets limits for monetary financing of the budget, it is the experience, particularly in developing countries, that without explicit limits for credit to the government, the central bank will face difficulties in achieving price stability.

[8] See, for instance, Hüpkes, Quintyn, and Taylor (forthcoming), Quintyn and Taylor (2003) and Abrams and Taylor (2000).

Direct credit to the government should ideally be prohibited, but in countries without a well-developed market for government securities or in countries where there are strong seasonality and major timing mismatches in the flow of the government's revenues and expenditures, temporary advances could be permitted, provided that they are of a short-term nature and do not exceed an explicit limit (Cotarelli, 1993).[9] Prohibiting lending to the government protects the central bank from government pressure. The central bank may lend to the government indirectly by buying government securities in the secondary markets through open market operations or by accepting them as collateral for loans to commercial banks. These operations should not be prevented, where conducted at the initiative of the central bank in the pursuit of monetary policy objectives. The potential for quasi-fiscal activities should be eliminated in the central bank law, which can be done by explicitly prohibiting activities that are not provided for under the act and that are not consistent with the appropriately defined objective(s) of the central bank.

Exchange Rate Policy

In light of increased capital mobility, newer central bank laws often delegate the authority over the exchange rate regime to the central bank in consultation with the government. Monetary and exchange rate policies are inextricably linked, particularly in countries with a convertible currency and free capital mobility. It can thus be argued that an autonomous central bank also must be in charge of deciding the exchange rate policy, if it is responsible for controlling inflation (Cottarelli, 1994). However, this is based on the assumption that the exchange rate movements simply reflect changes in money demands and supplies, while in practice, particularly in the short run, numerous factors under the authority of the government affect the real exchange rate. Careful consideration must thus be given to country specific conditions.

E. Political Autonomy

Governance Structure

The central bank law should define a governance structure that will limit the risk of undue interference and government pressure in the exercise of its powers. Depending on the degree of autonomy delegated to the central bank, there are up to five distinct functions of governing bodies. Namely: (i) making policy decisions (determining the target in case of goal and target autonomy); (ii) advising the decision makers of the central bank (in case there are concerns that the autonomy delegated to the central banks may not fully ensure a balanced view); (iii) making decisions on how to execute the policy; (iv) implementing the decisions (management, sometimes a management board or just the governor); and, (v) monitoring the (a) policy performance, (b) financial condition of the central bank, and (c) use of bank resources. Some countries only have one board performing several of these functions and the governor responsible for the day-to-day operations, while other countries may have several

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[9] A few central banks have special provisions regarding *intraday* liquidity with a view to lubricate the real-time gross settlement system.

boards, such as a policy board, a supervisory board, an audit committee, and the governor, or a general manager, as chief executive officer. Needless to say the composition of the board(s) should reflect its function(s), while at the same time try to depoliticize the decision-making process, and take into account country specific conditions, including corporate law.

To ensure political autonomy, the following elements, among others, should be considered:

- The governor, deputy governors, and board members should observe certain qualification requirements, including being of good moral standing and having relevant experience. Government officials, if considered necessary, should constitute a minority, only be included to ensure information sharing, and, ideally, not have the right to vote. Boards with oversight responsibilities should have external members, ideally the majority, to avoid the management of the central bank from overseeing itself.

- The nomination and appointment of the governor, and ideally also of members of the board(s), should, if at all possible, be done by separate arms of the government to provide some measure of balance.

- The term of a board member should be longer than the election cycle of the body with the predominant role in selecting the member. Terms should be staggered to ensure continuity and facilitate accountability.

- Government directives to the central bank or the members of its decision making bodies should be explicitly prohibited, since they should be solely responsible for exercising the powers and carrying out the tasks conferred upon them by the law.

- Remuneration should not be changed to the members' disadvantage during their term of office to avoid it being used to unduly influence the policies of the central bank.

- The governor should only be dismissed for breaches of qualification requirements or gross misconduct. Depending on country specific conditions, the (supervisory) board, an independent tribunal, or the supreme court could rule upon the latter, ideally with the consent of the legislature. Other board members should also be protected from arbitrary dismissal. Often these requirements are less rigorous, but they should ideally be the same as for the governor.

The legal framework should provide for functional immunity of members of the governing bodies and central bank staff for actions taken in good faith while discharging their duties. This is particularly important for central bank staff performing banking supervision or is involved in payment systems.

Coordination and Conflict Resolution Procedures

Although a central bank is autonomous, there is still a need to ensure close coordination with the government in a number of areas. This can be facilitated by clearly defined and prioritized objectives stipulating that without prejudice to the primary objective and financial sector stability, the central bank shall support the general economic policies of the government. At the same time the legislative framework should define procedures to resolve potential conflicts with the government. The government's right to overrule the central bank during exceptional circumstances may be viewed as a safety valve, as long it is done in a transparent way. However, if frequently used, it would undermine the purpose of establishing an autonomous central bank and recreate the inflation bias. Newer central bank laws therefore often exclude such a safety valve and instead clearly stipulate that the central bank be an autonomous legal entity. If, for instance, the government is responsible for the exchange rate regime, the exchange rate is pegged, and international reserves decline below a threshold considered by the central bank to be necessary to ensure a smooth flow of international transactions, the central bank should be obligated to make recommendations to the government. If the government does not react within a specified period, the government should publicly justify its policy choice. The central bank should be transparent and ideally explain that temporarily it can no longer be responsible for price stability due to factors outside its control.

F. Financial Autonomy

The central bank's financial integrity should be protected to prevent it becoming subject to indirect influence from the government via appropriation procedures or as the result of significant losses depleting its capital. Profitability should not in itself be a central bank objective, as it could adversely affect achieving and maintaining price stability.

A central bank should have an initial authorized capital and accumulate general reserves until the equity capital is sufficient to cover its risks. In practice, however, how to determine the appropriate level of equity capital of a central bank is widely discussed (Sullivan, 2003). Typically, the initial authorized capital is established and a share of profits is continuously allocated to general reserves until they reach a multiple of the authorized capital or a ratio of, for example, monetary liabilities that function as a proxy for the risks the equity capital is supposed to cover.

It is important that the central bank first make prudent provisions and allocations to general reserves, and only afterwards transfer *realized profits* net of unrealized losses to the owner(s) of the central bank, usually the government. It is advisable that the central bank make prudent provisions according to sound accounting standards, thus avoiding the need for establishing special reserve funds. To ensure that losses do not deplete the initial capital and make the central bank economically dependent on the government, the central bank law should include provisions that obligate the government to recapitalize the central bank. A continuous depletion of the central bank's capital amounts to providing direct credit to the government and is often the result of policies the government forces on the central bank. Accordingly, the government should be obligated to automatically recapitalize the central bank. Finally, central banks should not be subject to frequent appropriation procedures, but it may prove useful if they are obligated to submit an estimate of expenditures for information purpose with a view to ensuring financial accountability.

G. Accountability

When the state delegates authority to a central bank and gives it autonomy, the central bank must be made accountable to ensure appropriate checks and balances and to minimize any abuse of powers by any of the parties involved. The accountability provisions should thus ensure that an autonomous central bank uses its delegated authority effectively and efficiently to achieve its primary objective, namely price stability, as well as its other tasks, and manages its resources in a thrifty way.

An autonomous central bank is ultimately accountable to the general public, but may be directly accountable to the executive branch or the legislature. Often it depends on tradition and the governance structure, say there is a separate supervisory board, but it should be clear to which arm of government—often the legislature in newer central bank laws—the central bank is formally accountable to avoid dilution of responsibilities.

Monetary Policy and Other Tasks

To facilitate performance monitoring, the central bank law should stipulate that the central bank publish policy statements at a minimum once a year, as well as an annual report on its monetary policy performance and its other operations. An increasing number of laws now require the central bank to present semiannual monetary policy statements and central banks usually publish more frequent reports and analyses on monetary policy. Frequent information on monetary policy can also make it more difficult for the government to intervene without the general public being informed. The reporting should clearly define factors within or outside the central bank's control that affected the outcome.[10]

Financial Conditions

Sound business practices are important for the credibility of the central bank and support its financial autonomy. Should sound practices not be implemented, the government may feel a need to further control the central bank. It is therefore highly desirable that the central bank, as a minimum, publish *audited* annual financial statements—ideally audited by independent external auditors. The use of international financial reporting standards is increasingly being recommended, but this necessitates that the central bank law clearly stipulates that only *realized* profits can be transferred to the government. Summary balance sheet information should be published more frequently—at a minimum monthly. In addition to audited annual financial statements, the supervisory board or the body to which the central bank is formally accountable should have the right to ask for an external audit of the adequacy of any central bank procedure.

H. Empirical Evidence

Empirical studies of central bank autonomy and accountability are supportive (see, e.g., Berger et al, 2002) but not compelling. There are basically three types of studies, and most of

[10] The IMF's *Code of Good Practices on Transparency in Monetary and Financial Policies* provides some guidance (http://www.imf.org/external/np/mae/mft/index.htm).

them focus on autonomy rather than accountability. Many studies simply compare an index of the central bank's de jure autonomy and accountability with inflation performance. The design of the index, that is the elements considered, their weights, and normalization procedures, affect the results (Mangano, 1998). Another type of study also tries to find a correlation, but takes other factors into account. For instance, such studies estimate whether the correlation between autonomy and inflation performance is stronger or weaker depending on the exchange rate policy, openness of the economy, monetization of budget deficits, debt ratios, etc. Finally, there are a few event studies that try to estimate if inflation performance or the level of interest rates have changed before and after significant amendments of the legislative framework.

Several studies have shown that during the period following the breakdown of the Bretton Woods system of fixed par values in the early 1970s, the industrialized countries that accorded greater legal autonomy to their central banks also experienced lower average inflation (among others, Grilli, Masciandaro, and Tabellini, 1991). Evidence from these countries further strengthened the case for central bank autonomy because the higher degree of autonomy did not appear to harm average real growth (Alesina and Summers, 1993), although a discussion of sacrifice ratios has later emerged (Cukierman, 2002). However, in the last decade with lower inflation, since there has been a general political commitment to combat inflation, it has become increasingly difficult to identify a correlation between more autonomy and accountability and lower inflation. Daunfeldt and Luna (2003), for instance, find that the decline in inflation often has happened before reforms of the legislative framework. A few event studies have been produced, like the one showing that the announcement of the new legislative framework for the Bank of England in 1997 did coincide with a decline in the interest rate (Spiegel, 1998).

The correlation between legal autonomy and lower inflation does not appear to be empirically significant in developing countries (Cukierman, 1994 and 1992). Schuler (1996), for instance, finds, based on a survey of 156 countries analyzing the period 1952–93 that developing countries with central banks have performed worse than other monetary systems and central banking in developed countries. The lack of strong empirical evidence of central bank autonomy in developing countries may be due to the use of other monetary anchors. Anyadike-Danes (1995), for example, finds that the linkage between central bank autonomy and inflation performance is much weaker in developing countries with a pegged exchange rate than in other developing countries. It has also been argued that de jure autonomy and accountability may be a poor proxy for de facto autonomy. Fry (1998), for example, finds that in developing countries, the size of the budget deficit and its financing dominate the standard measures for central bank independence. Furthermore, there may simply be different preferences between inflation, employment and development in developing countries. Finally, the decision makers may in some developing countries be less sensitive to the political election cycle. Jácome and Vázquez (forthcoming), however, do find correlation between stronger autonomy and better inflation performance in Latin America and the Caribbean, when taking into account fiscal stance and exchange rate regime.

Several studies have found correlation between stronger central bank autonomy and better inflation performance in selected transition economies.[11] Furthermore, it appears that transition economies delegating more autonomy and accountability to their central bank also generally have been most successful in upgrading the monetary and financial framework to the needs of a market economy (Lybek, 1999).

Even when empirical supportive evidence is found, the causality question remains: Is it central bank autonomy and accountability that cause good inflation performance, or is it the commitment to pursue sound economic policies that causes good inflation performance and central bank autonomy and accountability? Some studies have used proxies for de facto central bank autonomy, like the turnover rate of the governor (Cukierman, Webb, and Neypati, 1992). De Haan and Kooi (2000), using a sample of 82 developing countries, do find that higher turnover of governors is positively related to inflation only if high inflation countries are included in the sample. A governor, however, may remain in office either because he or she implements sound policies or because of willingness to accommodate government instructions.

Entrenchment of Central Bank Autonomy and Accountability in the Constitution

If the need for central bank autonomy and accountability is accepted, there are valid reasons to entrench these concepts in the constitution. Older constitutions are typically fairly silent regarding the central bank. Constitutions of transition economies are often quite detailed regarding nomination, appointment and in some cases dismissal of the governor and other board members. Only a few constitutions, like the one in South Africa, explicitly specify the objective of the central bank. Several Latin American countries, after the problems in the early 1980's, have amended their constitution and included fairly detailed provisions on the central bank, including prohibiting direct central bank credit to the government. Gutiérrez (2003), for instance, applied an index covering both autonomy and accountability on the constitutions of Latin American countries. She takes into account several factors and does find a significant relationship between a higher degree of autonomy and accountability in the constitution and better inflation performance.

I. Conclusion

An appropriately designed central bank law, perhaps with key provisions entrenched in the constitution, can contribute to the credibility of monetary policy. It is crucial to acknowledge that central bank autonomy and accountability facilitate price and financial sector stability, which are conducive to sustainable economic growth. A good legislative framework makes monetary policy more credible, while at the same time allowing more flexibility. A central bank law should have clearly defined and prioritized objectives, delegate sufficient authority and autonomy to the central bank to achieve these objectives, while at the same time ensure checks and balances. There must be consistency between the objectives of the central bank, its authority, degree of autonomy, and accountability. Inconsistencies may not just endanger

[11] See, e.g., Cukierman et al. (2001), Maliszewski (2000), Lybek (1999) and Loungani and Sheets (1997).

the credibility of the monetary authority but jeopardize confidence in the overall legal framework.

In reaction to a crisis, it may be tempting to focus on addressing the problems perceived as having caused the crisis and simply “copy” a law from a country with a good track record, while not fully acknowledging that other conditions may be quite different. To be successful, however, it is important to adapt the law to local conditions. A strengthened legislative framework will only be successful if combined with a good track record.

APPENDIX: MAIN GUIDELINES ON CENTRAL BANK AUTONOMY AND ACCOUNTABILITY

Objectives and targets Price stability, as the best contribution monetary policy can make to balanced sustainable growth, is the preferable formulation for the primary objective. Consistent with this broad objective, a specific target—which could, for example, involve explicit inflation targets, maintenance of a fixed exchange rate, or monetary aggregate targets—should be established and published. These targets may be determined by the central bank (target autonomy); or determined by the government in agreement with the central bank (instrument autonomy). To facilitate accountability, the target(s) should be easy to monitor. Consideration should be given to explicit, but limited "escape clauses" in the face of significant exogenous shocks.

Monetary policy A central bank should determine and implement monetary policy to achieve its target. To this end, the central bank should have authority to determine quantities and interest rates on its own transactions without interference from the government.

Conflict resolution A clear and open process should be established to resolve any policy conflict between the central bank and the government. Some of the aspects below (e.g., the nature of government representation on the board) are potential channels for such a resolution; another approach is to allow the government to direct or overrule the central bank, but such a power should be constrained, to avoid other than exceptional use. It should be absolutely clear to the executive, legislature, and the general public that responsibility for the results lies with the government, not the central bank, if the central bank is overruled, its advice ignored, or its effectiveness is significantly limited by government policies. This may require that both the government and the central bank publish a formal statement to that extent. For instance, in cases where international reserves decline to levels insufficient to conduct international transactions due to factors outside the central bank's control, it shall make recommendations to the government. If the government does not react within a specified period, the central bank should notify the general public that it temporarily cannot be held accountable for price stability due to factors outside its control.

Governor Nomination and appointment/confirmation of the governor should be by separate bodies to provide some measure of balance, bearing in mind the institutional framework. The term should be longer than the election cycle of the body with the predominant role in selecting the governor. Dismissal should be only for breaches of qualification requirements, or misconduct; lack of performance could also be grounds if clearly defined in terms of the primary objective and specific targets. The latter could be ruled upon according to a suitable and independent judicial procedure, and perhaps be with the consent of the legislature.

Board Composition of the board should ensure a reasonably well informed and balanced view, but avoid conflicts of interest. Precisely what is reasonable depends in part on the role of the board (decision-making, monitoring, or purely advisory), and whether it is a single or multiple board structure. The highest level board should include a majority of non-executive, non-government directors. Indeed, direct government representatives should be eliminated from a policy board and probably also from a monitoring board. If a government representative does participate in a policy board, it should at least be without the right to vote (though it might be with a limited, temporary veto power). As with the governor, nomination and appointment/confirmation should be by different bodies; terms should be longer than the election cycle of the main body in the appointment process, and should be staggered; and dismissal of board members should occur only for breaches of qualification requirements and misconduct, and on performance grounds only if clearly defined. The latter could be ruled upon according to a suitable and independent judicial procedure, and be with the other board members' prior consent.

Credit to government If not prohibited, direct credit to the government should be carefully limited to what is consistent with monetary policy objectives and targets. For example, temporary advances and loans could be allowed only if: (i) they are explicitly limited to a small ratio of average recurrent revenue of preceding fiscal years (say, 5 percent); (ii) they bear a market-related interest rate; and ideally (iii) they are securitized by negotiable securities. The central bank should not underwrite and

	participate as a buyer in the primary market for government securities, except with noncompetitive bids and within the overall limit for credit to government. Indirect credit to the government, that is, buying outright existing government securities held by the market, or accepting them as collateral, should be guided by monetary policy objectives. The central bank should not finance quasi-fiscal activities.
Exchange rate policy	Basic consistency needs to be ensured between the exchange rate and monetary policy. If exchange rate policy (including choice of regime) is not solely the responsibility of the central bank, the bank should nevertheless have sufficient authority to implement monetary policy within the constraint of exchange rate policy (e.g., in a fixed exchange rate regime, to support the exchange rate as the specific target of monetary policy), and should be the principal advisor on exchange rate policy issues (e.g., as to whether the current regime is most suitable for the fundamental price stability objective). In the event of a conflict with the government on exchange rate issues, the conflict resolution procedures as stated above should come into effect.
Financial conditions	The law should ensure that the central bank has sufficient financial autonomy to support policy autonomy, but with matching financial accountability. Its budget should not be subject to normal annual appropriation procedures (but could be subject to a longer-term appropriation—e.g., on a cycle consistent with the term of the governor). Only realized net profits, after prudent provisioning by the central bank and appropriate allocations to general reserves, should be returned to the government. The government should ensure the solvency of the central bank by transferring interest bearing negotiable securities if the authorized capital is depleted. The body to which the central bank is accountable should be allowed to ask external auditors and the auditor general to review the central bank's accounts and procedures.
Publication and reporting	Policy and financial accountability should be clearly established. The central bank should prepare formal statements on monetary policy performance at, say, six-month intervals, without prior approval by the government. Regardless of to whom the bank is directly accountable, these statements should be forwarded to both the executive and the legislature and should be published for the benefit of the public. Annual financial statements audited by external auditors should similarly be forwarded and published. Summary balance sheets should be published more frequently (e.g., on a weekly or monthly basis).

Source: Lybek (1998 and 1999).

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