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Central Bank Independence in Words and in Deeds: Lessons from Brazil and Chile

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Chapter 6

CENTRAL BANK INDEPENDENCE IN WORDS AND IN DEEDS: LESSONS FROM BRAZIL AND CHILE

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ABSTRACT

Political independence of the central bank is considered to bring financial stability to a nation and therefore to foster economic growth by providing safe investment environments. However, granting a central bank autonomy is politically contentious because of the implications such independence will entail for politicians in terms of their ability to influence monetary policy. This chapter analyzes central bank independence in words and in deeds. The first part discusses the existing literature on central bank independence and problems associated with its measurement. The implications of this debate are analyzed with two Latin American countries, Brazil and Chile. In Brazil, the difficulty in reaching a political consensus on granting the central bank formal independence has led the government to confer "operational" independence since the mid-1990s. Despite the improvement in the financial stability of the country, the Brazilian central bank remains politically vulnerable because its independence is not guaranteed by the constitution, and the credibility of prudent monetary policy is not strong enough to deter speculative attacks in critical moments. The Brazilian experience is then contrasted with the Chilean case in which the central bank's independence is constitutionally guaranteed.

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I. INTRODUCTION

Central bank independence is one of the major areas of research in political economy. A common belief suggests that a politically independent central bank brings about price stability. Alesina and Summers' (1993) figure showing an almost perfect inverse relationship between inflation and the degree of legal central bank independence among industrial countries is quite famous. Some even argue that the effects of central bank independence reach beyond inflation control to promote performance in such areas as economic growth, exchange rate stability, and fiscal discipline of the government, although such relationships are still disputed. At the heart of the improved economic performance that independent central banks bring about lie the constraints imposed upon opportunistic or ideologically motivated politicians. Succinctly, independent central banks deter political business cycles based on the use of monetary instruments either by preventing expansionary monetary policy before elections (Nordhaus 1975; Clark and Hallerberg 2000) or by easing partisan effects on policy following elections (Hibbs 1977; Alesina and Roubini 1997). If monetary policy is in the hands of politically insulated conservative central bankers (Rogoff 1985), the society will enjoy low and stable inflation regardless of electoral or partisan cycles. According to Fischer (1995, 201), "The case [for central bank independence] is a strong one, which is becoming part of the Washington orthodoxy." Indeed, developing countries with episodes of high and hyper inflation have been advised to make their central banks independent to gain much desired economic stability. But what kind of independence should they pursue?

The question of central bank independence is not as straightforward as it may appear at first. Since the 1990s, scholars have attempted to examine two dimensions of central bank independence—de jure and de facto—and the effects of each on policy outcomes. At first there was a strong focus on legal independence. However, scholars began looking beyond statutory provisions to analyze the actual behavior of central banks with the recognition that while a central bank may be independent in law, it may be politically controlled in practice. This problem may be particularly pronounced in developing countries where institutions are generally weak.

This chapter examines central bank independence in words and in deeds. The next section reviews the debate on central bank independence and problems associated with its measurement. The implications of this debate are analyzed with two Latin American countries. We first examine the case of Brazil, a country that has gone through numerous economic instabilities and stabilization programs. Since the 1990s, Brazilian policymakers have been discussing central bank independence as a key component of financial stability in the country. Yet the difficulty in reaching a political consensus on granting the central bank formal independence has led the government to confer "operational" independence since the mid-1990s. Despite the improvement in the financial stability of the country, the Brazilian central bank remains politically vulnerable because its independence is not guaranteed by the constitution, and the credibility of prudent monetary policy is not strong enough to deter speculative attacks during critical moments. The Brazilian experience is then contrasted with the Chilean case in which the central bank's independence was constitutionally guaranteed by the military government two months prior to Chile's return to democratic rule in 1990. Initially the democratic opposition threatened to repeal the law giving broad autonomy to the central bank. However, low inflation and stable economic growth have helped the bank

maintain a high level of de jure and de facto independence while weathering a massive scandal that led to the resignation of the central bank governor in 2003.

II. CENTRAL BANK INDEPENDENCE IN WORDS AND IN DEEDS

A central difficulty in examining the effects of central bank independence on economic performance is measuring the independence of the central bank. Cukierman (1992) notes that central bank independence depends on a variety of legal and non-legal factors. However, because it is difficult to measure informal characteristics, such as the personality of key bank employees, a large body of scholarly work on central bank independence has focused on legal independence. Additionally, measuring legal independence allows researchers to analyze how much independence the legislators actually wanted to give the central bank (Cukierman, Webb, and Neyapti 1992).

One of the first measures of legal central bank independence was created by Alesina (1988, 1989). This measure, which builds on Bade and Parkin's (1988) pioneering work of central bank independence, focuses primarily on political independence based on the following criteria: appointment of board members, the presence of government officials on the central bank's governing board, informal contact between the government and the central bank, and the presence of laws requiring the central bank to accommodate the government's fiscal policies. Each component is then given a score ranging from 1, indicating the least independent, to 4, the most independent.

In contrast to Alesina, Grilli, Masciandaro, and Tabellini (1991) classify central bank independence based on two categories: political independence and economic independence. Political independence is defined as "the capacity to choose the *final goal* of monetary policy" while economic independence is "the capacity to choose the *instruments* with which to pursue these goals" (1991, 366). The aggregate category of political independence is based on the appointment of board members, the board's relationship with the government, and the bank's formal responsibilities. Meanwhile, economic independence is based on the government's influence in determining how much it can borrow from the central bank and the monetary instruments available to it. In theory, each bank has the potential to score 8 points in both the political independence and monetary independence categories. In the study, actual scores range from 3 to 13.

Although Grilli, Masciandaro, and Tabellini's measure of central bank independence is more encompassing than Alesina's index, broad generalizations may inflate the value of political independence. For example, one question asks whether or not the entire central bank board was appointed by the government. However, rather than creating a numerical score based on the percentage of board members who are appointed by the government, they code the question as a dummy variable. It is therefore impossible to differentiate between a bank where a single board member is a political appointee and a bank where all board members except for one are political appointees.

A third index of central bank independence, which was developed by Cukierman (1992) and Cukierman, Webb, and Neyapti (1992), measures independence using 16 variables nested in four broad categories: (1) the appointment, dismissal, and term of office of the bank's chief

executive officer, (2) policy formation, (3) objectives stated in the legal charter, and (4) limitations on lending to the government. Each variable is initially coded on a uniform scale of 0 (lowest level of independence) to 1 (highest level of independence). They are subsequently aggregated into a single index of independence based on different weights. We should note that there is little information about how the authors came to decide on different weights for the index's components.

This review of three respected measures of legal central bank independence shows that while the concept seems simple at first, it is actually quite difficult to measure. This is further reflected in Eijffinger and Haan's (1996) findings that there is a low degree of correlation among the three measures of legal independence.* They argue that two key factors explain this divergence. First, because scholars are more familiar with certain countries, they will interpret relevant banking laws differently. Second, each measure focuses on different aspects of legal independence. For example, Eijffinger and Schaling (1993) argue that Grilli, Masciandaro, and Tabellini's measure is weak because it has too many variables that erode the value of the most important elements of central bank independence. Overall, this indicates that studies utilizing these measures of legal independence should be viewed with caution since there is no consensus on how to measure legal autonomy.

Another question concerns actual behavior of central banks. Although there is a certain advantage in examining the degrees of independence explicitly written into law, one should not presume that central banks always have the level of independence accorded to them legally. While legal status may be a good indicator of central banks' actual independence in advanced industrial democracies, it may not be an accurate indicator of effective independence in many developing countries. In general, institutions and the rule of law are much feebler in developing countries than in advanced industrial democracies. Consequently, a central bank that is independent on paper may not deter electorally or partisan induced monetary cycles because it is in fact politically controlled. Moreover, many central bank laws are either imprecise or incomplete (or both), which leaves much room for interpretation. As such, we must pay close attention to the actual behavior of central banks as well as their statutory status. In the end, "There is no theory that says it matters what the rules say. There is only a theory that says it matters what the behaviour is" (Forder 1996, 44). Few people would dispute with such a statement, but the greater challenge is: how do we measure it?

Measuring actual, rather than formal, central bank independence is quite complicated. As Cukierman, Webb, and Neyapti (1992, 355) state, actual independence depends "not only on the law, but also on many other less structured factors, such as informal arrangements between the bank and other parts of government, the quality of the bank's research department, and the personality of key individuals in the bank and the (rest of the) government." One of the most commonly used proxies for actual central bank independence was developed by Cukierman (1992) and Cukierman, Webb and Neyapti (1992). The Cukierman measure is based on the turnover rate of central bank governors.+ Its underlying

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∗ The correlation between the Alesina and Grilli, Masiandaro, and Tabellini indices was only .58 and the unweighted correlation between the Alesina and Cukierman indices was .38 (Eijffinger and Haan 1996, 25).

+ Cukierman also proposed a measure based on a survey of central bank staff (Cukierman 1992) and another indicator called *political vulnerability* defined as the percentage of political transitions followed within 6 months by the replacement of the central bank governor (Cukierman and Webb 1995). However, the measure based on central bank governors' turnover rates is the most commonly used proxy for actual degrees of central bank independence.

assumption is that politically vulnerable central banks will have their governors replaced frequently before they complete their legally defined term limits (if there are any). One would also expect that bank governors replaced simultaneously with or shortly after changes in the government would have lower independence than governors who serve across different administrations.

An example may help illustrate the relationship between turnover rates and central bank independence. The Argentine central bank, at least on paper, is one of the most independent banks in Latin America and its governor's legal term is four years. However, there is an informal tradition that a central bank governor resigns whenever there is a change of the government, or even a change of the finance minister. In Cukierman's study, governors' actual terms of office averaged only 10 months during the 1980s (Cukierman 1992, 369). This example suggests that turnover rates may be a good indicator of actual independence. In fact, Cukierman (1992) and Cukierman, Webb, and Neyapti (1992) find that turnover rates explain well cross-country variation in inflation between 1950 and 1989 in a sample comprised of both developed and developing countries. In contrast, formal independence is inversely related to inflation in industrial democracies, but not in developing countries.

Although the Cukierman measure may represent the current state of art in assessing actual central bank independence, it is not a perfect measure. Its most serious drawbacks are that, as is often the case with any aggregate data, it may be insensitive to cross-national and longitudinal variations. For instance, central bank independence based on governors' turnover rates requires one to average the rates over certain period of time—in the study by Cukierman (1992) and Cukierman, Webb, and Neyapti (1992), the averages are for a ten-year period. As a result, the measure will not capture variation during this time frame. Central bank governors may also stay in office for different reasons in different countries. Although turnovers of central bank governors may be low in some countries because governments are constrained from intervening in bank affairs, central bank governors in other countries may stay in office because they do whatever is necessary to please the governments. In the latter case, turnover rates are low precisely because central banks are subservient (de Haan and Kooi 2000, 646, footnote 2). Perhaps as a result of the imprecise measures of central bank independence by either statute reading or turnover rates, recent research on the relationship between central bank independence and macroeconomic outcomes (such as inflation) has been inconclusive (de Haan and Kooi 2000).

The question of de jure versus de facto independence also has policy implications. Most importantly, many economically unstable countries are advised to make their central banks independent to achieve low and stable inflation and to help establish credibility in governments' commitments to sound macroeconomic policy. But to what extent is legal independence relevant? What causes the gap between legal and actual levels of independence? If all that is needed is de facto independence, policymakers of these countries may well avoid going through the cumbersome legislative process to enact the bank's legal status change, which often involves a constitutional change. However, it is our contention that even though informal independence may help promote economic stability in the short run, such status without formal backing keeps central bankers vulnerable to political pressures. Therefore, macroeconomic policy in these countries will not have strong credibility, and any signs of economic or political problems can trigger exaggerated fears about their economic prospects, as the Brazilian experience shows.

III. CENTRAL BANK INDEPENDENCE AND MACROECONOMIC PERFORMANCE IN BRAZIL

The late 20th century witnessed a wave of major economic reforms in Latin America. During the 1990s, after recurrent high and hyper inflation and economic stagnation, a number of Latin American countries introduced legislation aimed at increasing central bank independence (Jácome and Vázquez 2005). Like many of its neighbors, the Brazilian government, particularly under President Cardoso (1995-2002), sought to reform the country's constitution to promote monetary stability. However, the difficulty in reaching a political consensus on granting the central bank formal independence led the government to confer "operational" independence in the mid-1990s. Despite the improvement in the financial stability of the country, the Brazilian central bank (Banco Central do Brasil, or BCB) remains politically vulnerable because its independence is not guaranteed by the constitution and the credibility of prudent monetary policy is not strong enough to deter speculative attacks during critical moments. This section discusses central bank independence, monetary policymaking, and economic performance since Brazil's return to democracy in 1985.

Originally established in December 1964, the degree of the BCB's effective independence has changed over time as the institution's roles have been redefined. Many scholars argue that independent central banks should focus on preserving price stability as their primary objective and should not be required to finance governments' fiscal deficits (e.g., Grilli, Masciandaro, and Tabellini 1991). However, until recently the BCB assumed many responsibilities that one would not expect an independent bank to perform. Until 1986, Brazil had no treasury department in the Ministry of Finance. The BCB therefore performed the tasks of the National Treasury and worked with the Ministry of Finance. It was also possible for the government to influence the money supply directly during the first year of the Sarney administration (1985-90). During this period, there existed an account called the "movement (or monetary) account" in the BCB through which the central bank supplied funds to the state-controlled Banco do Brasil that in turn provided credit lines for government programs. In 1986, this account was extinguished, the Secretariat of National Treasury was finally established, and the national budget accounts were unified.* In return, the BCB began to issue notes and bonds that year.

Although the Bank was relieved from acting as the Treasury,+ these changes did not grant the central bank much independence. One aspect of central bank independence concerns appointment and dismissal of the central bank governor and board of directors. In Brazil, the central bank governor serves at the pleasure of the president. The president of the republic appoints the central bank governor and directors, and the national Senate confirms the nominations. There are no fixed terms for these positions and the president alone can dismiss the governor for policy or other subjective reasons. Between 1985 and 1995, Brazil had 15 central bank governors (excluding 3 interim positions), averaging 1.4 new governors per year! The Bank's missions also mounted to 22 items, ranging from price stability to economic growth and the government frequently intervened in BCB affairs. For example, President

* Before the unification of the national budget accounts, there were at least three such accounts that were not centrally controlled, which made it difficult to monitor and control the national budget.

+ The 1988 Constitution prohibits BCB lending to the National Treasury.

Itamar Franco fired BCB Governor Paulo Cesar Ximenes Alves Ferreira (March 26 – September 9, 1993) over a dispute on the treatment of pre-dated checks (Hiroi 2009). Whether in legal or effective terms, the BCB was not politically or operationally independent.

Today, the Bank has two missions: price stability and stability of financial institutions (Hiroi 2009). Although there was no legal change in the BCB statute, the Bank enjoyed much independence during the two terms of the Cardoso government. Monetary policymaking occurred in the National Monetary Council (Conselho Monetário Nacional) presided over by the Minister of Finance in which the BCB governor participated with a vote.[*] The Council determined monetary policies in the meeting held during the last week of every month. The BCB then executed these policies without government interference. Hence, the BCB gained "operational independence" from the government. In fact, President Cardoso never called BCB Governor Armínio Fraga for the purpose of intervening in the bank's operation (Hiroi 2009). Scholarly work also attests to the BCB's increased autonomy. Holanda and Freire (2002), for instance, measured BCB independence based on economic outcomes and found that there has been a tendency for an increase in independence since 1994.

The Cardoso government sought to institutionalize the BCB's independence by granting the central bank governor fixed tenure that would not coincide with political cycles, but such a move required a constitutional amendment. With fierce opposition from leftist parties and without the prospect for securing the three-fifths vote required for a constitutional amendment, the proposal muddled through Congress very slowly, and it was never voted on in the Chamber of Deputies during Cardoso's two terms.[+] During 2002, with the victory of the left-wing Workers' Party's candidate in the presidential race seeming unavoidable, preserving central bank independence earned during the Cardoso presidency gained renewed attention, but no proposal was formally approved by Congress.

After taking office in January 2003, President Luiz Inácio Lula da Silva and his economic team pursued remarkably conservative economic policies both to fight inflationary pressures and to gain investors' confidence. Granting the BCB formal independence was one of them. With the support of the Lula government and opposition parties, Congress approved and promulgated a constitutional amendment to Article 192 on financial institutions in May 2003, thereby opening a door towards granting formal independence to the Bank. Yet, the Lula government found strong opposition within its legislative coalition, especially the president's own Workers' Party and other leftist parties. As such, despite many talks about central bank autonomy, the government did not vigorously pursue its realization.

During this period, segments of Congress and even Lula's vice president made public demands that the BCB lower interest rates set high to offset inflationary pressures. BCB Governor Henrique de Campos Meirelles was also under constant attack in a series of scandals that allegedly involved him. Then in August 2004 President Lula issued a decree (Medida Provisória no. 207) granting the central bank governor the status of a minister. The national press reported that Lula issued the decree to protect the BCB governor.[¥] However,

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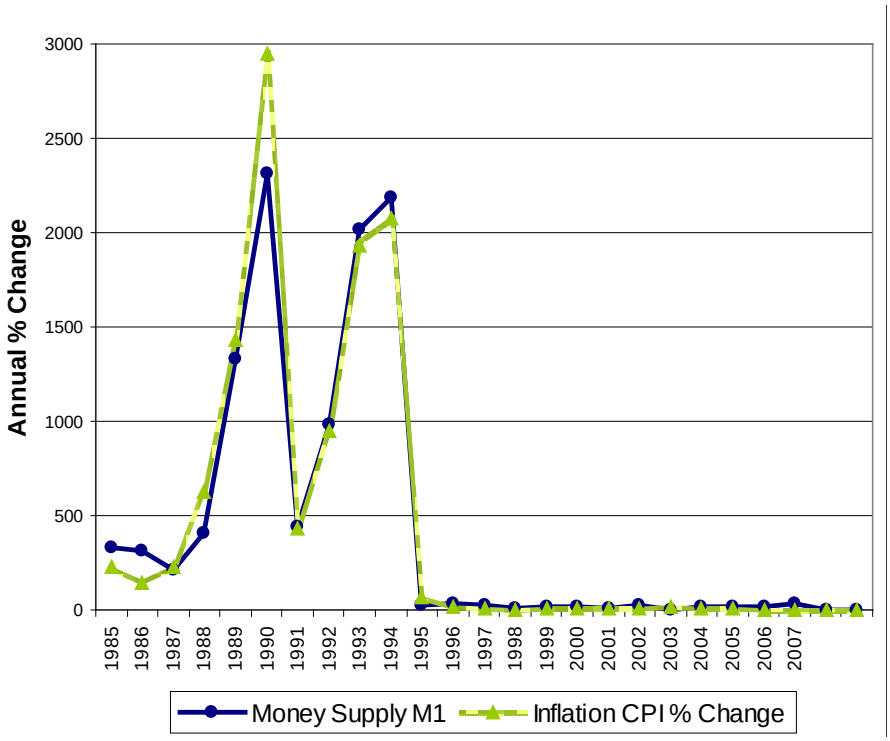
∗ This continues to be the structure of monetary decision making under President Lula (2003-06; 2007-present).

+ The author of the proposal was José Serra, Cardoso's key ally in the Senate before he joined the government. Serra proposed the bill in November 1997 and the Senate approved it in 1999, but it was subsequently tabled in the Chamber of Deputies.

¥ With the ministerial status, any charge against the BCB governor must be handled only by the Supreme Federal Court. Without such status, the BCB governor would have to answer any charges and questions at the lower courts, which would make it impossible for him to perform his duties as the BCB governor.

proponents of central bank independence immediately and severely criticized this measure. Congressional and legal disputes followed. Eventually, the decree was converted into law and the constitutionality of the measure was upheld by the Supreme Federal Court, but with a remark by the Court's president: "With the upholding of the decree, we will have a central bank governor who will be subject to the appointment and dismissal by the President of the Republic. As such, the intended autonomy of the Central Bank is incompatible with this model."*

Based on statutory documents and anecdotal evidence, we consider the BCB as legally and effectively dependent until 1995 and effectively independent throughout the two Cardoso administrations (1995-98; 1999-2002) and the beginning of the Lula government. We consider the BCB's independence diminished once again from August 2004 with the issuance of the controversial decree and its conversion into law (Law No. 11036 of 2004). Article 2 of the law reads "The rank of Governor of the Central Bank of Brazil is at this time transformed into the rank of Minister of the Republic" (Brazil 2008). A consensus exists among leading works on central bank independence that a central bank is not independent if its governor is subject to at will appointment and dismissal by the head of government as implied by the ministerial status. Therefore, Brazil's current model compromises the Bank's independence even though the BCB continues to enjoy relative autonomy *granted informally by the president*.

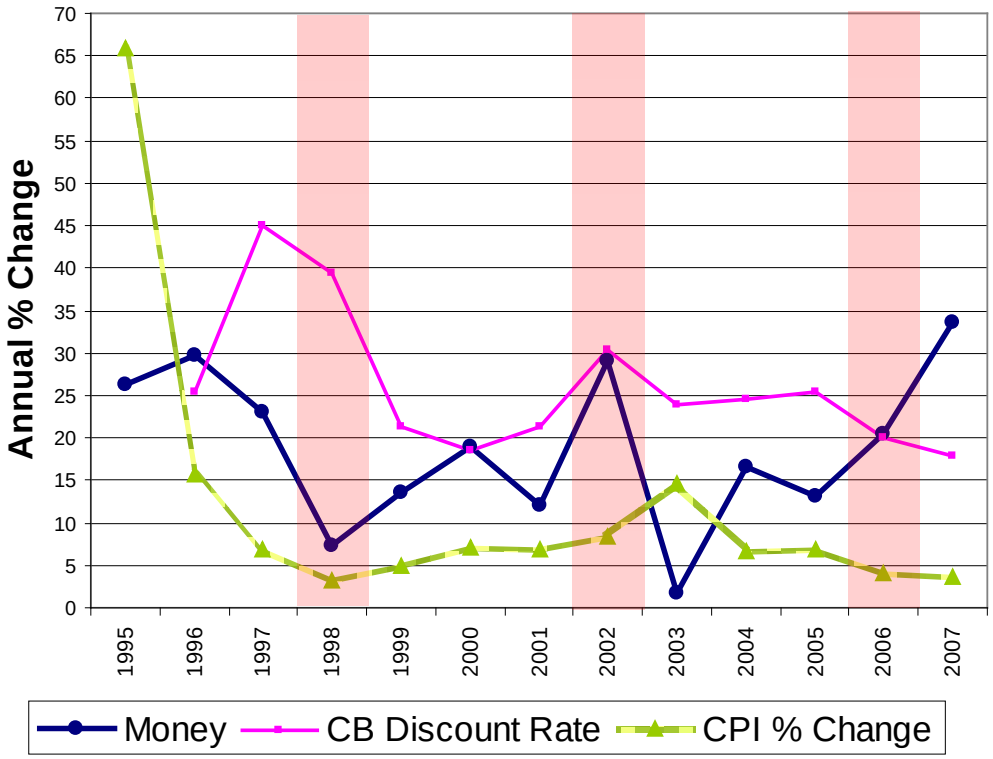


Source: *International Financial Statistics*, International Monetary Fund, online version.

Figure 1. Inflation in Brazil, 1985-2007.

* "Meirelles tem status de ministro," *Correio Braziliense*, 6 May 2005: A-11.

Brazil's post-authoritarian economic history shows the pattern consistent with the evolution of BCB independence depicted in this chapter. In the earlier years, Brazil experienced enormous economic instabilities and its economy was literally a mess. As Figure 1 shows, triple digit inflation was common during this period, exceeding 3,000 percent in 1990. The central bank increased the money supply to keep up with inflation, which fueled inflationary pressures even more. Successive governments launched numerous stabilization measures to no avail. Between 1985 and 1994, Brazil implemented at least nine major stabilization plans and underwent six different currencies to fight chronically high inflation and balance of payments crises.* During the period of only one decade (1985-1995), there were 14 finance ministers and 15 central bank presidents.



Note: The shaded vertical lines denote presidential and legislative election years.
Source: *International Financial Statistics*, International Monetary Fund, online version.

Figure 2. Inflation and Interest Rates in Brazil, 1995-2007.

Economic stabilization finally came to fruition with the success of the Real Plan in 1994-95. Inflation declined from the annual rate of 2,076 percent in 1994 to 66 percent in 1995 and 6.9 percent in 1997 (see Figure 2). The BCB served as a gatekeeper of inflation and guardian of economic stability in the post-Real era. Even under recurrent pressure by politicians and businesses to reduce interest rates, which are set primarily to achieve inflation targets, the operationally independent BCB has been able to pursue a conservative interest rate policy.

* See Baer and Paiva (1998) for Brazil's economic stabilization plans.

Data in Figure 2 evince that inflation has been respectably low in Brazil since the mid-1990s, and there are no detectable electoral or partisan cycles with respect to monetary policy, be it the BCB discount rate or money supply. Therefore, even without formal independence, de facto independence has worked to stave off political business cycles and provided relative price stability.

Nevertheless, it appears that informal independence has not been able to generate the degree of credibility needed to repel speculative attacks during challenging times. The first test of credibility ensued after the 1997 Asian financial crisis, followed in 1998 by Russia's economic collapse. International investors speculated that Brazil was next in line for an economic crisis. By November, the country's international reserves that amounted to nearly US $75 billion in April dwindled to US $41 billion, and Brazil's crawling peg exchange rate regime was under constant attacks. The government raised interest rates to nearly 40 percent annually to protect the exchange rate arrangement and prevent capital flight, but international reserves continued depleting, forcing the government to negotiate emergency loans with the International Monetary Fund. The crisis eventually resulted in the abandonment of Brazil's crawling peg in January and the replacement of the central bank governor in March 1999.

The second test of credibility took place in 2002-2003 in the midst of uncertainty regarding the successor to President Cardoso. The prospect for Lula's victory, a former union leader candidate seen as a radical leftist, was frightening to both domestic and international investors. The BCB's independence that generated relative economic stability during the Cardoso terms was not anchored by law. Since autonomy was granted by discretion, it could also be taken away at will, and there was no guarantee that the next president would appoint a conservative individual as the BCB governor. With the country's currency rapidly losing its value and fear of capital flight and return of high inflation, the BCB raised the overnight lending rate to close to 30 percent, but the market remained wary about the next government's economic policy and thus the country's economic prospects. Upon assuming office in January 2003, Lula sought to calm investors by pursuing unexpectedly conservative economic policies, including his appointment of an internationally renowned investment banker, Henrique de Campos Meirelles, as the BCB governor. The high interest rate policy also continued throughout Lula's first term, and the fear of economic instability due to political succession gradually subsided.

IV. CHILE: DELEGATION WITHOUT DEMOCRACY

In contrast to Brazil where the independence of the central bank is dependent on the will of the president, in Chile it is firmly entrenched in the law. Since its return to democracy, Chile has been viewed as having one of the most independent central banks in the world (Boylan 1998). However, the road to autonomy came about through undemocratic means. On September 11, 1973 a military junta led by General Pinochet, responding to public unrest and vast economic problems, overthrew the democratically elected government of Salvador Allende. Initially, the junta had great success in stabilizing the economy. The inflation rate declined from 508.1 percent in 1973 to 31.2 percent in 1980. Likewise, the real GDP growth rate increased from -5.6 percent to 7.8 percent (Banco Central de Chile 1983, 46, cited in

Loveman 2001, 281). But in the early 1980s economic problems reappeared due to a combination of domestic blunders and an international financial crisis.

By 1987 the economy was beginning to recover and in 1988 the junta, in accordance with the 1980 Constitution, held a plebiscite to determine whether General Pinochet would be allowed to govern for 8 more years. Although Pinochet was confident going into the polls, he lost by a vote of 43 percent to 54 percent and elections were scheduled for December 1989 (Rector 2003). Two months prior to the election, the government passed a constitutional act giving the Chilean central bank broad independence that included: the expressed prohibition on financing public expenditures except during times of war, ten year term limits for board members, and control of the foreign exchange rate[*].

The timing of this constitutional change was not coincidental. Boylan (1998) argues that Chile's authoritarian leaders, recognizing their imminent loss of power, gave the central bank broad autonomy to protect their economic interests by limiting the policy options of the democratically elected government and maintaining orthodox economic policies. This was particularly important in Chile since the democratic opposition consisted of a large coalition of political parties that varied from moderate to extreme left. Although the new government could remove the central bank's legal autonomy, such changes would risk massive outflow of foreign capital (Boylan 1998). Comments by both opposition members and government supporters lend credence to this argument.

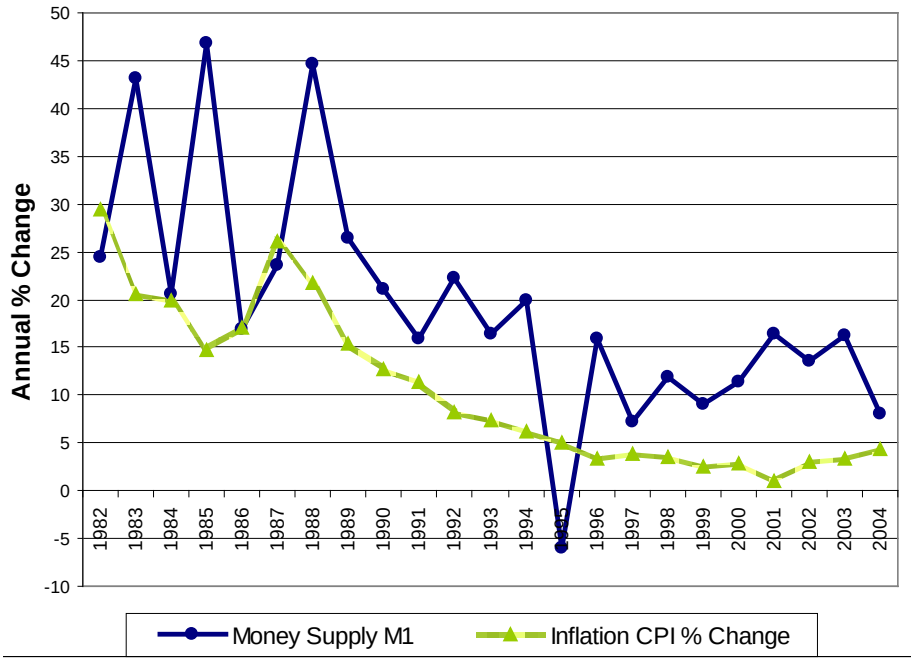
According to one report, Admiral Jose Toribio Merino, a member of the military junta, stated that central bank autonomy was implemented to deny the democratically elected government the ability "to introduce a socialist economy" (Latin American Markets 1989). Despite initial threats by opposition leaders to repeal the law on central bank autonomy, the democratic government did not follow through on its threats. This may be due in part to negotiations between the military junta and incoming leaders that led to the appointment of Andrés Bianchi Larre, the consensus candidate across the political spectrum, as the first independent central bank governor (The New York Times 1989). Since then politicians have mostly refrained from challenging central bank autonomy even when the opportunity presented itself. For example, when in 2003 central bank Governor Carlos Massad discovered that his secretary had been selling sensitive market information to a local financial group, there were not widespread public comments by politicians calling for the abolishment of central bank autonomy.

In addition to providing the central bank with legal autonomy, the law governing the Chilean central bank also increased de facto independence. Between 1981 and 1989, before the law went into effect, the average term of central bank governors in Chile was approximately 13.6 months. In contrast, after the central bank was given autonomy in October 1989, the average term of central bank governors jumped to 54 months[+], an increase of almost 400 percent (Central Bank of Chile official website at www.bcentral.cl/eng/).

∗ Law 18,840, which gave the central bank autonomy, can be found at http://www.bcentral.cl/eng/about/basic-constitutional-act/index.htm.

+ This was for the time period between December 1989 and December 2007.

The broad autonomy given to the Chilean central bank has proven effective as Figure 3 demonstrates. During the 1980s, even under the economically conservative, heavy-handed military dictatorship, Chilean inflation averaged 21 percent. Since 1990 the average inflation has been 7.92 percent. Moreover, Chile's positive economic performance extends beyond monetary stability. Although many Latin American countries--Argentina, Brazil, Mexico, and Peru to name a few --were hit by economic crises in the 1990s and 2000s, Chile has been enjoying strong and sustained economic growth. In fact, Chile has been one of the region's fastest growing economies and the International Monetary Fund's poster child for market-oriented economic reforms. While it is difficult to determine exactly how much of this success can be attributed to the central bank's legal and effective independence, there is no doubt that it has provided price stability and a safe investment environment needed for the economy to grow.



Source: *International Financial Statistics*, International Monetary Fund, online version.

Figure 3. Inflation in Chile 1982-2007.

CONCLUSION

A politically independent central bank deters manipulation by politicians of monetary policy instruments and thus is believed to bring about price stability and promote healthy economic performance. Since the 1990s, scholars have attempted to gauge de facto central bank independence in addition to legal independence. This new approach stems from the understanding that while a central bank may be independent in law, it may be politically controlled in practice. The problem may be particularly pronounced in developing countries where institutions are generally weak.

This chapter examined central bank independence in words and in deeds. We reviewed some of the most commonly used indices of central bank independence and problems associated with these measures. Most studies focused on statutory independence but the Cukierman measure of de facto independence, based on the turnover rates of central bank governors, gained prominence over the last decade. We analyzed the implications of these debates with two Latin American countries—Brazil and Chile. Brazil is a country where the central bank gained operational independence in the mid-1990s without legal changes. Despite the improvement in the financial stability of the country, absent a constitutional guarantee the Brazilian central bank remains politically vulnerable, and the credibility of prudent monetary policy is not strong enough to deter speculative attacks during sensitive moments. The Brazilian experience is in contrast to the Chilean case where the outgoing military government constitutionally guaranteed the central bank's independence two months prior to Chile's return to democratic rule in 1990. Initially the democratic opposition threatened to repeal the law giving broad autonomy to the central bank. However, low inflation and strong economic growth have helped the bank maintain a high level of de jure and de facto independence despite a massive scandal in 2003.

Our findings have an important implication for the study of central bank independence and for those contemplating granting the central bank greater autonomy. We believe that the de jure-de facto discrepancy that characterizes many developing countries will lessen as countries transition to democratic rule and the rule of law strengthens. As democracy strengthens, formal rules and institutions matter more, and statutory independence of central banks becomes more important. In a global economy in which economic crises transmit across countries instantly, having strong institutional credibility is vital to avert speculative attacks. Neither de facto independence without legal reinforcement nor legal independence without substance can offer this shield, but central banks that are constitutionally and effectively independent are better positioned to provide economic stability.

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