

# Independence, Credibility, and Communication of Central Banking

Ernesto Pastén  
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editors



Banco Central de Chile / Central Bank of Chile

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Empirical models have failed to explain inflation behavior over the last 20 years in most developed economies. The unusual inflation dynamics—the ‘missing deflation’ during recessions and the ‘missing inflation’ during recoveries—points to a failure of Phillips curve predictions. Several hypotheses have been proposed to explain the ‘twin puzzle’ phenomenon while at the same time have imposed challenging implications to conduct monetary policy. It is of utmost importance to understand the challenges for monetary policy conduct in an environment where inflation dynamics is hard to unravel. This volume contributes to the study of the ‘twin puzzle’ phenomenon and the challenges facing monetary policy. It gathers a selective group of distinguished scholars and policy makers to discuss the latest academic findings on inflation dynamics.

*Primavera*  
Eugenio Guzmán Ovalle  
Oil on canvas, 63.5 x 40 cm  
Collection of the Central Bank of Chile



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Ernesto Pastén

Ricardo Reis

*Editors*

Central Bank of Chile / Banco Central de Chile

Series on Central Banking, Analysis,  
and Economic Policies

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ISBN (print) 978-956-7421-67-1

ISBN (digital) 978-956-7421-68-8

Intellectual Property Registration 2020-A-2881

ISSN 0717-6686 (Series on Central Banking, Analysis, and Economic Policies)

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The articles in this volume are revised versions of the papers presented at the Twenty-third Annual Conference of the Central Bank of Chile on Independence, Credibility, and Communication of Central Banking, held in Santiago on 22-23 July 2019. The list of contributing authors and conference discussants follows.

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# INDEPENDENCE, CREDIBILITY, AND COMMUNICATION OF CENTRAL BANKING: AN OVERVIEW

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The institution of central-bank independence is often lauded as a great conquest of the accumulation of knowledge and the sensible setting of policy. The economic literature is filled with arguments for why an independent central bank would lead to better outcomes. To this prior, the experience of the last couple of decades has added the supporting data. Independent central bankers have been, for the most part, able to keep inflation under control despite no lack of shocks and macroeconomic volatility. Whether during the Global Financial Crisis, through individual country slumps, or at the trough of the pandemic recession, independent central banks were typically part of the solution rather than part of the problem. Attacks on the independence of a central bank nowadays typically generate a strong pushback from the press and civil society.

One important reason why this independence seems so solidly established is that central bankers made a priority out of having credibility in their policies. Unlike many other areas of policymaking, renegeing on previous promises is rare, and there is a constant emphasis on the predictability of rules. Even changes of opinion that are justified by new data are endlessly explained and defended. Large swings in policy typically follow months of preparation, public discussion, and transparent procedures that highlight pros and cons. Like any other policymaker, central bankers sometimes make decisions that seem to be mistakes after the fact. However, they have always been able to point to the arguments before the fact that led to those decisions.

*Independence, Credibility and Communication of Central Banking* edited by Ernesto Pastén and Ricardo Reis, Santiago, Chile. © 2021 Central Bank of Chile.

This credibility is partly derived from technical expertise. In many countries, the central bank has earned a reputation for being the premier source of independent rigorous economic analysis, and it has opened its analysis to the scrutiny of academics and other experts.

In a democracy, it is not enough to present supporting research and to convince the experts. For a policy to be credible, the general public needs to understand it and the reasons behind its implementation. For a central bank to be independent, it must communicate citizens its mission and the way it goes about it. In the other direction, communicating a policy is the way to make it credible, and being open and accountable is the acceptable way to yield unelected power in a democracy. For an independent central bank, communication is a policy tool in itself. Through its control of future interest rates and monetary conditions, the central bank affects expectations of the future today and is able to steer the economy.

Independence, credibility, and communication are then the three legs on which the modern institution of a central bank rests on. This book collects chapters presented at the annual conference of the Central Bank of Chile, at the time it commemorated its 30th anniversary of its independence. It was fitting to devote the conference to frontier research on the three legs of central banking. Not just to reassess whether the legs remain stable and fit for their purpose, but also to reflect on how they can be improved and adjusted to the challenges ahead.

The book is structured into four blocks of chapters. The first three blocks follow the topics in the title of the Conference: Independence, Credibility and Communication of Monetary policy. The last block closes the book with one chapter documenting an application of concepts in all other chapters to an experience of a regime change in the conduct of monetary policy in Chile.

The first block begins with a chapter which is an extended version of the keynote lecture given by Kenneth Rogoff about the main challenges he sees ahead for independent central banks from a broad perspective. This paper refers to the legitimacy of central bank independence and its interplay with other challenges, such as the role of central banks in inflation control, stabilization and whether to extend its mandate in a world with low inflation, how to deal with financial crises and large-scale fiscal policy, and to keep monetary policy effectiveness when interest rates are persistently close to or below zero.

The other two chapters in this block study specific aspects of independence about its causes and determinants. One chapter is

empirical, by building new measures of independence for emerging economics, and seeing how resilient central banks were after the Great Financial Crisis. The other chapter considers fluctuations in the political pressure that central banks are subject to. These arise because the general public reacts to perceived failures and successes of the central bank, and politicians feel more or less pressured to deliver on their short-term goals. The crisis required that central banks engaged in some lender of last resort, cooperated with fiscal authorities in stimulus packages, and revised the regulation of banks by different government entities. Across all three dimensions, new lines had to be drawn in the separation between the central bank and the government. Independence was re-defined—in some ways strengthened and, in others, weakened. The pandemic recession of 2020 promises to offer new challenges to independence.

The next block is composed of two chapters focusing on the credibility of monetary policy when countries are under fiscal stress. The conference took place well before the 2020 pandemic struck and so before the large run-up in public debt in advanced and emerging economies alike. The lessons from these two chapters are today even more prominent. Highly indebted countries with dismal growth prospects can employ austerity, default, or inflation to deal with their public debt. The reality of most cases is that there is a mix of all three, used to different extents. Often, a little more of one is perceived as allowing for less of the other two, but as the chapters in this book show, the connection between the three is complex and delicate. It may well be that some policies make several of these dimensions worse, as they can trigger economic forces that feed off each other. While every economist is trained to learn that economies in fiscal trouble often resort to hyperinflation, less appreciated is that a fiscal crisis also comes with financial repression. This is because it is not only strictly monetary policies that affect fiscal resources but macroprudential policies as well. Some of the key insights that have shaped our understanding of the credibility of central banks under fiscal pressure extend to thinking of the central bank as a financial regulator. Others are more novel and point to dangers and opportunities of actively using macroprudential tools.

The next block includes three chapters devoted to communication. Economic science has made great strides in this field by going beyond whether central banks should communicate or not, to how they should do it. These chapters point to trade-offs that arise with different ways to communicate. They provide concrete ways in which communication flaws can endanger the credibility of central banks, and they show

that there is a fine line between credible communication with financial markets and credible independence from them. These chapters enlarge the set of actors to be considered in these discussions, as policymakers also must communicate within heterogeneous policy committees, and the general public is diverse and has many other demands for its attention.

The last chapter applies these concepts and many others to Chile's experience with floating its exchange rate in 1999. Exchange-rate policy is a dimension of central banking in which credibility is more central, communication has to be more careful, and independence is put more to the limit. When intervening in foreign-exchange-rate markets, central banks face the consequences of their choices in real time, and instantly experience any lack of credibility. Communication slips can easily change beliefs and trigger sell-offs. Crises can quickly become the catalyst to deep recessions and revisions of the independence of the central bank. The Chilean experience illustrates well how the three legs of central banking are each complicated and nuanced, and how their soundness depends on how they interact with each other.

Our hope is that the lessons from this book both inspire future research and help to guide future policy. Several leading central banks have been going through a revision of their mandate, and as societies focus on different objectives for the medium run, there are legitimate questions on what the role of the central bank should be. These themes will surely lead to many discussions. May those discussions be independent of other interests, credible in their arguments, and well communicated.

A brief non-technical summary of the chapters in this book follows.

**Risks of Central-Bank Independence**, by Kenneth Rogoff. This chapter is an extended version of the Conference's keynote lecture. It argues that central banks have been victims of their own success: Because inflation has been under control for so long, society has started to question the role of central banks. The author stresses that the performance of central banks in the challenges ahead is the best argument for legitimacy of central banks, for which independence has been the institutional foundation where the central banks' success stands. The chapter reviews main challenges and proposes some ways forward.

The first of this list of challenges is the control of inflation. Traditionally, high inflation has been the problem central banks have to deal with; today it is too low inflation. This opens a question on the role of central banks in stabilization and whether the mandate of central banks should be expanded. This is the second challenge. The

third is the endowment and use of emergency tools for central banks to manage financial crises. The fourth challenge is how central banks should deal with large government debt in exceptional situations in a world of low interest rates and low inflation, which may lead many to think that government spending is a cost-free lunch. The last challenge has to do with the standard policy toolkit of central banks, which is very limited when interest rates are at zero or close to zero for prolonged periods of time. This chapter elaborates on the author's views to address each of these challenges. Overall, it is a call for a delicate balance between rules and flexibility in the conduct of monetary policy.

**The Transformation and Performance of Emerging Market Economies Across the Great Divide of the Global Financial Crisis**, by Michael Bordo and Pierre Siklos. How does the strength of central-bank institutional development benefit the economy? To tackle this question, Professors Bordo and Siklos evaluate in this chapter the performance of a number of emerging markets before and after the Great Recession of 2008–2009 and relate it to an index of institutional resilience they propose.

This index combines information capturing the degree of central-bank independence, transparency, and governance, but also political economy indicators capturing the level of political distress that central-bank institutions must bear. As this chapter recognizes, the strength of institutions is only tested at times of questioning of their roles, during large crises and episodes of political turmoil. Some emerging economies suffered political distress before the Great Recession; others have been exposed to it to different extents in later years. This heterogeneity sheds light on the benefits of strong central-bank institutions in global shocks, financial shocks, credibility shocks, and trade shocks.

The sample covers a total of 29 advanced and emerging economies, including Chile, from 1998 to 2017. The degree of central-bank independence has not experienced noticeable changes in Chile in this time window as well as in most countries, which reflects the great consensus on the importance of independence. The degree of transparency has been changing substantially in all countries toward more openness in central-bank decision-making. The improvement is largely heterogeneous but with a similar trend for both advanced and emerging economies. In contrast, central-bank governance has shown signs of deterioration, especially for emerging economies. On a different front, most countries have moved toward exchange-rate flexibility, but very few have reached full flexibility—most notably, Chile among them.

Overall, including other seven indicators, the institution resilience index shows that developed countries tend to have higher institutional quality than emerging markets, and the gap has been slightly widening through the sample. Interestingly, resilience fell after the Great Recession in developed countries, while it increased in emerging economies, but both changes did not last long. Although there is substantial heterogeneity in the resilience index across countries, it looks more volatile in emerging economies. In turn, one dimension where institutional development may materialize is on central-bank credibility, which, according to alternative measures analyzed, has fallen after the Great Recession, but less so in countries where the index of institutional resilience is the strongest.

**Inflation Targeting under Political Pressure**, by Mariana Halac and Pierre Yared. In a similar vein to the chapter by Professors Bordo and Siklos but from a different perspective, professors Halac and Yared theoretically study the optimal monetary-policy implications of political pressures. Although always important and even more in recent years, this aspect of the implementation of monetary policy has rarely been considered.

Their model is a classical Barro-Gordon setup, where they introduce “political-pressure shocks” as stochastic variation in the weight on output relative to inflation in the objective function of the central bank. Realizations of larger weight on output are interpreted as the result of episodes where political authorities or the political situation make the central bank more prompted, for instance, to tolerate higher inflation in response to shocks or to accommodate fiscal stimulus. Two critical ingredients in the analysis are, first, the repeated nature of the interaction between the central bank and private agents, which takes the form of an infinitely repeated game and, second, the assumption of lack of commitment, as agents’ expectations are rational and therefore must be consistent with the monetary policy implemented in equilibrium.

In this context, political pressure generates interesting aggregate dynamics. First, higher political pressure may lead to higher or lower inflation. Second, when political pressures do affect inflation, it does not need to be a monotonic relationship. In general, even in the absence of political pressure, the policy of the central bank is self-enforcing in the sense that a deviation from that policy may trigger suboptimal high inflation in the future. This works as a “threat” to the actions taken by the central bank. This threat works as an imperfect commitment device in the sense that the central bank’s optimal policy is to keep



inflation low, which in turn avoids expectations of future paths of high inflation, then high inflation is never observed in equilibrium.

With political pressure, this does not have to be the case. If the political shock is observable to private agents, political uncertainty may lead to higher inflation and output volatility around a single stationary path. But if political pressure on the central bank is not readily noticeable by private agents, aggregate dynamics are characterized by a rich Markov switching process, where episodes of high inflation alternate with episodes of low inflation. Switches between them are triggered when the level of political pressure reaches an endogenous threshold: If political pressure is low, the “threat” of future high inflation is enough for the central bank to resist and keep an optimal policy of inflation control. In such a case, inflation dynamics is characterized by a cap, such that stochastic variation in inflation occurs in response to shocks, but the central bank ensures that inflation does not get too high. In contrast, if the pressure is strong, the central bank may tolerate inflation higher than the cap, but not everything is lost. Private agents may understand that inflation will be high for some time, so expectations about future information are not necessarily de-anchored if high political pressure is a low-frequency event. However, if the high inflation is persistent, it creates expectations that the central bank is giving up on controlling inflation. This de-anchors expectations for longer than the political pressure actually lasts, and this leads to an episode of high inflation that is hard to revert.

**The Fiscal Footprint of Macroprudential Policy**, by Ricardo Reis. There is a large economic literature on the many links between fiscal and monetary policy. One of the main channels is that the two of them share an overall government budget constraint. Monetary policies, even if focused on inflation control, leave a fiscal footprint. They tighten or loosen the budget constraint that the fiscal authority must deal with. This chapter investigates this interaction of fiscal policy not with monetary policy but with macroprudential policy. Because there are so many dimensions to macroprudential interventions, the chapter focuses on one dimension that is common to many of them—banks having to hold more government bonds.

The first channel the chapter considers is the increased demand for government liabilities due to tighter policy. This raises the price of those bonds and relaxes the budget constraint of the government. Low policy interest rates and quantitative easing have a similar direct impact, so the chapter compares three policies’ fiscal footprint. On the

one hand, it concludes that monetary policy tends to have a larger fiscal footprint than macroprudential policy. On the other hand, it notes that because the channels are similar, we may expect them to be used in tandem. This provides a fiscal argument for concentrating these two policies within a single institution, the central bank.

The second and third channel discussed in the chapter arises in the context of a simple model in which macroprudential policy makes banks less prone to default, thus saving on potential bailout, but it also makes them less willing to extend credit that would raise tax revenues. This leads to four surprising results that the chapter applies to different historical experiences. First, in normal times, when there is neither a fiscal nor a financial crisis in sight, then tougher macroprudential policy makes rolling over the debt easier but lowers credit, which lowers future fiscal revenues. The more focused on the near term is a politician, the more they would like macroprudential to be tighter. This provides support for an independent central bank to conduct macroprudential policy to avoid these temptations. Second, when there is a financial crisis so bailouts are on the horizon, desires for financial stability and looser government budget constraints will coincide. There is no conflict between fiscal and macroprudential policymakers, as both want tougher macroprudential policy. Policy is credible because it is not challenged. Third, the chapter points to a novel “unpleasant macroprudential arithmetic”. If the fiscal authority pursues high public deficits, thus threatening to cause a fiscal crisis with sovereign default, then this will risk dragging the banking sector along. Macroprudential policy may then have to be looser in order to help the government finances and prevent the default. In some cases, the central bank is forced to engage in financial repression.

The fourth and final case arises when there is both a financial crisis and a fiscal crisis. The model in the chapter is independently interesting because it generates a doom loop—the worse the fiscal crisis is, the worse the financial crisis will be, and viceversa. This creates a new challenge for macroprudential policy. A too independent policymaker that completely ignores its fiscal footprint may have a policy that is too tight. That would make the fiscal crisis worse and, potentially, in itself endanger financial stability, thus making the policy self-defeating. Ignoring the fiscal footprint is no longer credible because fiscal problems spill over to financial instability. Communicating how to deal with these tradeoffs becomes key. Moreover, having tighter macroprudential policy leads to, after an unexpected fiscal shock, a larger loss for banks. Seemingly safer banks may become riskier, as safe government bonds default. A macroprudential policymaker that

ignores the fiscal consequences of their actions will lead to deeper crises.

The financial regulation and macroprudential policies that are set by central banks are often as important as monetary policies. As we re-think the independence and credibility of central banks relative to fiscal authorities, considering the interlink between macroprudential and fiscal policy is important. This chapter provides foundations for thinking about the trade-offs in this task.

**Fiscal Inflation and Cosmetic Defaults in a Small Open Economy**, by Francesco Bianchi. When public finances become unsustainable, countries are sometimes advised to restructure their public debt to avoid a descent into hyperinflation. This chapter gives a note of caution to this recommendation in a small open economy if it wants to get back economic stability and preserve monetary-policy independence. It argues that, although all sovereign defaults are painful for the defaulting economy, they do not always eliminate the spirals of high inflation, losses in output, and unstable public debt that ultimately caused the default. This happens when defaults are ‘cosmetic’: the repudiation of public debt is not enough to ensure the restoration of public-debt sustainability and to make it consistent with a monetary policy that stabilizes the exchange rate and inflation. The chapter then takes these ideas to interpret Chile’s macroeconomic history since the 1960s.

The mechanism proposed relies on expectations. A default in sovereign debt, in principle, helps to unload some of the fiscal burden and to recover monetary-policy independence. However, a cosmetic default does not create sufficient public-debt unloading, so agents keep considering the possibility of a new spiral down the road. This mere possibility creates inflationary pressure and thus devaluates the exchange rate. Monetary policy may fight against these forces creating a recession. But if these forces are too strong, monetary policy would give up its control of inflation, thus effectively losing its independence.

When interpreting Chile’s macroeconomic history since the 1960s through the lens of this model, the chapter argues that it can be divided into four distinct periods. First, in the 1960s, inflation was under control. However, fiscal instability was in incubation. It unleashed in the early 1970s and generated hyperinflation led by large primary deficits. The second period starts around 1974 and lasts until 1981, when monetary-policy dominance is restored with fiscal policy focusing on keeping deficits under control and monetary policy targeting a fixed exchange rate. This period of stability ended abruptly with the international financial crisis of 1981. The subsequent period

between 1982 to 1989 brought about a slow and painful recovery process, where reputation of fiscal discipline was slowly gained. The final period started in 1989 to nowadays, when the central bank was formally granted independence, inflation slowly receded, and Chile enjoyed stable growth. First implicitly and later explicitly, a fiscal rule introduced further credibility in fiscal discipline, thus ruling out expectations of explosive paths. As the model predicts, once uncertainty about fiscal responsibility vanishes, monetary policy can control inflation and the exchange rate remain stationary.

**Central Banking with Many Voices: The Communication Arms Race**, by Annette Vissing-Jorgensen. What are the economics behind informal communication of central banks with the general public? What do data tell us about informal communication? Is the outcome of informal communication inefficient and, if so, is there a way to improve it? These questions have received little formal treatment both on the empirical and theoretical fronts. Annette Vissing-Jorgensen provides some answers in this chapter, filling an important gap in our knowledge with this highly innovative and provocative chapter.

She starts by noticing two key ingredients of modern central banking that create incentives for informal communication. First, the institutional arrangement of central banks usually relies on collective decision-making through a policy committee. Naturally, each member of this committee has her/his own particular view about the state of the economy and what policy should be implemented. For instance, the Board of the Central Bank of Chile is composed of five members who all vote at every monetary-policy meeting while the United States' Federal Open Market Committee is composed of nineteen members out of which twelve vote at any meeting. Second, the current consensus on monetary policy is that central bankers should aim to not surprise markets. Central bankers therefore speak to the press, give speeches, and participate in other outreach activities. The ultimate goal is to make policies credible by being transparent but, at the same time, to reflect the input that they provide. As a result, monetary policymakers effectively shape markets' diagnosis about the state of the economy and their expectations about both future trends in the economy and monetary-policy decisions. Since central bankers are then weary of disappointing those expectations, the result is that communication, both formal and informal, becomes a tool for one individual member of the committee to increase their influence on final monetary-policy decisions.

Central banks are aware of these incentives. They have responded by typically following well-designed strategies of formal communication

involving statements, regular reports, and the designation of one or a few spokespersons. Yet, as this chapter carefully accounts for the United States, informal communication is common practice. In particular, this chapter reviews evidence from the asset-pricing literature, documents the Fed's concern about informal communication using released internal documents, and summarizes steps taken by the Fed to reduce the occurrence and effects of informal communication.

For its normative analysis, this chapter proposes a game-theoretical model of informal communication. The model boils down to a form of prisoner's dilemma, where the efficient outcome is to have no informal communication, yet, in equilibrium, there is plenty of it. This generates a cacophony that undermines the effectiveness of central banks on the management of expectations. It also reduces the quality of central-banking decisions. Professor Vissing-Jorgensen proposes ways to mitigate it. High transparency in describing the monetary-policy's best-reaction function is a way to diminish the incidence of informal communication on shaping the public's belief-formation process. In a recommendation that mostly applies to the United States, Professor Vissing-Jorgensen proposes to have a monetary-policy committee with fewer members. More generally, she also notes that more similarity in backgrounds and views across Board members would diminish disagreement among them and thus reduce the incentives of using informal communication. The other side of the coin is that more homogenous committees would lead to less rich monetary-policy decision-making.

**The Three E's of Central-Bank Communication with the Public**, by Andrew Haldane, Alistair Macaulay and Michael McMahon. This chapter proposes three E's as the principles for effective central-bank communication with the general public: Explanation, Engagement, and Education. To do so, the authors revise extensive literature, convey an empirical analysis based on both a survey of individuals and an experiment, and produce theoretical results by using a model.

The survey they use includes about 2,000 U.K. individuals. It was conducted by the Bank of England from 2001 onwards to construct an index of monetary-policy understanding by the public. The results are disappointing. In spite of the enhanced importance given by the Bank of England to communication and of all the efforts toward this goal made through the years, the general public's understanding of monetary policy is limited and seems to not have improved with time. Looking at disaggregated data yields a slightly better picture. The understanding of monetary policy has increased for those sections

in the sample which are more educated, have higher income, or are older. It is among the young, the poor, and the less educated that central-bank communication has found more difficulties. Another interesting result is that trust in the central bank tends to decrease after big downturns, such as the Great Recession in 2007–2009, and it then takes very long to recover. This suggests that trust in the central bank and the effectiveness of central-bank communication is hard to build but easy to lose.

To further shed light on these issues, this chapter also runs an experiment. They ask 285 individuals from the “general public” and a sample of first-year graduate students of Economics at the University of Oxford to read several documents that the Bank of England uses for communication. Some are simplified documents targeting the general public, while others target specialized audiences, like the Inflation Report and briefings of monetary-policy decisions. The simplified documents require knowledge equivalent to eighth graders, and the Inflation Report and the briefing of monetary-policy decisions require knowledge equivalent to college students. They conclude that, despite all the efforts, the communication of the Bank of England does not meet minimum standards of broad reachability.

Finally, this chapter also proposes a rational inattention model to further stress the importance of Explanation, Engagement, and Education as the three pillars of effective central-bank communication. The rational inattention model incorporates the “difficulty to process information” that may prevent individuals to incorporate certain types of information in their decision-making even when such information is readily available. About Explanation, they show that there is a tension in central-bank communication—simpler messages are easier to process and thus more likely to be incorporated in individuals’ decision-making but at the cost of having poorer information content. About Engagement, they show that using techniques to capture the public’s attention is an effective way to provide incentives to make the public make the effort of processing difficult information. Finally, about Education, they show that it increases the public’s capacity to understand complicated messages, including those about monetary policy. Advances on these three fronts improve welfare by allowing monetary policy to achieve better macroeconomic outcomes at lower social costs in terms of activity and employment.

**Improving U.S. Monetary Policy Communications**, by Stephen Cecchetti and Kermit Schoenholtz. This chapter shares with previous ones its goal of providing recommendations for improvement of central bank communication although relying on different sources

of information. They reach some conclusions also considered by the previous two chapters, while others are different or taken from a different perspective. Based on two dozen interviews to academics and policy makers, as well as their own reading of scattered literature on the topic, they identify three main areas for the improvement of central bank communication in the U.S.

Their first recommendation is a call to simplify monetary policy statements, but at the same time to keep and elaborate on dissent views. This way, on the one hand, central banks can reach the broadest possible audience for key monetary policy decisions while, on the other hand, reducing incentives for leaks and informal communication that undermine the effectiveness of monetary policy. Emphasis should be given, according to the authors, to reaching a form of “group accountability,” such that the rationale of monetary policy decisions should be explained and justification for dissents. Their second recommendation is to clarify the way that policy will accommodate changing conditions. This allows the general public to understand central banks’ decisions as a reaction function rather than inflexible statements. Thus, the general public could internalize more easily the changes in monetary policy decisions. Their final point is to highlight policy uncertainty and risks. This will give the public information about when it is more likely that monetary policy decisions can change, either because the central bank’s diagnosis about current conditions is not so clear or because it is likely that the current monetary policy will change in the short run.

**Comfort in Floating: Taking Stock of Twenty Years of Freely Floating Exchange Rate in Chile** by Elías Albagli, Mauricio Calani, Metodij Hadzi-Vaskov, Mario Marcel, and Luca Antonio Ricci. This chapter looks into the experience of Chile when launching a free-floating regime for the exchange rate, to stress the importance of effective communication, strong credibility, and well-established independence of central banks. When a stark policy shift is implemented, private agents respond accordingly. It is critical for the success of the policy shift itself and the achievements of its intended goals that these reactions are consistent with the policy. This can only happen when the policy shift is credible and well communicated, and the particular case of a floating exchange-rate regime is credible only if the central bank is independent.

The “fear of floating” has been a recurrent factor in the way in which central banks respond to external crises in emerging economies. It introduces a rigidity on the exchange-rate response to the crisis—it is often argued—which makes the overall adjustment of the economy

more costly. One obvious way to solve it is the implementation of a fully flexible exchange-rate regime, but such policy can only succeed if it eliminates the social costs that were feared of in the first place. Some feared costs of floating are the destabilizing effects of large swings in exchange rates over firms' balance sheets, surges in inflation, and suddenly reduced access to international credit markets. All these costs can be eliminated if a flexible exchange-rate regime induces the deepening of financial products that allow firms to hedge against large swings in exchange rates. This is the aspect this chapter focuses upon by using the Chilean experience.

A free-floating exchange-rate regime was implemented in Chile in 1999 after the lessons learned from the Mexican crisis in 1994 and the Asian crisis in 1998. This chapter documents a remarkable and progressive reduction in firms' exposure to exchange rates. First, firms reduced the mismatch in their balance sheets on the denomination of their assets and liabilities. Second, firms engaged in international trade started to massively participate in exchange-rate derivative markets, which in turn significantly grew. This allowed firms to avoid the effect of exchange-rate fluctuations on their costs and thus reduce the passthrough of exchange-rate swings to domestic inflation. It also allowed firms to have more access to international financial markets. All these effects—this chapter argues—strengthen the resilience of the real and financial sectors to external shocks. It also improved the performance of the Chilean economy to the Great Recession which happened some years later, when the flexible exchange-rate regime was solidly implemented. In fact, as this chapter documents, Chile was one of the least affected countries by this crisis among emerging economies.



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# Independence, Credibility, and Communication of Central Banking

Understanding the dynamics of inflation is one of the most important challenges that macroeconomists face. The long period of declining unemployment combined with persistently low inflation has proved a puzzle for traditional macroeconomic frameworks. This outstanding collection of papers digs deeply into the issue, providing refreshing new insights, both empirical and theoretical. The volume is a must read for anyone interested in researching inflation dynamics, as well as policy makers interested in knowing the state of the art on the subject. I recommend it enthusiastically.

*Mark Gertler*

*Henry and Lucy Moses Professor of Economics at New York University*

This book was ahead of its time in tackling a key issue that continues to puzzle policymakers and academics: why has inflation remained muted despite sharp falls in unemployment? The chapters explore a wide range of hypotheses and draw on the diverse country experience from an impressive group of authors. Their analysis provides important new insights and explores several theories that have previously received little attention —some of which appear to go some way to resolving the “missing inflation” puzzle.

*Kristin J. Forbes*

*Jerome and Dorothy Lemelson Professor of Management and Global Economics at MIT's Sloan School of Management*

Recent inflation dynamics have been a major puzzle for academics and policymakers. Missing disinflation during the Great Recession, an apparently weakened Phillips curve, missing inflation in the aftermath of the Global Financial Crisis are just some of the riddles. In the “*Changing Inflation Dynamics, Evolving Monetary Policy*” volume, world-class scholars give their expert takes and shed new light on these issues. Methodological diversity, creative thinking, and lucid presentation are the hallmarks of this volume.

*Yuriy Gorodnichenko*

*Quantedge Presidential Professor of Economics at University of California, Berkeley*



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