European Journal of Business and Management www.iiste.org
ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)
Vol.8, No.9, 2016

Modern Central Bank Communication

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Abstract
Theory and practice of monetary policy have changed significantly over the past three decades. An important part of today's monetary policy is the management of the expectations of market participants. The most effective way to manage the expectations of market participants is the publication and explanation of the central bank's forecast of inflation, output, and the instrument rate. The importance of the appropriate communication channels has grown due to the greater independence gained by the central banks and the accompanying need for accountability. With an independent central bank, the public needs to be able to judge whether or not it has succeeded in using the appropriate instrument to achieve its goal. Accountability is the quid pro quo of the central bank independence and communication facilitates the means to transparency which is important for accountability. Hence communication plays an important role in explaining to the public both the instruments and the goals as well as the reasons behind the decisions made by the authorities (Winkler, 2000). This is especially true in the case where a central bank chooses to follow a strict policy rule, such as inflation targeting.

1. Introduction

In the past, the communication practices of central banks could best be described as secretive and ambiguous thus giving rise to a certain mystique surrounding their activities. In contrast, communication today is considered to be an essential and critical part of modern central bank policy making. Over the past fifteen years central banks have placed more and more emphasis on the amount of information they release to the public as well as on its timeliness and quality. This new open approach has been welcomed by the public and has improved the efficiency of different monetary policy strategies. This article aims to present the evolution of both the economics and the political economy of monetary policy in the last three decades – first the Great Moderation and then the Financial Crisis – as a story of two intertwined tales: on the one side the tale of how to govern money and interest rates in the short run; on the other side the tale of how to design in a longer horizon the monetary architectures. In the tradition the two tales are told separately, where the academic scholars preferred to focus essentially on the first perspective while only the central bankers and partially the policymakers were also sensible to the engineering of the monetary settings. The big innovation in the modern monetary policy was the progressive merger of the analysis of the macroeconomic effects of the public choices in the monetary games played day by day (monetary policy) with the study of the structural features that characterized both the monetary players – governments and central bankers – as well as the rules and institutions of the monetary games that shape goals and incentives of the players (central bankers and other economic agents). The article also shows the progressive merger in a pedagogic way, dedicating the first part to monetary policy and the second one to central banking. This introduction presents the overall story of the two tails in a systematic and integrated way.

1.1. The Role of Central Bank Communication

Although a strong commitment to a nominal anchor is associated with significant benefits, establishing and maintaining such a commitment tends to be easier said than done. The discussion of the time-inconsistency problem indicates that there are always pressures to renege on that commitment. An increased transparency and accountability of central bank can be reached by communication tools which play an important role in helping central banks maintain a strong commitment to a nominal anchor. It is proved by different studies that the publication of the inflation objective increases the accountability of the central bank. Hence, it promotes the commitment of the central bank in delivering a low and stable inflation in helping the economy. Such objectives give the public a "precise yardstick for measuring how the central bank is doing". The best evaluator of the central bank is the public which appreciate its success in maintaining the price stability and in this regard they measure the gap between the inflation rate and the declared inflation objective. In this context it is very difficult for the central banks to take policy actions inconsistent with the stated objective because the deviations would be observed by the public and thus would be more likely to be called into question. Another important thing that central banks should consider is the way they declare the inflation objective. If the inflation objective is declared as a numerical value rather than a range (this is case for the inflation targeting regime) the more accountability of the central bank is enhanced. Is it possible to change the inflation objective at the recommendation of the government? The time-inconsistency problem is present, because by raising the numerical inflation objective the expansionary monetary policy may generate higher employment and output for the country in the short run which is not the central banks long term objective. Being transparent and declaring the numerical inflation

objective makes it much harder to engage in such opportunistic behavior. The loosing of the credibility could be devastating for a central bank so there are strong incentives not to change the inflation objective.

Generally, we find two important communication challenges regarding the commitment to an explicit numerical inflation objective. First, a central bank must make clear that this commitment should not be understand as an action that the central bank will continuously maintain inflation at the declared rate, due to economic development it may vary over a time horizon. Taking in consideration the shocks, for the central banks generally is not desirable to keep inflation at a specific level. Thus, a commitment to keep inflation low and stable should be interpreted in a probabilistic sense that is, policy will act in a manner that keeps inflation close to the inflation objective on average over time, and unusually large shocks may result in more persistent deviations from this objective. A second challenge is connected with the fact that a monetary policy commitment to an inflation objective is oriented toward minimizing variability in the real economy as well as keeping inflation low and stable. These challenges highlight the fact that central bank projections for economic activity and inflation play an important role in maintaining a strong commitment to a nominal anchor. The central bank must explain how the economic outlook shapes its current policy actions as well as the expected path of policy. Moreover, as the economy deviates from those forecasts, as it inevitably does, the central bank must explain how policy will adapt to achieve the broad economic goals of price stability and maximum sustainable employment. By publishing the forecasts of inflation, the central bank helps better anchoring inflation expectations, thereby enhancing the effectiveness of its monetary policy actions. Another benefit that derives from publishing of such forecasts is the fact that such the forecasts can be used to highlight the analysis and reasoning behind monetary policy decisions, which can help the public to better understand monetary policy actions and strengthen the central bank’s credibility. There is a broad international consensus that the central bank should have full authority to determine the short-run setting of its policy instruments, without any external interference. In addition, central bank communication is crucial in promoting public support for maintaining low and stable inflation. In a democratic society, every public institution is eventually accountable to the public, and the establishment of transparent objectives and of a clear policy strategy plays an essential role in facilitating that accountability. The old adage correctly states that "Actions speak louder than words," and, clearly, just announcing an objective for inflation does not mean anything unless the actual policies pursued by the monetary authorities are consistent with the objective. Communication, do matter if this communication help to ensure that the appropriate actions will be taken in order to strengthen the public's confidence that the central bank will continue to act in a manner consistent with its long-run objectives. The increase in transparency and accountability, which results from clear communication about inflation objectives and about how monetary policy will be conducted to achieve these objectives, creates stronger incentives for central banks to avoid the pursuit of short-run overly expansionary policies. This approach also helps to establish a credible commitment to pursuing policies that keep inflation under control and economic activity growing on a sustainable path. Today, central bank communication is right at the heart of monetary policy. It is actually a monetary policy tool in itself. Even for those with little interest in central banking, it is difficult to avoid the pronouncements in the newspaper. Those people may even end up reading the articles, if only because central bank communication can have a major impact on financial markets and hence on their savings. Central bank communication was not always so extensive. Backing to the days when the most important central bank in the world (FED) would not even publish its interest rate decisions; rather, it would let the outside world derive them from the market reaction. Today, this sounds unbelievable. In 1994, the Fed decided to make its interest rate decisions public. The youngest central bank in the world, the European Central Bank (ECB) was born in 1998. This coincides with a new era for central banking. There are two main developments during this period that steer in the raise of the importance of communication for central banks. First, the increasing independence of central banks made it more important to communicate with and be accountable to the public. Second, against a backdrop of liberalizing financial markets, the effectiveness of monetary policy became more and more dependent on steering expectations of future interest rate policy.

In the first case, the main challenge for the ECB was to reconcile three attributes of central banks that do not immediately fit together: being very powerful and independent yet unelected. The best example of a country that had done this successfully was Germany. This model has worked because, by sticking closely to its mandate, the Bundesbank has gained the trust of the people. Bundesbank has worked actively in communicating the motivation for its mandate and its plans to achieve it. This inspired the ECB’s founding fathers to give the ECB an equally clear and narrow mandate oriented towards price stability. ECB has established trust by clearly communicating that mandate and, of course, delivering it. Building trust among the 400 million citizens of the euro area is a major communication challenge. ECB communicates in 19 countries using 23 different languages. In all these countries, citizens’ expectations are different. The ECB also plays its part in building trust by opening up to the public. Focusing on transparency: for example, the ECB was the first major central bank to offer monthly press conferences. But in these challenging times for the economy, ECB have taken another step forward: it publishes summaries of the monetary policy meetings of the Governing Council. This is an additional

way to explain its actions and the discussions that inspired them.

1.1.1. The International Experience

Naturally, we can ask whether communication about inflation objectives and about how monetary policy is conducted to achieve these objectives actually helps strengthen the commitment to fostering low and stable inflation, and thereby produces better economic outcomes. More specifically: Does communication of inflation objectives lead to increased public support for the central bank? Improved inflation performance? More firmly anchored inflation expectations? Over the past decades, most of the major foreign central banks have adopted frameworks which have the overriding objective of bolstering public confidence that policymakers will act to keep inflation low and stable. While self-declared "inflation targeters" are the most prominent in this regard, other central banks also have introduced explicit inflation objectives of some kind, generally in the form of a preferred inflation point or range.

1.1.2. Modern Monetary Policy and Central Bank Governance

Up to thirty years ago economic theory did not attribute importance to the concept of central bank governance. The institutional arrangements became important when the economic theory started to stress its role in determining the macroeconomic performances, i.e. during the New Classical Revolution.

The role of the central bank design and governance was confirmed in the New Keynesian analysis of the monetary policy. The theoretical bottom line can be summarized as follows: the policymakers tend to use the monetary tools with a short sight perspective, using the inflation tax to smooth different kind of macroeconomic shocks – i.e. real (Barro and Gordon, 1983) and fiscal (Sargent and Wallace, 1981) unbalances – trying to exploit the trade-off between real gains and nominal (inflationary) costs. The inflation tax finances the stabilization policies. But the more the markets are efficient the greater the risk that the short sighted monetary policies produces just inflation. In fact the rational private agents fully anticipate the political incentives to use the inflation tax, fully adjusting the nominal variables. In this framework the Friedman–Lucas proposition on monetary policy neutrality holds. Furthermore, the political inflation bias can dynamically generate greater uncertainty and negative externalities (such as moral hazard risks). The inflation tax is inefficiently used in a systematic way, becoming tendentially high and volatile and then producing only macroeconomic distortions. The inefficient use of inflation tax was empirically confirmed by the fact that the optimal taxation theory did not find any support in the data. The optimal taxation theory claims that the benevolent policymaker chooses the rate of any taxation – including the inflation tax – to minimize the present value of the social cost; consequently inflation and tax rates have a positive relationship. If the optimal taxation theory empirically fails it is natural to conclude that the government is not benevolent, being affected by inflation biases.

Therefore, banning the use of the monetary policy for inflation tax purposes becomes the social goal. The institutional setting gains momentum; the relationships (governance) between the policymaker – who designs the overall economic policy – and the central bank -which is responsible for the monetary policy – become crucial in avoiding the inflation bias. The more the markets are rational the more the rules of the game between policymakers and central bankers gain momentum (Barro and Gordon, 1983; Backus and Driffill, 1985; Rogoff, 1985; Lohmann, 1992). Central bank governance is a medal with two sides. On the one side, the central banker has to be independent, i.e. the central bank enjoys the ability to implement the non-inflationary monetary policy without any external (political) short sighted interference. The central banker becomes a veto player against inflationary monetary policies. On the other side, the central banker has to be conservative, where conservativeness refers to the importance that he/she assigns to price stability in its relation to other macroeconomic objectives. The conservativeness is the necessary step to avoid that the central banker himself/herself becomes a source of the inflation bias. Independence and conservativeness become the conditions to implement credible non-inflationary monetary policies. The trade-off between conservativeness and independence (Eijffinger and Hoeberichts, 1998) can be addressed using independence as a tool to implement conservative monetary policies. But the private agents trusts the central banker only if effective rules on accountability and transparency hold. In other words a conservative central banker is credible if he/she works in an institutional setting which guarantees independence and accountability, acting in a transparent way and implementing an effective communication policy.

The relationship between independence and accountability represents the core of the so-called central bank governance. The central bank governance became the institutional setting for implementing the day by day monetary policy: given the long run goal to avoid the risk of inflation, the modern central banker can also smooth the real business cycles (Bernanke and Gertler, 1995; Clarida, Gali and Gertler, 1999; Woodford, 2003), using monetary policy rules (Taylor, 1993; Henderson and McKibbin 1993; Walsh, 1995). Monetary policy becomes the final outcome of a complex interaction between three main components: monetary institutions, central banker preferences and policy rules (Persson and Tabellini, 1993; Svensson, 1995). In this respect the huge literature on central bank governance can be described as a two stage process. Initially, the scholars

involved in the field went on to verify the theoretical conjectures with comparative, institutional and empirical analysis. After constructing indices of central bank governance (Grilli, Masciandaro and Tabellini, 1991; Cukierman, Webb and Neyapti, 1992; Alesina and Summers, 1993), it has been attempted to determine whether and how the different indices could be considered as drivers in explaining the most important macroeconomic phenomena: inflation, public debt and interest rates, income and growth. Taking advantage from the first wave of studies on the monetary regimes – including the critical views (McCallum, 1995) – the literature did an important step forward considering the central bank governance as an endogenous (dependent) variable that has to be explained (Posen, 1995). Which are the drivers that can motivate the decision of one or more countries to maintain or reform their monetary regimes? Why and how are the policymakers forced to implement monetary reforms that reduce their powers in using the inflation tax, changing the rules governing the central bank settings? So far various interpretative hypotheses were advanced to explain the genesis of the political process that leads a monetary regime to assume given characteristics. Developments in endogenizing the central bank governance and thereby its effectiveness has been the subject of analysis in both economics and political science. All the hypotheses stress the importance of studying the role of the preferences of both the citizens and the governments in determining the central bank governance features. Furthermore, it is worth noting that the different views can be intertwined in studying under which economic, institutional and cultural conditions reforms of the central bank governance do take place or not. It is also evident that these studies acquire greater importance in periods – as the present period after the Financial Crisis – when there is a tendency to reform, or at least to question, the design of the central bank governance.

1.1.3. Central bank accountability, transparency and communication

During the 1970s and 1980s, central banks were very much shrouded in monetary mystique and secrecy (Goodfriend, 1986). The theoretical rationale for the lack of central bank transparency and communication was given by the theory of ambiguity, credibility and inflation under discretion and asymmetric information developed in the seminal article of Cukierman and Meltzer (1986). Transparency of central bank decision-making has increased rapidly from the early 1990s beginning with the adoption of inflation targeting by the Bank of England, Bank of Canada, Reserve Bank of New Zealand and the Swedish Riksbank. Although the Federal Reserve System was officially not conducting inflation targeting, in practice it gradually shifted more or less as to inflation targeting. The European Central Bank adopted from its beginning a so-called two-pillar strategy with a monetary pillar focusing on monetary aggregates like M3, which it inherited from the Deutsche Bundesbank, and an economic pillar taking account of the drivers of inflationary expectations. Nowadays, most central banks put a much larger weight on their communication with the public nowadays than they used to do. An important trigger for increased transparency has been the requirement for greater accountability of independent central banks. As central banks have become more independent over time, they have to pay closer attention to explaining what they do and what underlies their decisions (Briault, Haldane and King, 1996). More transparency and increased use of communication is partly a logical consequence of this development. Even though central bank accountability justifies this trend towards more transparency, it is less obvious that more central bank transparency is also beneficial from an economic point of view. Therefore, many theoretical studies try to analyze whether the trend towards transparency could be justified from an economic point of view as well. These studies vary not only with respect to the different aspects of central bank transparency, such as political, economic, procedural, policy and operational transparency, but also regarding the structure of the economy determining the monetary transmission mechanism (Issing, 2005). Besides this theoretical research on the economic effects of more central bank transparency, more recently empirical studies also address various questions using recently developed indices of central bank transparency. The objective of this introduction is not to give a comprehensive overview of the literature on the economic effects of more central bank transparency. The transparency literature can be distinguished within five different categories: political, economic, procedural, policy, and operational transparency. Building on these five categories, the first comprehensive index for central bank transparency was constructed for the central banks of Australia, Canada, Eurozone, Japan, New Zealand, Sweden, Switzerland, the United Kingdom and the United States (Eijffinger and Geraats, 2006).

Nowadays the ability of central banks to affect the economy critically depends upon their ability to influence market expectations regarding the future path of overnight interest rates, and not merely their current level. Therefore, the public understanding of current and future policy is critical for the effectiveness of policy. Now days, monetary policy is explained as the art of managing expectations. As a result, communication has developed into a key instrument in the central bankers' toolbox in recent years. Virtually all central banks in advanced economies have taken major steps in using communication as a key instrument in monetary policy-making. For example, many central banks, including the Bank of England and the Federal Reserve System, publish minutes and voting records, while the European Central Bank explains its monetary policy decisions at the day of the meeting of its decision-making body at a press conference. The increased importance of communication for policy makers is mirrored by the rapid development of the academic literature on this topic.

Researchers have highlighted two reasons why communication may prove useful for central banks. First and foremost, communication may be a very direct and effective tool to influence expectations. Therefore, it plays a seminal role in improving the effectiveness of monetary policy and, consequently, the economy's overall performance (Blinder, Ehrmann, Fratzscher, De Haan and Jansen, 2008). Second, communication may be used to reduce noise in financial markets. More transparency over policy may lead to greater predictability of central bank actions, which, in turn, reduces the uncertainty in financial markets. The ability of policy makers to move asset prices and the predictability of policy decisions are not independent of each other as communication that leads to high predictability of decisions may also have a significant effect on financial markets. However, it is by no means clear what constitutes an optimal communication strategy, as it is not straightforward that providing more information is always preferable. Any communication strategy of a central bank is faced with a potential conflict as the literature on transparency has shown that a maximum level of information need not be optimal for the efficiency with which it is able to pursue its mandate. Indeed, from a theoretical perspective it is not obvious that communication may help the central bank realizing its ultimate objective(s), like price stability and stable economic growth.

Communication has little value added if the central bank credibly commits to a policy rule. Assuming that the public has rational expectations, any systematic pattern in the way that policy is conducted should be correctly inferred from the central bank's observed behavior. Hence, when it comes to predicting future interest rates, it suffices to interpret (forecasts of) economic data in view of the central bank's policy rule; there is no need for central bank communication. Central bank transparency can be defined as how easily the public can understand the goals and intentions of the central bank. One might say that a central bank can be fully transparent without any communication. This stylized example makes clear that there are, essentially, three reasons why central bank transparency and communication may matter: non-rational expectations, asymmetric information, and absence of policy rules and credibility. If one or more of these conditions hold, central bank communication may have an impact on financial markets (see: De Haan, Eijffinger and Rybinski, 2007). First, the assumption that the public will understand monetary policy perfectly regardless of the efforts that are made to explain it may be unrealistic. King (2005) poses that the public may follow simple (but possibly fairly robust) 'heuristics' in making decisions instead of following optimizing behavior. He argues that in this case central-bank communication can play an important role in leading people to choose heuristics of the right sort: "the more the central bank can do to behave in a way that makes it easy for the private sector to adopt a simple heuristic to guide expectations the better. A good heuristic from that point of view would be 'expect inflation to be equal to target' (King, 2005, p. 12). In other words, by communicating to the public the central bank may help anchoring expectations.

Bernanke (2004) refers to the recent literature on adaptive learning in explaining why communication on these issues affects monetary policy effectiveness. When the public does not know but instead must estimate the central bank's reaction function, there is no guarantee that the economy will converge to the optimal rational expectations equilibrium because the public's learning process itself affects the behavior of the economy. The feedback effect of learning on the economy can lead to unstable or indeterminate outcomes. In such a setting, communication by the central bank may play a key role in helping improve economic performance. Second, financial-market participants generally do not have as much information as monetary policymakers do about a number of key inputs to policymaking, including the policymakers' objectives, their assessment of the economic situation, and their policy strategy. If there is asymmetric information, i.e. if the public and the central bank dispose of different information, it is perfectly rational for the public to adjust its expectations. The central bank may, for instance, provide information about its reaction function. This should lead, ceteris paribus, to an increase in the private sector's ability to forecast the central bank's policy instrument. One possibility in countries without explicit inflation targets is that central bank may provide information about the long-run inflation target of the central bank. Likewise, central banks could also provide information on the relative weights that the central bank places on its output and inflation objectives. Furthermore, the central bank may have better information on the economic outlook. Kohn and Sack (2004) argue that private agents may lend special credence to the economic pronouncements of central bank, particularly if the central bank has established credibility as an effective forecaster of the economy. However, even if the central bank has private information an important issue that remains to be settled is under which circumstances release of this information may be beneficial, i.e. contributes to realizing the objective(s) of the central bank.

Finally, most central banks do not follow a fixed rule. For example, Bernanke (2004) poses that "specifying a complete and explicit policy rule, from which the central bank would never deviate under any circumstances, is impractical. The problem is that the number of contingencies to which policy might respond is effectively infinite (and, indeed, many are unforeseeable)" (see: Siklos and Strurm, 2013).

1.1.4. Conclusions

Monetary policy and central banking become two sides of the same coin: the modern central banker was

essentially a monetary policy agent, primarily focused on monetary stability goals, which can be pursued by maneuvering interest rates. The mainstream of modern central banking can be briefly summarized using the principal-agent terminology. The citizens, who represent the principal, realized that on average the politicians in charge tend to use monetary policy tools to obtain short term macroeconomic goals. The reason is that the politicians are naturally shortsighted agents, given that they try to maximize their probability to be and/or to remain in office. Therefore, politicians tend to use monetization to address urgent problems in terms of unemployment, fiscal unbalances, and recently banking bail-outs. But the more the markets are rational and efficient, the more it is likely that monetization policies simply produce more inflation and uncertainty, without any real gains. The citizens realize the politicians' biases in using monetary policy powers and find it optimal to change the rules of the game: the monetary policy has to be delegated to an unelected bureaucracy being the central bank, where the bureaucrats in office are designed as career-concerned agents, i.e. they know that their success depends on how they fulfill the goal of their institution.

Consequently for monetary policy effectiveness, it is crucial that the mission of the central bank is well defined and established using three criteria. First of all, the main goal of the central bank has to provide monetary stability in order to avoid the employment bias, i.e. the temptation to use monetary tools to elude labor market inefficiency problems. Secondly, the central bank cannot finance public deficits and debt in order to avoid the fiscal bias, i.e., the temptation of fiscal monetization. Thirdly and more recently, central bank involvement in financial regulation and supervision has to be minimized in order to avoid the banking bias, i.e., the temptation of bank bail-out by the use of monetization (see: Eijffinger and Masciandaro, 2011 and Masciandaro and Passarelli, 2014). Furthermore, the mission of the central bank has to be protected from risks of political capture, defining its independence from executive power, its accountability with respect to legislative power, as well as procedures for its transparency and policies for communication. The relevance of the central bank governance has been definitely settled in the last decades.

The governance of central banks has become the benchmark to evaluate the effectiveness of the monetary institutions, supported by empirical analyses which stressed the association between central bank independence and inflation performance. That was the situation before the Financial Crisis. But now, after the Financial Crisis, the scenario is changing. The desire to avoid new cases of systemic banking instability and at the same time to address the deep economic crisis has focused new attention on the architecture of the central bank regimes. Policymakers in all countries have wondered and are still wondering whether to reshape their central bank settings while news proposals rose recently in Europe and in USA. In both cases the common trend seems to be an increasing involvement of the central banks in financial regulation and supervision, also taking into account the new distinction between macro and micro prudential supervision. It is evident that the central banking pillars of the monetary action must be reconsidered. But how should that been done? Is it possible to maintain the benefits of the mainstream of central banking maintaining monetary stability and also taking into account at the same time the importance of financial stability? Consequently, is it possible to reintroduce banking responsibilities into the central bank domain in a way consistent with the present institutional setting, i.e. without introducing risks of political capture and/or banking capture? On these questions the final overall suggestion is that reconsidering the central banking benchmark implies a relevant risk assumption, which so far has been underestimated. How to hedge this risk is a fundamental issue that must be considered to understand not only what will be the economics of the "post-modern" monetary policy, but also which political economy drivers are motivating the demand and supply of reform of the central bank governance.

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