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Central Bank Independence and Inflation Target Regime

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Abstract

The objective of this paper is to evaluate the efficiency of inflation target regime in developing countries and to discuss the importance of independent central banks. As inflation control is the main central bank's objective, agreed by targets established by the government, and as monetary policy has no instantaneous impact over inflation, the monetary authority must try to anticipate inflationary pressure. In this way, we want to understand how monetary policy's decisions are made under inflation target regime.

Content

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Central Bank Independence and Inflation Target Regime

1. Introduction

In the last years, it has been a consensus in many countries that the main objective of monetary policies is price establishment. Inflation target regime is an alternative to monetary policy that it has been applied substituting the monetary target approach and crowling pegs.

In monetary targets' case, money demand has showed an irregular behavior and often, structural changes motivated by some financial innovations that happened in the last thirty years. Therefore, it is difficult to foresee a monetary target as a final monetary policy goal, making unstable the relation between money supply and the main objective, which is inflation control.

Another anti-inflationary policy alternative is the adoption of crowling peg; however, this kind of mechanism doesn't let the Central Bank to have autonomy over its own monetary policy. The vulnerability to speculative attacks that happens when the exchange parity is not feasible is a problem inherent to the use of this kind of mechanism. Because of problems generated by the use of monetary control and crowling peg, the adoption of inflation target regime system has been more usual.

Following this idea, in the 1990's, many countries made use of inflation combat policies based on the adoption of inflation targets. That system permits the monetary policy to have as a principal target a variation interval of consumer price level, permitting a clear evaluation of monetary policy performance, making a comparison between the target and observed inflation.

One of the principal's arguments in favor of rule's adoption is transparency's increase in monetary policy conduction, as communication between monetary authority and public is strengthened. Actions start to be monitored, besides the observation of policymakers' performance. If the obtained results were compatible with the announced rule, monetary authority gains an increase in its credibility, what can induce agents to remake theirs expectations, as a way that they converge to the rule. As a counterbalance to inflationary predisposition problem and to price establishment maintenance as the main monetary policy's priority, proposals for the organization of independent central banks were developed based on neoclassical theoretical arguments; we emphasize Rogoff's (1985) as well as Walsh's model (1995).

2. Proposals to Independent Central Banks

In the decade of 90's, many countries like New Zeeland, Chile and United Kingdom changed theirs laws to give more autonomy to their Central Banks in relation to the governments, what would permit central banks to concentrate their effort in the search and maintenance of price stability. The basic presupposition, as showed by Mendonça (1997), is that exist causality between a high degree of central bank independence and price level behavior.

For Cukierman (1994), the question about central bank independence has a theoretical and an empirical basis. The first argument is based on policymakers' inflationary bias. This conception shows that monetary policy has a fast but temporary impact over real variables like, employment level, budget deficit, and real interest rates. Under this perspective, an increase in monetary supply results in an increase in inflation and in inflation perspectives, creating an inflationary bias that will persist in the long run even when the effects of monetary expansion have ended.

In relation to the empirical case, the defense of central bank independence results by the observation that there exists a negative correlation between legal independence and inflation in industrialized countries, that is, as higher is central bank's independence degree, lower tends to be the inflation rate. Therefore, central bank's independence means autonomy to do monetary politics without central government interference, to search the main objective that is price stability, the principal central bank's job, even if it has to sacrifice others objectives. The two principals' approaches about central bank's independence debate, which the main objective is to stop monetary policy's inflationary bias, are the works developed by Rogoff (1985) and Walsh (1995).

According to Blinder (1998), the theoretical proposal developed by Rogoff is based in the nomination of more conservative central banks directors, with higher aversion to inflation than society as a group, and then, supporting a lower price variation rate. This would reduce welfare state losses associated to inflationary events and product instability, prevailing its monetary's decisions. In this approach, central bank has liberty to define its quantitative inflation target and it can use all the instruments with full autonomy.

At once, the approach developed by Walsh, consists on contracts like granter-agent, where central bank acts like the agent and political authorities act like the granter[1]. The contract model suggests targets by rules, eliminating inflationary bias, but preserving the advantages of discritionarity, that contrasts with the traditional model where the central bank is submitted to a monetary rule. This contract should impose some costs to central banks' presidents and its directors if the planned target were exceed. In New Zeeland, for example, central bank's president can be dismissed if inflation grows to higher levels.

An important point for Mendonça (1997) is that a central bank is independent or not looking to its capacity to choose which target must be a priority, and which political instruments it will use. In Rogoff's model, the central bank has goal independence to choose the quantitative inflation target and it can use the instruments with total autonomy. Nevertheless, in Walsh's model, the central bank has only instrumental independence, that is, it can choose all kinds of monetary policy instruments, to pursuit the inflation rate agreed by contract.

The central bank independence proposition, as showed by Mendonça (1997), belongs to the debate rules versus discritionarity. Despite the target be the same, price stability, for Rogoff, the best procedure would be the adoption of one optimal policy's rule. For Walsh, the formulation of a contract would not submit the central bank to follow one rule, it would let it to use the advantages of discritionarity, it's important to emphasize that inflation target proposal emerged because of this model.

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1 Blinder (1998).

3. Inflation Target System: an alternative to monetary policy

The orientation of monetary policy to search price stability has incentiveted many countries to adopt inflation targets. The main characteristic of this monetary regime is the official announcement of inflation rate floating limits to a horizon of one or more periods.

The reasons why so many developing countries implemented inflation targets were the fail of monetary targets in the 70's, the intensification of efforts in the fight against inflation in the 80's and central bank independence degree increase in the 90's.

3.1 Characteristics of Inflation Target Regime

The announcement of an inflation rate variation band and the recognition that the main monetary policy's objective must be the maintenance of a low and stable inflation rate, permitting a reduction of inflationary bias, so that "... *the idea of inflation targeting is obviously a manifestation of the principle of long run monetary neutrality"* (Stevens & Debelle, 1995, p. 8).

With the objective to choose the best strategy and to make fisiable the announced policy to economic agents, central bank uses a model about the way economy works and additional information that complement decision's making process. Therefore, inflationary target regime let the use of discritionary politics, that is, the choice of appropriate short run interest rate by the central bank, so that, according to Mishkin (1999), there are two elements that can keep away the inflationary targets from a rigid target: i) inflation targets don't give simple and mechanical instructions about how the central bank should conduct monetary policy; and ii) inflation targets have, as observed, high degree of policy discretion.

The setting of quantitative inflation target also permits an increase in monetary policy conduction's credibility. One way to evaluate monetary policy performance is to do a comparison between effective inflation and inflation target. If inflationary expectation and the target converge, announced monetary policy will get stronger and, consequently, so the credibility of monetary authority in the conduction of monetary policy in a way to make the target feasible.

According to Mendonça (2000), this regime also has a high degree of transparence, as information related to inflation rate is easily understood by the whole population. This transparence is strengthened by the increase in communication between monetary authority and public, what happens, in general, throw inflation reports. These documents show the targets and limitations of monetary policy, inflation targets numerical values and how they are determined, how targets are obtained, given attention to actual and future conditions of the economy and possible reasons to divert from the announced target.

Despite the argument that inflation target regime increases trasparence and reduces monetary policy inflationary bias, we must remember that this regime permits discritionary actions by central bank; it does not eliminate the entire inflationary bias. Then, for the quotted author, the use of this regime does not mean that monetary authority will be always against inflation.

Therefore, the principal characteristics of inflationary targets regime are the public announcement of inflation target and the search of price stability as monetary policy priority's objective.

3.2 Inflation targets implementation and its foresight as an intermediate target

Inflation target regime implementation is prejudiced because it is difficult to foresight exactly the effective inflation rate and because of the presence of discrepancies. The current inflation is pre-determined by previous contracts, what means that monetary policy can affect only future inflation, while, other effects over the economy will be observed only some periods after the instrument was selected, that is the short run interest rate. Therefore, the adequated instrument choice is limited by uncertainty about monetary policy transmission mechanism.

In relation to external discrepancies, that is, the interval that happens between implementation's action and its effects, the central bank can adopt foresight models as a way to estimate the impacts coming from inflation shocks, minimizing discrepancies' effects.

According to Giambiagi & Rigolon (1998), to solve the problem of imperfect inflation control, inflation foresights are used as an intermediate monetary policy target, as, by definition, it's more correlated with the main variable, it's continuously observed by the central bank and it's transparent.

Bernanke & Mishkin (1997)[2] emphasize two questions about inflation foresight. Periods shorter than a year or longer than four years are considered inconsistent, because they imply in two potential problems: i) problem of operational nature – once there is a temporal interval between monetary policy action and inflation response, this implies in a low foresight, what can result in precision's problems to the target; because the policy is performed in the short run, and the real world is dynamics; and ii) central bank credibility – as inflation has a low degree of foresight, it is difficult for the public to evaluate the effort realized by the central bank to attain the announced target. Imperfect inflation control and the presence of discrepancies make harder to control central bank's performance, which can always argument that an eventual deviation between observed inflation and inflationary target happened because of factors apart from its control, and because of this it can not be responsible. So, having in mind the idea that inflation target regime increases monetary policy's comprehension, credibility construction throw inflation target regime can be a long process.

To prevent credibility loss, central bank makes use of the called escape clauses, used to exclude effects resulted by supply shocks, like: changes in exchange terms of international trade, changes in indirect taxes, natural disaster, governmental burden, international interest rates and domestic interest rate. The advantage of this structure is that central bank has responsibility over the use of escape clauses in extreme situations, without credibility loss, when the target is not attained, as the change in planned policy is not a result of time inconsistent policy adoption, but a result of variables that could not be measured. In normal conditions, the central bank follows the announced target and divert only in cases when happens big shocks over product or basic prices.

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2 Cited in Mendonça (2000).

Nevertheless, an important point is that escape clauses do not represent a solution to problems originated by uncertainty about inflation foresight, as the target success do not depend, in large part, on the accuracy of inflation foresight, since the central bank promises to attain an objective without the capacity to grant its consecution.

Therefore, inflation target implementation using central bank inflation foresight as an intermediate target is simple: the monetary policy instrument is chose as a way that inflation foresight gets close to inflation target.

3.3 Technical Questions

Inflation target announcement is the first step to introduce inflation target regime and it is related, according to Fisher (1995), to the necessity of an independent central bank. This idea has as foundation the fact that independence conception is a result of two others concepts: instrument independence and target independence, as it was showed before. In inflation target literature, it has been emphasized that central bank must have instrument independence to search the proposed inflation target.

However, this does not represent a sufficient condition for the success of inflation target regime, and it is a justification to increase central bank's instrument independence. To exemplify this situation, we can look at central banks with the higher independence degrees – USA[3], Switzerland and ECB – where we don't observe the use of explicit inflation targets and there is success in the search of price stability. According to Mendonça, there is no evidence to indicate that countries with high independence degree's central bank have necessity to adopt inflation targets.

An important step for inflation target adoption is the definition of the price index which the target will base on. According to Giambiagi (1998), series must be precise, and at the same

[3] Since middles of 80's, the monetary policy regime that FED seen to use is the neutral interest rate, which uses feds funds rates as a way to attain in the medium and long run a neutral real interest rate – a rate compatible with long run potential real GDP. See Blinder, A. (1998).

time it can not permit that individual price shocks affect inflation bias.

As a way to protect from wrong impressions about index manipulation, the central bank must explain to public the methodology used on price index calculation, choosing an index calculated by an institution that is independent from monetary authority. This guarantees a higher level of monetary authority's compromise and transparence.

Countries that have adopted this regime are choosing inflation bigger than zero as a target, of around 2% per year. This position drift from the argument that the existence of inflation close to zero would provoke a permanent pressure to increase natural unemployment rate, as it would reduce real wage flexibility, reducing labor market locative efficiency. Another reason to the target not to be defined close to zero is because it could generate expectations about the competence of searching or not future inflation rate and, consequently, credibility problems for central bank.

Another important point that emerges from inflation target regime implementation is that the target to be specified should be in terms of a rigid point or a confidence interval, this choice imply some discritionary degree to monetary authority. According to Gonçalves (2000), in the absence of supply shocks, a rigid inflationary target would work well. However, in the presence of shocks, a rigid target is not sufficient to hold negative effects over employment and production.

For Giambiagi & Rigolon (1998), inflation targets are more frequently specified as confidence bands, and its use is motivated by inflation imperfect control, in the presence of discrepancies in monetary policy variables and the event of short run shocks. The bands permit, in particular, some monetary policy flexibility to shocks and the advantage that small inflation rate variations don't have to be justified to the population. In general, the announced bands have amplitude of two percentage points, what makes probable that some times inflation moves outside the band.

4. Analyses of different approaches

4.1 The European Central Bank

The ECB is a special case that must be cited, it is a unique institution that represents more than just one country. It represents an entire community, and for this reason is deductble that this institution has a high independence degree, no government may have influence over this central bank. Without this idea the existence of the ECB would be inconceivable.

As described by Eijffinger & Haan (2000), the Executive Board must implement monetary policy in accordance with the guidelines and decisions of the Governing Council. The members of the Executive Board are appointed by the governments of the member countries, on a recommendation from the European Council after it has consulted the European Parliament and the Governing Council of the ECB. The term of office of Board Members is eight years and the mandate is not renewable. This ensures the personnel independence of the members of the Executive Board.

An important change is noticed in 1994, when it was no longer allowed for central banks to provide credit to their respective governments, though they were allowed to act as fiscal agent. Therefore, the financial independence of the ECB also seems to be warranted. However, there is nothing that the ECB precludes to engage in operations at the secondary market for government bonds, which may have exactly the same outcome as direct provision of credit. The Stability and Growth Pact may be regarded as an additional safeguard to ensure that national governments remain sufficiently solvent so that the ECB does not have to bail them out.

While the Maastricht Treaty clearly establishes the maintenance of price stability as the primary objective of the Eurosystem, it does not give a precise definition of what is meant by price stability. In order to specify this idea more precisely, the Governing Council of the ECB announced, in 1998, that price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%, and, within this definition, the ECB has as its function the maintainance of inflation rates below but close to 2% over the medium term.

According to Eijffinger & Haan (2000), the Maastricht Treaty includes various provisions to ensure that the ECB will be independent. Neither the ECB nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a member state or from any other body. Every member state must ensure that its national legislation, including the statutes of its national central bank, is compatible with the Treaty and the Statute of the ESCB. So the instrument independence of the ECB seems guaranteed too.

The ECB is indeed very independent, and may be regarded as even more independent than the Bundesbank. This is certainly true if one takes into account that in Germany the law which describes the functions of the Bundesbank could be changed by simple parliamentary majority, whereas in the case of the ECB a unanimous decision of all member states is required. Even though the ECB's independence is properly arranged for, this does not imply that there will be no conflicts between the ECB and national governments.

4.2 Brazil

Brazil is the biggest economy in South America and a nation that passed through many economic problems in the last decades. However, since 1994, with the implementation of the Real Plan, Brazil stopped an inflationary process and started a new era in its monetary policies. Because of this, we choose Brazilian monetary policy as an example to show the application of monetary target regime.

In January 1999, after an exchange rate crisis, Brazil introduced an inflation target regime, whose main objective was monetary policy credibility restoration and to assure inflation reduction gains. As a part of the new monetary policy conduction, central bank shows, each three months, inflation's reports with information about Brazilian's economy and international information that helps to give transparency and to evaluate policy's performance.

Inflation Target in 1999, 2000, 2001, and 2002

	Target	Superior limit	Inferior limit	Realized Inflation
1999	8,0%	10,0%	6,0%	8,9%
2000	6,0%	8,0%	4,0%	5,97%
2001	4,0%	6,0%	2,0%	7,67%
2002	3,5%	5,5%	1,5%	12,5%

Source: Brazilian's Central Bank

Inflation target regime showed to be feasible to monetary policy conduction in Brazil during its two first years of implementation, 1999 and 2000, despite shocks related to exchange rate variation and administered prices adjustments. Nevertheless, during 2001, with an increase in the intensity of these shocks, the regime didn't attain success; inflation rate was about 7.7% against an established central target of 4%.

About inflation target regime in Brazil, the inertial component of administered prices, indexed to general price index, and the dependence of external financing are structural transmission channels of supply shocks and so, restrict the possibility of interest rate reduction, which is used to control economy expansion and maintain a reduced free price inflation rate. To rethink the methodology of price composition is one way to avoid inflation rate inertia, preventing bigger costs over production activity. Another option is the announcement of inflation targets excluding administered prices or using an inflation nucleus.

The adoption of inflation targets in Brazil did not mean that the central bank ignored other objectives, like economic growth. However, it showed an alteration in monetary policy conduction, from the moment when convergence to the inflation target may happen in a longer horizon, searching the target attainment 12 to 18 months later, and not annually. According to the central bank, monetary policy conduction aims to avoid secondary propagation or the inertia of supply shocks over inflation.

5. Conclusion

Some countries with high independence degree central banks don't adopt inflation target regime, nevertheless, we can deduce that, as higher central bank independence degree, lower is the effort to conquest credibility for monetary policy conduction what facilitates the achievement of the established target under inflation target regime. Countries with the most independent central banks do not implement inflation target regime for a simple reason, their monetary authorities have a high credibility level, and so, it is not necessary to conquest public confidence, as the necessity of credibility increase is one characteristic of inflation target adoption.

The adoption of inflation target regime was in part motivated by an increase in developing countries central banks' independence degrees; however, we can perceive that despite this increase, central banks in these countries did not attain independence degrees like the observed in central banks of USA, Switzerland, and the ECB.

Therefore, it's advisable that before inflation target regime implementation, developing countries should realize central bank legislation changes following the example of countries like New Zeeland, Chile and United Kingdom, which increased the autonomy of theirs central banks given more transparence to monetary policy execution, what benefits inflation target regime adoption.

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