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The Optimal Transparency of Monetary Policy

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Abstract

In this study, optimal transparency is examined in terms of monetary policy. Since about the last two decades, more emphasis has been placed on implementations of the monetary policy transparency for the success of the inflation targeting regime adopted by many countries. It is considered that transparency will be beneficial, such as the ability of central banks to make better predictions of economic units and to increase the credibility and persuasion power of the central bank. It is assumed that practices in this context will produce better results for the effectiveness of the monetary policy, but there is not always an expected outcome for an increase in the level of transparency. With this study, the negative effects of high transparency are put forth and what the optimal level of transparency should be is dealt with. In addition, the development of the central bank of the republic of Turkey in the context of transparency is stated.

Keywords: Transparency, Monetary Policy, Central Banks, Central Bank of the Republic of Turkey, Monetary Policy Regimes.

1. Introduction

Monetary policymakers are increasingly using transparency practices involving the sharing of information and predictions of decision-making processes and the practices with economic units. It is considered to be a key factor in the success of the inflation targeting regimes, which are based on expectations, and it is assumed that it helps households, companies and other actors to shape their expectations regarding inflation and interest rates. On the other hand, transparency policy implementations become compulsory if reliability is an important precondition for the success of economic policies (Erdoğan, 2004). In many countries, central banks now regularly report to the public about their intentions, predictions, procedures and outcomes.

When we examine the developments in terms of transparency in monetary policies, it is possible to suggest that transparency is accelerated with the passage of inflation targets, especially in New Zealand and later Canada, Sweden and the UK. In this process, it was the first time that New Zealand adopted the inflation targetting in 1989 and the inflation rate is determined by the consumer price index in the 0-2 point band for each year. This was due to the announcement of overnight interest rates by the American central bank FED in 1994, the

announcement of the 2% inflation target by Sweden Riksbank in 1995, the publication of the interest rate forecast by the New Zealand central bank under the inflation and growth projections in 1997 (Svensson, 2010). Other important developments were the FED's announcements regarding long-term objectives in 2004, short-term interest rates in 2012 and the sharing of portfolio evaluations with the public.

When we look at the issue within the scope of the Central Bank of the Republic of Turkey, it is observed that the bank has applied transparency regulations in line with its monetary policy, instrument independence, and these regulations have intensified with the transition to inflation targetting to a large extent. In the 2001-2005 period, important steps were taken to improve the institutional infrastructure in the monetary policy for the success of the inflation targeting regime. In this period, the Central Bank activated its institutional framework, clarified its communication policy, expanded its information set and improved inflation forecasting methods. The adoption of the price stability by the central bank as the main objective of the Central Bank legislation in 2001 and the radical institutional changes have been an important milestone. Inflation forecasts, deviations from previous inflation forecasts and inflation reports including deviation reasons, open letters, financial stability reports, money board meeting summaries and press announcements were the most important means of communication with the public and the government as a result of these developments.

Transparency not only contributes to the accountability of central banks, it also increases the effectiveness of monetary policy. As the difference between the intentions of monetary policymakers and the perceptions of the public is improved, policy decisions and information about practices are spread, helping households and firms to have a healthy forecast. On the other hand, it can increase the effectiveness of the bank on long-term interest rates, thereby increasing the ability to influence economic growth or inflation. Nevertheless, it is stated by some researchers that the effectiveness of monetary policy will increase as transparency is increased. It is argued that sharing more information may have negative consequences on monetary policy, that the central bank of the public will be overly sensitive to the forecasts and that the central bank will not be able to direct anticipators in the direction of monetary policy in this case. Furthermore, it is accepted that excess information will cause more loudness of the signal provided by the central bank, which will make it difficult for economic agents to rationally act and lead to increased inflation bias. Despite the benefits of transparency, it has recently been adopted that greater transparency will not produce better results. In terms of monetary policy, it is necessary to have different opinions regarding transparency, what should be the dimension of transparency in achieving the monetary policy targets, and in other words, whether there should be an optimal level of transparency. Therefore, in this article, differently from other studies, we try to investigate the optimal transparency case. The purpose of this study is to investigate the reasons why more transparency doesn't always produce desirable results in the monetary policy. The study consists of three parts. In the first part, basic concepts including definition and benefits of transparency are given. In the second part, transparency

applications of the central bank of the Republic of Turkey are given. In the last part, the opinions about this concept are explained in the frame of the comments.

2. Conceptual Framework of Transparency
2.1. Definition of Transparency

Transparency; it means facilitating the perception of something or transforming them into easily perceived thought and emotion. According to another definition, it is the principle of making and applying decisions in the direction of rules and regulations to ensure access of those that will be influenced by decisions taken to information, and that making the information accessible, understandable and concrete (Transparency International, 2017). When considered from the point of view of monetary policy, transparency is the level of disclosure of information regarding the central bank's control error (Jensen, 2002). According to another definition, it means to provide the market and the public with all the information about the central bank's clear, transparent and timely procedures as well as its strategies, evaluations and policy decisions (ECB, 2017). From these definitions, the transparency in the monetary policy can be regarded as a situation in which the central bank's decisions and actions are clearly understood by the public in accordance with the intentions of the central bank, the lack of asymmetric information between the central bank and the banks and the private sector.

On the other hand, transparency does not mean precise or perfect knowledge. Both the central bank and the private sector are concerned with transparency as long as they both face uncertainty about the structure of the economy and are aware of the uncertainty but have the same knowledge. In a situation where there is no transparency, there are two effects, uncertainty and impulse effect. Under the influence of uncertainty, asymmetric information gives the opportunity to use the presence of private information directly on one of the parties, while the disadvantage of information leads to an uncertainty for the unit experiencing the disadvantage. The second effect is that the proprietor of the private information may be able to influence the other party's judgements and thus the other party indirectly influences their economic behaviour (Geraats, 2002). Central banks publicly disseminate the information in two forms, explicitly specifying the policy instrument and implicitly reporting on its short-term objectives. In order for transparency to become, it is necessary for central banks to clarify and disclose their values and intentions and to form a common language between the parties.
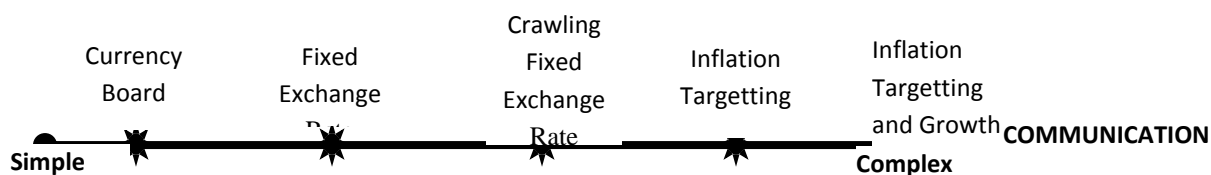
Transparency can be categorized in various ways. According to Hahn (2002), transparency includes purpose, information and operational transparency. Objective transparency includes the publication of the central bank's inflation target, output target or other objectives and the relative importance of the bank's contribution to these goals. Future inflation forecasts, bank audit results, real economic data, models used for future inflation forecasts and transparency regarding the related data reflect the transparency of information. Finally, the short-term interest rate target shows operational transparency and announcement of decisions such as intervention in the exchange rate market. Geraats (2001), classifies in five different dimensions: political, economic, procedural, policy and operational. Political transparency consists of institutional arrangements related to the policy goals and their justification. Economic transparency is related to the publication of economic data, policy models, and central bank

forecasts, as well as economic information used for monetary policy. The central bank's conditional forecasts for output and inflation are included in this transparency. Procedural transparency includes disclosing policy calls through monetary policy decisions, monetary policy strategy and voting records and meeting minutes. Policy transparency refers to the announcement and explanation of policy decisions and future policy actions. Operational Transparency is related to the implementation of monetary policy actions and the sharing of information on the instruments used and control errors in monetary transmission mechanisms. The Central Bank of the Republic of Turkey, in accordance with the nature of the information available to the public, is similar in transparency to the above definitions; transparency regarding goals, policies, tools, methodological and functional transparency and economic knowledge (CBRT, 2011).

2.2.   Transparency In Monetary Policy Regimes

Main monetary policy strategies used to ensure price stability are exchange rate targeting, monetary targeting and inflation targeting. Each of these targets helps to set a limit on the value of the national currency and at the same time provides a nominal anchor for the monetary policy. Whatever monetary regime is chosen, (Cukierman, 1996), the chosen regime should be easily controlled, have a strong relationship with price stability, be observed at short intervals, and also should prevent other economic accesses. In this respect, transparency in monetary regimes is important in achieving policy objectives. The effect of transparency on the application of monetary policy differs depending on the independence of the central bank, in other words, whether politics depend on the rule or discretion. While the policy regime is simpler for the central bank to communicate than on the rule-based basis, more effort is needed to ensure healthy communication in regimes where voluntary monetary policies are more dominant. Therefore, the monetary board, which is based on a certain rule, is more important than the fixed exchange rate regime, as central bank's independence is the forefront, inflation targeting and transparency are more important in the regime to ensure the price stability and output target.

Figure-1. Transparency in Monetary Policy Regimes

Source: Blinder et.al. 2001.

The role of expectations in the inflation targeting regime is great. Khan (2003), argues that transparency is inevitable in order to increase the confidence in the inflation targeting regime and to discipline the implementation of the regime on the grounds that delay in monetary policy implementations are causing disruption in the process of achieving the targets. In addition to the independence of the monetary authority, the regulations aiming at increasing

the level of transparency with respect to policy implementations contribute to the breakdown of inflation expectations. Avoiding the tendency of fiscal and monetary authorities to escalate inflationary trends is setting the ground for the persistence of the price stability environment by increasing the credibility of both authorities. The steps taken to establish the price stability lead to a positive course of macroeconomic performance (Erdoğan, et al. 2010). Despite these benefits in targeting inflation, it is difficult to achieve the expected contribution without selecting the right policy rate. The central bank must foresee a fixed interest rate or a policy interest rate path instead of a forecasting of future interest rates in the market (Mishkin, 2004).

2.3.   Benefits of Transparency

Transparency has various benefits in enhancing the effectiveness of monetary policy. Fundamentally, transparency has a function to reduce uncertainty in the market; to stabilize economic shocks; to reduce political interventions; to improve the quality of forecasts and contribution to the predictability and to reduce inflation bias. However, two preconditions must be fulfilled for the expected contributions of transparency in monetary policy. Accordingly, an understanding of the purpose of the monetary policy and an appropriate interest rate for the purpose of the central bank should be employed (Demirhan and Demirhan, 2011). The benefits can be listed under the following headings:

2.3.1.   Developing Expectation Channels

While central banks have a say on short-term interest rates, there is no direct effect on long-term interest rates, such interest rates are largely dependent on market expectations. Because of this, the bank tries to direct long-term interest rates by signalling the future monetary policy's long-term activities (Crowe and Meade, 2007). In this respect, transparency ensures that there is greater alignment between policymakers' views on future interest rates and market expectations (Bernanke, 2004). Therefore, it reduces the volatility in expectations and improves the effectiveness of monetary policy for the short term as well as for the long term. In this way, the power and speed of giving direction to the markets as the monetary policy aim to increase, and the private sector expectations are adapted more rapidly to the changes in the monetary policy.

2.3.2.   Increasing Credibility and Flexibility

A transparent policy designed to achieve a certain purpose, such as providing long-term price stability or leaving out the output gap, enhances the credibility of the monetary policy. Unless there are surprises in the formation of prices and fees, the central bank's reputation rises, and it becomes easier to steer the economy as it desires. Fixing the inflation expectations of the private sector according to the inflation target is a vital precondition for real inflation stability. Ensuring that private sector expectations are close to the inflation target indicates the reliability of the inflation targeting regime (Svensson, 2010). In the face of a change or an expected deviation in economic conditions, the public clearly understands these changes and is able to adapt themselves. Thus, transparency allows the central bank to make policy changes without causing any financial problems (Blinder et al., 2001). Therefore, the establishment of

transparency allows the monetary transmission mechanisms to achieve a much faster result than expected (Geraats, 2001). On the other hand, the widespread belief is that that a transparent central bank accurately identifies the inflation target in the public sector, gives more flexibility to central banks in affecting interest rates, helps to balance economic shocks and reduces vulnerability and avoids undesirable changes in inflation expectations.

2.3.3. Decrease in Political Interventions

Another benefit of transparency is that it reduces the pressure on the central bank to act in a way to serve political purposes. The publication of inflation forecasts and their results make the public more vulnerable to political interventions. Transparency serves as a mechanism that allows the central bank to assess whether central bank actions are consistent with their own policies (Dincer and Eichengreen, 2014), as the bank is more independent and free from choosing its own tactics. At the same time, the responsibility of monetary policymakers is also increasing. In the event of a deviation from the publicly announced targets, the policymakers have the opportunity to call for an account and punish them (Erdoğan and Büyükakın, 2005).

2.3.4. Increase in The Quality and Predictability of The Forecasts

Transparency applications can improve the predictions of the central bank and the quality of private sector forecasts. Understanding that forecasts are made with the right economic modelling and best practices can lead to a better understanding of future interest rates, and thus to sound private sector estimates, in order to convince the quality of the private sector central bank predictions (Mishkin, 2004). At the same time, the publication of these forecasts constitutes an incentive for the central bank to make better predictions.

2.3.5. Reducing Inflation Bias

Barro and Gordon (1983), argue that economic agents are likely to decide according to pre-existing inflation expectations, so they have a higher expectation of inflation than expected by monetary policymakers. Therefore, in the market where there is no transparency, that is, where the opacity is dominant, market expectations regarding future inflation rates can be determined at a higher level than the central bank. It is more convincing for economic units to explain how their policies are and how they are assuming in reaching the inflation rate targeted by the central bank, which fulfils its obligation to provide a lower and stable inflation rate. Otherwise, inadequate transparency raises the expectation and the central bank will not be able to adhere to its promise and respond strongly to major shocks. On the other hand, both expectations and inflation outturn are higher at the higher level due to the fact that the expectations are shaped in the negative direction (Fraga and Goldfajn, 2003). Moreover, even in the case of insufficient transparency, even if price stability is provided, inflation may show high resistance to the effects of the crises experienced and the expectations of the economic units (Koç and Abasız, 2012).

3. The Central Bank Transparency of Republic of Turkey

Transparency regimes of the central bank of the Republic of Turkey were carried out in the context of the 1994 and 2001 crises and the EU membership adventure and the transition to the inflation targeting regime to a large extent. As the central bank has been able to use more instruments in the direction of monetary policy, it seems that the bank has improved its accountability and transparency. With the decisions of January 24, 1980, important steps have been taken in order to adapt the monetary and exchange rate policies to the market economy structure in the process of transforming the country from the import substitution structure to the free market economy. Effective regulation of the central bank's reserves and functioning in a way to ensure price stability, deposit and loan rates are determined by market Dynamics, and the convertibility of the Turkish Lira is ensured. The first important step in this period was in 1990 when the monetary policy to be implemented was publicized. Another important development was the announcement of the monetary programs to be prepared by the CBRT after the 1994 economic crisis and the amendments adopted on April 21, 1994, in the frame of the April 5th decisions (CBRT, 2012), binding both the Bank and the Treasury.

In the same period, following the 1996 customs union agreement in the EU accession process, a number of regulations were passed and financial sector also took its share from these regulations in order to achieve institutional and structural harmonization. In this context, it is accepted that the structure and functions of the bank were in compliance with the EU legislation and that the monetary and credit policy was carried out independently. Having the Helsinki summit in 1999 and the candidate country status of the EU, the central bank has been committed to the independence of the Maastricht criteria, but this obligation has not been fulfilled in the wake of the 2001 crisis. Following the economic crisis in 2001, the floating exchange rate regime was passed on 22 February 2001. After the crisis, a structural transformation process started in the economy, in this period critical changes were made in the bank's establishment law and short-term advances to the treasury and the granting of loans to the public were terminated. In addition, this period has been a milestone for the fight against inflation. The main objective of the bank was to provide price stability, the monetary policy to be implemented and the monetary policy instruments to be used were determined directly by the bank itself, and the bank's instrument independence was achieved in the direction of price stability. With the amendment of the law, the criteria of transparency and accountability have been substantially harmonized and the ways of financing political power through direct and indirect methods have been closed and the political pressures on the institution have been reduced (Erdoğan, 2004).

The 42nd article of the Central Bank of the Republic of Turkey numbered 1211 on the issue of private inspection and public disclosure envisages the preparation of periodical reports on the bank's monetary policy applications and the publication of these reports to the public so as to ensure transparency. In the same article, if the targets determined by the central bank cannot be reached or not reached, it is stated that the grounds for this and the necessary precautions to be taken in this matter should be notified in a written form and disclosed to the public.

Significant developments have been made in 2002 to improve the institutional infrastructure in the monetary policy with the application of the "implicit inflation targeting". The Bank has implemented implicit inflation targeting until 2005 to create prerequisites for the transition to the inflation targeting regime. From 2002 to 2005, major preconditions for reducing inflationary pressure, adapting to floating exchange rate regime and increasing depth in financial markets, developing communication policies and expanding the information set have been carried out in the context of open inflation targeting. Since 2006, under the open inflation targeting, the monetary policy board has been set to become a decision maker from being a recommendation institution. Monetary policy board meeting dates have already been announced to the public and interest rate decisions were published on the website.

Moreover, quarterly inflation reports and monetary policy board evaluations and text summarizing the stance on inflation outlook were published after the meeting (CBRT, 2006). The Central Bank reports on the inflation outlook, medium-term inflation and output openness estimates, factors affecting inflation and evaluations on the subjects that were within the scope of duty with the reports published with certain intervals. The Bank also shares with the public reports on financial markets, developments and risks to financial stability, as well as its views on the monetary policy outlook. In this context, the monetary and exchange rate policy, the open letter submitted to the ruling government, the monthly price developments, the quarterly inflation report, the financial stability report twice a year and the quarterly balance of payments and international investment reports are published. In the strategic plan of the Central Bank 2014-2018, the following targets were set; "To identify the information needs of the target groups to be contacted in order to ensure better understanding of the Bank's policies in terms of expectations' management, to create mechanisms to meet these needs and to measure the understandability of the Bank's policies; to add the work done to the MPC decision-making process (CBRT, 2013).

Taking into account the historical development of the Central Bank, in parallel to the structural reforms in the economy, the radical changes in 2001 and the clarification of price stability as the primary priorities have been the most important factors in the development of central bank transparency. This development is evident in the study of 120 countries for the period 1998-2010 by Dincer and Eichengreen (2014) (with the use of Geraats Transparency Index.). The most transparent central banks were central banks in Sweden, New Zealand and Hungary, Turkey, Hungary, Thailand, and the Philippines which are the countries with the highest increase in transparency, according to the results of the transparency index between 0-15. The transparency index of Turkey, which was 3 in 1998, has increased steadily except 1999, reaching 10 beginning from 2006. The transparency index increased by three points compared to the previous year when Turkey switched to implicit inflation and the transparency index rose to 10 with an increase of 2 points compared to the previous year in 2006, when the transition to open economy inflation targetting was experienced (Table 1).

Table-1. Transparency Levels According to Geraat's Transparency Index

	119 98	119 99	220 00	220 01	220 02	220 03	220 04	220 05	220 06	220 07	220 08	220 09	220 10
N.Zelan	10,5	13	13	13,5	14	14	14	14	14	14	14	14	14
Sweden	9	9,5	11,5	11,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5	14,5
Turkey	3	2	4	5,5	8,5	8,5	8,5	8,5	10	10	10	10	10
Hungar	3,5	3,5	5,5	6,5	9	9	9	10,5	11	12	13,5	13,5	13,5
Thailan	2	2	6	6,5	8	8	8	8	8	8	8,5	9	9
Philippi	3,5	5	5	6	10	10	10	10	10	9	9	9	10

Source: Dincer and Eichengreen (2014)

4. Optimal Transparency

Although transparency has many benefits in monetary policy, it is difficult to say that monetary policy will always have a positive influence on the effectiveness of monetary policy. Transparency, which has positive effects on monetary policy up to a certain level, can lead to negative consequences when this level is exceeded, as expected. Cruijsen et al., (2010), have shown that developing countries continue to benefit from increased transparency, with the increase in transparency at a certain level, and the same is not true for central banks of some leading developed countries such as the Bank of England.

The announcement or disclosure of more information does not mean greater transparency and a better understanding of this information on the market. The amount and value of transparency, openness or information provided; (Winkler, 2000), there are some conflicting aspects in the presentation and interpretation of information, in the understanding of information by the sender and the receiver, and in the compatibility with the use of information used in external communication in internal analysis. As a result of the provision of surplus information, people are beginning to focus too much on complicated monetary policy and uncertainty can become dominant. In addition, overexploitation of information leads to extreme information overload and head-to-head mutuality (Cruijsen and Eijffinger, 2010). As a result, the quality of economic units and private sector inflation forecasts that can not see the whole and the predictions about the future interest rate are deteriorating.

Announcing the future interest rate forecast is also the issue that should be addressed in this context. The announcement of the central bank's forecast of interest rates may lead to a decrease in bank reliability. Generally, the market is not aware that central bank forecasts are shaped by certain conditions. The public can perceive the new situation as the abandonment of the policy that the central bank has declared or the policy of the central bank to have been created before if the introduction of new information in the face of changing economic conditions and the central bank changes the policy forecast that it had previously adopted. Therefore, even if the central bank conducts its policy in the most appropriate way, deviations from the foreseen policy path required by changing conditions can be seen as a failure of the

central bank (Mishkin, 2004). This is the first reflection of time inconsistency contributed to the literature by Kydland and Prescoot (1977). Due to time inconsistency, a policy set for period t + 1 during the period t + 1 is not optimal during the period t + 1, and the request to follow the previously announced plans is lost (Fischer, 1980). At the same time, expectations about future policies have led economic agents to influence their current decisions (Kydland and Prescott, 1977). Therefore, believing that the central bank cannot achieve the inflation target causes individuals to shape their inflation rate expectations at a higher level and to settle wages and contracts in this direction. On the other hand, when full information is communicated to the public, monetary policymakers and central banks are not volunteers, and even in some cases, they may want their policies to become completely incomprehensible (Mishkin, 2004). The reason for this is that under these circumstances the central bank facilitates the direction of the economy either for monetary policy purposes or against economic shocks. Otherwise, it is difficult for monetary policymakers to observe the level of output through surprise inflation by using the informational advantage of the economic situation, in other words, opportunistic policies are difficult to implement (Erdoğan, 2004). Moreover, with the introduction of full information, the central bank is influenced by the private sector estimates, this leads to a flattening of the estimation distributions and the inability to produce the desired effect (Ehrmann and Eijffinger, 2012).

The increase in transparency due to these reasons is not always desirable for central banks and markets to the success of monetary policy implementations and the rationality of expectations and predictions. So while transparency is useful to a certain level, transparency over this level is not beneficial. For this reason, it is of utmost importance that the degree of transparency is determined at the optimal level. The optimal level of transparency reflects the degree of transparency that other conditions give rise to the effectiveness of monetary policy up to a certain level while data is being used, and at a further level, it reduces effectiveness. It is difficult to determine the exact degree of optimal transparency (Cruijsen and Eijffinger, 2010), because it is difficult to measure difficulties in accurately reflecting the transparency of selected variables. Furthermore, an optimal level of transparency may vary from country to country depending on the economic and financial structure of each country, and this level may vary over time depending on the economic conditions in which the country is located.

Several explanations have been made in the literature for optimal transparency in monetary policy. Taking the issue in the context of social benefit, Cukierman notes that limited transparency is more useful to society in limited transparency when information about shocks continues to remain private. The choice of limited transparency in terms of social benefit stems from the fact that the central bank struggles to achieve various objectives with a single instrument. Accordingly, if the central bank is striving to achieve both the inflation target and the output target, it is not possible to achieve success in both of these targets. There is no need for reconciliation with employment stability as the demand shock only affects direct inflation. On the contrary, when there is supply disruption, it affects both employment and inflation, and it is necessary to reconcile that each of the inflation targets and output targets is near the

target. Thus, the central bank is optimally exchanging between multiple targets, in which case, if limited transparency prevails, it allows to bear less costs than full transparency. As a result, it is stated that social welfare is higher under limited transparency, suggesting that this result is valid in both Lucas supply function and Neo-Keynesian economy (Cukierman, 2000).

Jensen addresses the issue within the framework of exchange between flexibility and credibility. In the new Keynesian model with a futuristic outlook, the greater the transparency about the control errors is, the easier it is for the private sector to make sense of the intentions of the central bank, and they can more easily distinguish the difference between the incremental increases in private sector and the consciously made increases. As a result, it is considered in transparency that inflation expectations are more sensitive to the actions of the central bank. For central banks, this means increasing the cost of stabilizing the output in terms of inflation. The underlying reason for this is that the inflation target conflicts with having an output target. If the central bank has good credibility, it is a loss to stabilize the bank's transparency practices to reach the inflation target. Increased transparency can lead to the disadvantage of eliminating the strategic advantage of the central bank by reducing the capacity to stabilize the economy. Thus, the optimal choice of transparency usually involves a change in creditworthiness versus the loss of transparency while transparency changes the exchange of output and inflation variables by creating a falsification of the stabilization policy (Jensen, 2002).

In terms of policy transparency, Faust and Svensson examine the issue in terms of inflation bias. The monetary policy is regulated in three different regimes to reveal the transparency effects as the regime, whose purpose and intention cannot be observed, the regime in which private sector cannot be fully observed but the central bank can make a full sense of its purpose and intentions and the regime in which private sector is directly observing. It states that the regime with extreme transparency, ie the regime in which the private sector can directly conduct observations, is the most unsuccessful regime among the regimes, and the regime in which intention cannot be observed reflects the optimal degree of transparency and is the regime without average inflation bias (Faust and Svensson, 1998).

Morris and Shin focus on the coordinating role of the central bank in the context of social welfare. When perfect information is the only balance between economic agents, social welfare is maximized, while in the presence of incomplete information, the prosperity effect of the central bank is uncertain. If the agents do not have any special knowledge, that is to say, only the knowledge of the public, the more accurate the public knowledge is, the greater the social welfare is. On the contrary, more public information is not always desirable if the economic units have special knowledge as well as public information, and as the accuracy of private information increases, the social welfare reduction of public information is increasing. The reduction of the welfare of public information is due to the fact that the units are overreacting to public information. The fact that false information or the misrepresentation of information regarding the disclosed information is effective, under these circumstances, an ineffective

balance in the context of social welfare is created. Here, the coordinating role of the central bank, especially in the framework of expectations, is important. The loss of social welfare is reduced if the central bank is more effective than coordinating market expectations, establishing the right balance between providing private sector time and providing frequent information, and protecting them from the damages caused by possible noises (Morris and Shin, 2002).

Cruijsen and Eijffinger explain optimal transparency in the context of inflation persistence. In the model of the transparency of the central bank in relation to the quality of the inflation forecasts of the private sector, the bank's optimal transparency level reflects the situation in which the quality of the inflation forecasts is optimized. Accordingly, an optimal transparency regime is the moderate level of transparency in which inflation persistence is minimized. Additional transparency on this level is accompanied by higher inflation persistence (Cruijsen and Eijffinger, 2010).

Walsh describes optimal transparency as a level of transparency that allows the central bank to make stable the production gap and inflation. In the absence of transparency, private sector firms may misinterpret the signalling of interest rate movements to try to balance the demand shocks of the central bank. Here, the central bank reduces the confusion by making a statement, thereby ensuring that inflation is more stable while having the expected demand more than neutralizing shocks. At the same time, the transparency of the central bank leads inflation not to react more to cost shocks. The policy contributes to a reduction in response to a negative demand shock in response to interest rate hikes, while the firms perceive the decline in the instrument as a positive cost shock, revising their expectations about cost shocks. This leads the central bank to react more strongly to the cost-containment signal, making inflation more stable. However, the fact that more information, such as reporting the output target to the entire firm, may increase the vulnerability of the central bank to the output target. In this case, inflation may be more volatile, as the more accurate public information provided is strongly counteracted by the central bank's announcement of the production deficit, and thus the more sensitive private sector is to a noise that is predicted to be a cost-containment shock (Walsh, 2005).

5. Conclusion

This study tried to investigate the possibility of optimal transparency by noting that the increase in the level of transparency will not always lead to positive results on the monetary policy. The announcement of the short-term interest rate target, publicizing the annual inflation forecast, improving the reliability of the central bank, where deviations from policy objectives and economic developments affecting them are regularly shared facilitates the bank's market orientation. However, this leads private sector to be more sensitive to policy decisions and actions of central banks and to react more if there is a deviation from the targeted indicators. Hence, the increased transparency cannot always provide desirable contributions to the achievement of the monetary policy objectives as expected. What should be the dimension of

information sharing for the success of the central bank is more important today, especially when the inflation targeting regime gains weight. As demonstrated in recent studies, transparency must be optimal, that is to say, must be increased to a certain level and then avoided from applications that would increase transparency after a certain level. This level should be determined taking into account the dynamics of central banks' credibility, the ability to perceive private sector central bank signals and current economic conditions.

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