

# Coordination between monetary and fiscal policies in times of crisis and its impact on the independence of central banks: Literature review

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## Abstract

This paper focused on the process of coordination between the financial and monetary policies and the boundaries that prevent compromising the independence of central banks, especially in times of financial and economic crises, as the solutions and mechanisms used to mitigate or manage their results weaken the voices calling for the need to separate the two policies in a way that ensures the success of each of them in achieving the goals that they seek. Nevertheless, this research dealt with some important literature and theories, those that focus on the need for independence for central banks and financial policy, as well as on the need for limited coordination between them in times of crisis, as they are the two most important policies within the framework of macroeconomic activity, provided that this necessary emergency coordination ends with the end of those crises. Furthermore, the research concluded by studying the most important literature that coordination between the monetary and financial policies is very necessary, however is considered a moral obligation in front of decision-makers in both policies, in order to spare the economy and people the negative effects resulting from crises. Also, this coordination is important in normal times to maximize welfare and achieve more strength and progress for the economy, provided that it does not affect the independence of central banks and does not negatively affect the fiscal policy tools. **keywords** : Monetary policy, fiscal policy, independence of the central bank, coordination between fiscal and monetary policy

## Introduction:

The financial and economic crises that the superior and developing economies were subjected to, starting with the Great Depression in the thirties of the last century and ending with the last economic crisis in 2019 changed many opinions and beliefs that looked at the effectiveness of each of the financial and monetary policies in isolation from each other, as the monetary and financial debate became worthless after the solutions that dealt with those crises proved the importance of both financial and monetary tools, in times of crisis, targeting inflation is no longer the only main objective on which independent monetary policy should focus, because of the devastating economic and social effects of deflation. However, as a result of the recurrence of these crises and the depth of their effects, the fiscal policy has become unable on its own to confront and treat, and its unconventional tools have been used, due to the inability of the traditional tools of monetary policy to work in light of the strong economic downturn, especially when interest rates reached the zero limit and the liquidity trap became the dominant feature on customer decisions, which obliged it to coordinate with the financial policy, especially in the field of public debt, and to rescue the troubled financial institutions due to crises.

Due to these developments in the field of work of both fiscal and monetary policies, the theoretical debate was launched between economists about the effectiveness of coordination between the two policies and its ineffective limits, and the responsibility of decision-makers in the trade-off between saving the economy as a whole or maintaining their belief in the necessity of a complete separation between the tools of both policies.

### **First: The concept of coordination between monetary and fiscal policies**

(Begg, 2002, pp. 21-22) presents a simplified concept of coordination between fiscal and monetary policies, “its content is directed to measures that ensure that decisions taken by decision-makers in one of the two policies do not have indirect and undesirable effects on the other policy.” He also asserts that the best forms of coordination at all are those that involve the participation of decision-makers in both policies in defining their goals, which leads to maximizing the results achieved from both policies. (Marszalek, 2003, p. 48) recognizes the coordination process as the mechanism through which negotiations take place between the financial authority and the monetary authority, each enjoying its independence from the other, in order to achieve the best-desired results from both, and to create the appropriate framework for activating the performance of each.

(Bennett & Loayza, 2000, p. 24) stresses the issue of coordination as a relationship between two independent authorities and not as a relationship between two authorities that depend on each other, whereby the central bank's independence contributes to achieving price stability and financial discipline. Moreover (Laurens & De La Piedra, 1998, p. 4) considers coordination between the two policies as an effective means to achieve the general economic goals of the state, which takes place on two levels, the first: when defining the general goals, provided that one of those goals is to work on developing the financial sector. The second: that coordination is carried out by taking some institutional measures and defining implementation mechanisms that would confirm the efficiency of that coordination.

### **Second: The development of the issue of coordination between fiscal and monetary policies in the economic literature**

It can be highlighted in four main stages (Kamal, 2010, p. 13):

The first stage: the absence of the issue of coordination between the fiscal and monetary policies.

The second stage: the emergence of the call for the independence of monetary policy from the political authorities.

The third stage: the emergence of the importance of coordination between the fiscal and monetary policies.

The fourth stage: the necessity of coordinating the fiscal and monetary policies in times of crisis.

These stages will be presented as follows:

#### **The first stage: the absence of the issue of coordination between fiscal and monetary policies**

The issue of coordination between fiscal and monetary policies was absent from the intellectual debate between Keynesians and monetarists, as the first team emphasized the effectiveness of fiscal policy by achieving a high level of employment by creating a deficit in the state's general budget and financing it with new monetary issuance, and thus monetary policy will be subordinate to fiscal policy (Al-Ghandour, 2000, p.5). Furthermore, in reducing the effectiveness of monetary policy and its weak ability to achieve economic stability, Keynesian economists relied on a basic argument that a large number of them believed in, which is that this policy does not have direct effects on macroeconomic variables, but rather its impact is limited to the changes it causes in interest rates, whose impact is weak and has a long time horizon, while the fiscal policy exerts a direct and rapid impact on total spending and then on the level of income and employment (Maatouq, 1989, p. 147). On the contrary, Milton Friedman and his supporters emphasize the important impact of monetary policy on economic activity and the general level of prices if the money supply is controlled so that this policy is more important than the financial measures explained by Keynes to stabilize aggregate demand (Eatwell et al, 1987, pp.492-493).

### **The second stage: the call for the independence of monetary policy from fiscal policy**

The seventies of the last century witnessed an increase in doubts about the feasibility of Keynesian thought, especially after the expansionist monetary policies witnessed in most Western economies accompanied by the phenomenon of inflationary stagnation. Also, Friedman emphasized that there is a trade-off in the short term between the unemployment rate and the deviation of the inflation rate from its expected rate, while this trade-off is absent in the long term, which confirms the limited impact of monetary policy on the unemployment rate. That era also witnessed the emergence of many writings that dealt with the problem of temporal inconsistency and the consequential importance of the monetary authority enjoying its independence from the financial authorities ( Handa, J. 2000, p.257).

According to (Jácome & Vázquez, 2005, p.3), the reforms witnessed by many central banks towards granting them greater independence in the design and implementation of their monetary policy from the financial authorities are based mainly on theoretical contributions, especially the time inconsistency model presented by both Kydland and Prescott in 1977, and then developed by Barro and Gordon in 1983, where this model showed that if governments face a trade-off between unemployment and inflation rates, they may prefer inflation rates that exceed the optimum rates, which is known in the economic literature as the inflationary tendency of monetary policy.

(Rogoff, 1985, pp.1169-1189) is the first to suggest delegating monetary policy to an independent and conservative central bank in the face of inflation as one of the solutions proposed to the problem of the inflationary tendency of monetary policy, which arises from the multiplicity of monetary policy objectives as it aims to stabilize output, and achieve employment, in addition to the price stability goal, despite the conflict between those goals. Therefore, this development in the economic literature during the seventies of the last century led to the main objective of monetary policy in many Western countries during the subsequent eighties being based mainly on controlling inflation rates and abandoning the multiplicity of monetary policy objectives, and there became an agreement among economists represented in the exercise of the central bank's role in controlling inflation requires its enjoyment of independence from the financial authority (Hallett & Weymark, 2004, p. 103).

In this context, (Walsh, 1995, pp.150-153) suggested that the relationship between the central bank and the government should be an agency relationship, whereby the principal (the government) presents to the agent (the central bank) an agency contract that specifies the course of the latter's work. However, such a contract contributes to reducing the inflationary tendency of monetary policy that does not adhere to a specific rule and enjoys the freedom of action due to the commitment of the Central Bank to achieve a low and stable rate of inflation, as well as this contract increases the ability of monetary policy to face aggregate supply-side shocks.

### **The third stage: the emergence of the importance of coordination between fiscal and monetary policies**

(Mishkin, 2000, pp. 1-2) considers that one of the important lessons that can be drawn from each of the financial dominance hypotheses presented by (Sargent & Wallace, 1981) and stressed the impact of government debt on the effectiveness of the monetary policy, as well as from the literature that dealt with the financial theory of the level general price, as the famous economist ( Woodford, 1995) presented in one of his important studies - that theory on how to determine the price level, in which he explained that the government's choice of deficit financing method plays a decisive role in determining the future course of the inflation rate, and according to this theory, fiscal policy occupies most of the attention in determining price level, accordingly, he called it the financial theory of price level. Therefore, these two hypotheses only contributed to confirming the importance of the issue of coordination between the fiscal and monetary policies during the eighties and nineties of the last century.

(Christiano & Fitzgerald, 2000, p. 2) have pointed out the important impact of the financial theory of the price level on the performance of the central bank for its important function in achieving price stability, and then the need for coordination between the two policies, which was also confirmed by (Woodford, 2001, p.3) in another study, where achieving price stability according to the results of this study does not only require undertaking an appropriate base for monetary policy, but it also requires following an appropriate base for fiscal policy, as it is suggested that Taylor's rule on which the design of monetary policy is based includes a goal that must be achieved for the size of the fiscal deficit in the government budget, which requires coordination between the tools and objectives of both monetary policy and fiscal policy.

#### **The fourth stage: the limits of coordination between fiscal and monetary policies in times of crisis**

Earlier in the financial crisis, it was evident through a literature review that a consensus had developed around an ideal central bank model, independent of the government, with an emphasis on price stability through the inflation target, which bears the primary responsibility for mitigating macroeconomic volatility. Nevertheless, this consensus was supported by theoretical and empirical evidence that showed that central bank independence is important in reducing inflation without having a negative impact on growth or employment. Furthermore, central banks in superior and emerging economies have converged with this model of central bank independence, and in many countries, some central bank responsibilities such as financial supervision and stability have been transferred to separate institutions to enable the central bank to focus on its primary responsibility for monetary policy ( Balls, et al, 2018, p.4).

To complement the independence of the Central Bank, inflation targeting has become the second pillar of optimal monetary policy. Therefore, inflation targeting was considered important for stabilizing nominal expectations, reducing uncertainty, and improving credibility (Bernanke, et al, 2018), with similar targets being particularly important in a period of low inflation (Svensson, 2000; Mishkin F., 2001). In addition, inflation targeting has helped enhance transparency and ensure accountability of an independent central bank by enabling the government and the public to evaluate central bank actions within their power (Dincer & Eichengreen,2013; Geraats, 2000). Moreover, the strong case for central bank independence has increased the independence of the most advanced and emerging central banks (Cukierman, 2008). Meanwhile, inflation targeting has been formally adopted by 26 central banks, and inflation targeting principles have been adopted by many including the Federal Reserve, the European Central Bank, and the Bank of Switzerland (Roger, 2010). However, it is important to note that this pre-crisis consensus was explicitly or implicitly based on the belief that central bank independence was a flawless commodity, the more independent a central bank is, the more effectively it can follow through on its primary mandate of price stability.

Close cooperation between the central bank and the public treasury in times of crisis is both inevitable and desirable, and the trick is how and when to disengage the treasury from the central bank after the crisis is over ( Blinder, 2012, p.2). In the financial crisis, many things change and there are several reasons for cooperation, the first of which is the time horizon, when the issue becomes how the financial system continues for one week, the long term practiced by the central bank vanishes, and is temporarily replaced by the short term adopted by the treasury, and this makes cooperation between the central bank and fiscal policy is more natural. Second, the main objective of the central bank is changing, as the objective of fighting inflation is no longer necessary and may lead to counterproductive results if a recession is imminent, but control of the financial system as a whole is the main objective. This is also the ultimate goal of the Treasury. Third, cooperation is necessary to calm the financial markets that may face a state of panic, and the need for coordinated action has executive, political and psychological dimensions. However, only the central bank has unlimited means, the ability to quickly deploy them without legislative approval. while the treasury needs to be covered by

political legitimacy. The monetary and fiscal authorities must present a united front to unstable markets, and perhaps also to an ambivalent legislature (Blinder, 2012, p.4).

The global financial crises revealed major weaknesses in the arguments for lack of coordination that economists advocated before the crisis. These points can be presented as follows:

- In order to achieve their inflation targets, central banks needed to significantly expand their tools beyond their policy rates. During financial crises, central bankers had to choose between the inflation goal and the goal of the economy at full capacity, especially when interest rates are at zero, as monetary policy alone cannot ensure price stability or return the economy to full employment, and thus fiscal policy had a major role to play in demand management, indicating the need for coordination between the government and the central bank. Moreover, new “unconventional” monetary policy tools such as quantitative easing have had fiscal implications, including new risks to the country’s consolidated balance sheet and affecting government debt management (Greenwood, et al, 2014).

The crisis has demonstrated that the modern complex financial system is exposed to systemic risks that micro-prudential regulators and those focusing on particular institutions do not focus on. These risks may accumulate over time: the behavior of some large companies may lead to pro-cyclical investment strategies. Moreover, supervisors often lack appropriate macroprudential tools (system-wide changes to capital and liquidity requirements, market structures, and permissible lending terms) to respond to such risks (Balls, et al, 2018, p.7).

- The increasing size and complexity of the financial sector have forced central banks to significantly expand their lender-of-last-resort facilities, as they have lent at subsidized rates, based on hard-to-value collateral and a wide range of counterparties. In fact, some central banks acted as market makers of last resort (Balls, et al, 2018, p. 7).

- The crisis showed that the traditional lender of last resort to the central bank alone could not stop the crisis, as governments pumped large amounts of financial resources to recapitalize failing institutions in order to prevent financial contagion. Additionally, many jurisdictions have established new resolution mechanisms for large interconnected financial institutions and new bodies responsible for combating risks to financial stability (Balls, et al, 2018, p.7).

- Fiscal and monetary policies are becoming increasingly international, involving trade-offs between domestic and foreign interests. Thus, monetary policy had to be increasingly interconnected across countries. However, (Rey, 2015) argued that unless a country imposes restrictions on its capital account, it cannot pursue monetary policy completely independent of the global financial cycle.

In response to these institutional shortcomings revealed by the crisis, countries around the world have reformed their regulatory frameworks. Furthermore, governments have broadened central bank mandates to include clear goals of financial stability and equipped central banks with varying degrees of macroprudential tools to achieve them, ranging from countercyclical capital reserves to loan-to-value ratios.

### **Concerns about the independence of the central bank during crises**

There are concerns that expanding the responsibilities and tools of central banks in times of crisis may undermine the independence of their primary function of monetary policy (Buiter, 2016). As the central bank's mandate for financial stability expands, they are forced to work on more politically controversial areas such as housing policy. Nevertheless, unconventional monetary policy tools such as asset purchases and financial stability levers such as loan-to-value ratios may also have first-order distribution issues. All this could lead to a popular backlash against the independence of the central bank. (Goodhart & Lastra, 2018), argue that political concerns about the effects of unconventional monetary policy on income distribution, wealth, asset prices, and public debt are likely to make central bank independence unsustainable. There are also concerns that the new authorities will weaken the institution's

focus on inflation. However, overburdening the central bank with responsibilities and tools may divert its institutional focus from monetary policy and undermine its effectiveness as a bureaucracy. Increased coordination with fiscal policy at the zero floor raises concerns that the central bank is under pressure for monetary financing.

The central banks' fundamental role in managing financial crises and increasingly in financial supervision may undermine their independence. (Brunnermeier & Gersbach, 2012), for example, argue that the independence of the European Central Bank has been undermined by the expectation that it will continue to provide cheap financing to cash-strapped banks. Also, (Masciandaro & Passarelli, 2013) conclude that “the greater the confusion and ambiguity between the central bank's role as a monetary authority and its participation in banking supervision will put its independence at risk. Moreover (Ueda & Valencia, 2012) believes that the combination of financial stability and monetary policy objectives may also lead to the emergence of dynamic inconsistency problems, leading the central bank to choose a higher than optimal level of inflation, as (Goodhart & Lastra, 2018) emphasized that the increased interaction between central banks and politicians as a result of central banks' involvement in financial supervision may blur the boundaries of central bank independence.

Accordingly, the above concerns illustrate the need for a new concept of central bank independence to take into account the new powers and responsibilities of central banks.

### **Post-crisis: Is the independence of monetary policy still necessary?**

In the post-crisis period, central banks have taken on a host of new responsibilities besides their primary roles as monetary policymakers and as lender of last resort. Many central banks now have mandates to supervise financial institutions and to ensure financial stability, as well as price stability. In order to achieve these new goals, they acquired a range of new powers, including systemic risk oversight, macro and micro-prudential regulation, crisis management, and financial conduct discipline. Also, some central banks have even adopted mechanisms to coordinate monetary policy with fiscal policy and debt management.

This diversity of approaches also reflects difficult questions about how best to structure and allocate responsibility for these new areas. The new powers of central banks are likely to interact with monetary policy and central bank independence in complex ways. However, new responsibilities can distract from or conflict with central banks' core functions as monetary policymakers and lender of last resort, or they can risk engaging the central bank in complex interagency policies or contentious policy areas, which could jeopardize the effectiveness and independence of the central bank (Balls, et al, 2018, p.34).

The period after the crisis revealed that economies are more vulnerable to liquidity traps than had been expected before the crisis. In addition, the global recession hypothesis (Greenwood, et al, 2014) assumes that these situations are more than temporary and that advanced economies experience a prolonged period of low aggregate demand and increased desirable savings on required investment, in a liquidity trap or global recessions characterized by insufficient aggregate demand and ineffective conventional monetary policy constrained by the zero floors, central bank independence is unlikely to be beneficial, and even potentially harmful.

In this context,( Blinder, 2012) asserts that once the dust settles on the acute phase of the financial crisis, the economy is likely to be weak, if not in a deep recession, and the country's major financial institutions are also likely to be poor or nationalized, or both. Also, in the post-crisis period, especially if the central bank has reached zero rates on nominal interest rates, as a result of the application of unconventional monetary policies such as large-scale asset purchases, inflation is unlikely to be a major concern thereafter, unless there is currency crunch and a major devaluation, however, the markets will remain troublesome. The legacy of emergency quasi-financial operations will remain, in fact, in extreme cases, a central bank may be concerned about its balance sheet, and with a macroeconomic need to stimulate, both

monetary and fiscal policy should in principle remain expansionary - and explicit coordination should not be necessary.

### **Conclusions:**

- Delegating monetary policy to a monetary authority that enjoys independence from political authorities contributes to limiting the inflationary tendency of monetary policy, which goes hand in hand with the multiple objectives of that policy. However, this delegation may have costs, the most important of which is the absence of coordination between the fiscal and monetary policies. Therefore, a firm argument emerges for the necessity of coordination between the two policies, as it supports the economy's ability to face unexpected shocks compared to the absence of that coordination (Hall, et al, 1999, p. 7.).
- Focusing attention on the effectiveness of one policy, let it be monetary policy, and look at the other, let it be a fiscal policy on the basis that it is ineffective, because the two policies are necessary to support each other, that is, it is better to take advantage of the relative advantages of the two policies that we are trying to identify a combination of them that will be most effective in terms of achieving macroeconomic objectives under specific circumstances.
- The crisis has shown that central banks need to be much stronger and have broader powers, however, the traditional academic concept of the complete independence of the central bank as an absolute good is not enough for this new world. Furthermore, if modern central banks are to become more powerful, they will take on more risks with the formal sector balance sheet, enter more politicized policy areas, and need better protection from political consequences and increased oversight of their actions. Therefore, if monetary policy is linked to financial stability and fiscal policy, more cooperation with the government is needed (Balls, et al, 2018, p.13).
- It is important to realize that the role of an independent central bank differs in inflationary and deflationary environments. In the face of inflation, which is often associated with excessive government debt monetization, a fully independent central bank should be in place to increase its ability to combat inflation, but with a prolonged deflation, excessive money creation is unlikely to be the problem, and more cooperative stance on the part of the central bank may be required. Nevertheless, under these circumstances, greater cooperation between central banks and financial authorities is in no way inconsistent with the independence of central banks (Bernanke, 2003).
- The main lesson from the crisis points to how macroeconomic policies and institutions need to be reformulated during crisis environments and to ensure that people's welfare is best protected, economists should not fall into taboos and should feel morally obligated to explore all possible means of public safety in extreme but plausible worst-case scenarios and conditions.
- In normal situations of unrestricted monetary policy, the current monetary and fiscal framework in most countries is likely to remain effective, as fiscal rules and supervision constrain fiscal excesses and independent central banks stabilize the economy. However, in crises and when the monetary policy reaches the zero thresholds of the interest rate, it is necessary to have an alternative framework for monetary and fiscal coordination. Also, it is necessary to establish a coordination mechanism that respects the following three principles: it must be activated by the central bank, it must protect democratic control of fiscal policy, and it must be limited to zero (Balls, et al, 2018, p.43).
- During the difficult post-crisis period, the Central Bank should carefully disengage from the Treasury and gradually restore its independence, and this will happen automatically once the crisis is over, and the central bank will naturally focus again on sound monetary policy, not emergency bailouts. However, how quickly the disengagement will be will depend on the circumstances. If financial stability is substantially restored, the central bank should be able to decouple its monetary policy from financial stability concerns and reassert its independence

with respect to past financial matters. Moreover, I believe that happened smoothly in the United States (Blinder, 2012).

### References;

- Al-Ghandour, A. (2000) "On Monetary Policy and the Independence of the Central Bank in Egypt", Faculty of Economics and Political Science, Department of Economics, Research Paper Series, No. 10.
- Balls, E., Howat, J., & Stansbury, A. (2018). Central Bank Independence Revisited: After the financial crisis, what should a model central bank look like?", M-RCBG Associate Working Paper Series | No. 87 .
- Begg, I. (2002). Europe: government and money: running EMU: the challenges of policy co-ordination. The Federal Trust.
- Bennett, H., & Loayza, N. (2000). Policy biases when the monetary and fiscal authorities have different objectives. Central Bank of Chile.
- Bernanke, B. S. (2003). Constrained discretion and monetary policy. Remarks before the Money Marketakers of New York University, New York, New York. February, 3.
- Bernanke, B. S., Laubach, T., Mishkin, F. S., & Posen, A. S. (2018). Inflation targeting: lessons from the international experience. Princeton University Press.
- Blinder, A. S. (2012). Global policy perspectives: central bank independence and credibility during and after a crisis. In Proceedings-Economic Policy Symposium-Jackson Hole (pp. 483-491). Federal Reserve Bank of Kansas City.
- Brunnermeier, M. K., & Gersbach, H. (2012). True independence for the ECB: Triggering power-no more, no less. VoxEU. org, 20.
- Buiter, W. (2016). Dysfunctional Central Banking. The End of Independent Central Banks or a Return to 'Narrow Central Banking'—or Both?. Citi Research, 21.
- Čenić, M. (2004). 'Jagdish Handa: Monetary economics' London, Routledge, 2000., str. 766. Ekonomski pregled, 55(11-12), 1063-1068.
- Christiano, L., & Fitzgerald, T. J. (2000). Understanding the fiscal theory of the price level.
- Cukierman, A. (2008). Central bank independence and monetary policymaking institutions—Past, present and future. *European Journal of Political Economy*, 24(4), 722-736.
- Dincer, N. N., & Eichengreen, B. (2013). Central bank transparency and independence: updates and new measures.
- Eatwell, J., Milgate, M., & Newman, P. (Eds.). (1987). *The New Palgrave: A Dictionary of Economics*, Finance. Springer. Vol. 3, The Macmillan Press Limited, London.
- Geraats, P. M. (2000). DP2582 Why Adopt Transparency? The Publication of Central Bank Forecasts.
- Goodhart, C., & Lastra, R. (2018). Potential threats to central bank independence. *Hawks and Doves: Deeds and Words*, 15.
- Greenwood, R., Hanson, S., Rudolph, J. S., & Summers, L. H. (2014). Government debt management at the zero lower bound.
- Hall, S. & Henry, B. and Nixon, J. (1999). "Central Bank Independence and Co-ordinating Monetary and Fiscal Policy", *Economic Outlook*, Vol.23, Issue 2 .
- Hallett, A. H., & Weymark, D. N. (2004). Independent monetary policies and social equity. *Economics Letters*, 85(1), 103-110.
- Hasan, M. F., Faris, A. A., & Abdulsatar, N. A. (2020). Contrarian Investment Strategy: a Superior Active portfolio approach. *THE IRAQI MAGAZINJE FOR MANAGERIAL SCIENCES*, 16(66).
- Hasana, M. F., & Al-Dahanb, N. S. (2019). The Herding Effect of Domestic Investors on Foreign Investors: Evidence from the Iraq Stock Exchange. *International Journal of Innovation, Creativity and Change*, 10 (6), 234-245.



- Jácome, L. I., & Vázquez, F. (2005). Any link between legal central bank independence and inflation?: evidence from Latin America and the Caribbean.
- Kamal, M. (2010). Theoretical framework for coordination between fiscal and monetary policies, University of London.
- Laurens, B., & De La Piedra, E. (1998). Coordination of monetary and fiscal policies.
- Maatouk, S. M. (1989) "Monetary Theories and Policies" - The Egyptian Lebanese House - First Edition.
- Marszałek, P. (2003). Coordination of monetary and fiscal policy. *Poznan University of Economics Review*, 3(2), 41-52.
- Masciandaro, D., & Passarelli, F. (2013). Single supervision and resolution rules: is the ECB independence at risk?.
- Mishkin, F. S. (2000). What should central banks do? Paper Prepared for the Homer Jones Lecture.
- Mishkin, F. S. (2001). Issues in inflation targeting. Price stability and the long-run target for monetary policy, 203-222.
- Rey, H. (2015). Dilemma not trilemma: the global financial cycle and monetary policy independence (No. w21162). National Bureau of Economic Research.
- Roger, S. (2010). Inflation Targeting Turns 20: A growing number of countries are making a specific inflation rate the primary goal of monetary policy, with success. *Finance & Development*, 47(001).
- Rogoff, K. (1985) "The Optimal Degree of Commitment to an Intermediate Monetary Target", *The Quarterly Journal of Economics*, Vol. 100, No.4.
- Sargent, T. J., & Wallace, N. (1981). Some unpleasant monetarist arithmetic. *Federal reserve bank of minneapolis quarterly review*, 5(3), 1-17.
- Svensson, L. E. (2000). The zero bound in an open economy: A foolproof way of escaping from a liquidity trap.
- Ueda, M. K., & Valencia, M. F. (2012). Central bank independence and macro-prudential regulation. International Monetary Fund.
- Walsh, C. E. (1995). Optimal contracts for central bankers. *The American Economic Review*, 150-167.
- Woodford, M. (1995, December). Price-level determinacy without control of a monetary aggregate. In *Carnegie-Rochester conference series on public policy* (Vol. 43, pp. 1-46). North-Holland.
- Woodford, M. (2001). Fiscal requirements for price stability, NBER Working Paper No. 8072.