

The Independence Of The Central Bank As An Effective Input To The Drawing And Implementation Of Monetary Policy (Germanic Central Bank Study As A Model)

HADEF Hizia, HADEF Chahida

ملخص: إن أهمية إستقلالية البنوك المركزية، أصبح من المواضيع الأساسية المطروحة على الساحة المصرفية ويؤيد العديد من الاقتصاديين إستقلالية البنك المركزي في مجال وضع السياسة النقدية مستندين إلى أن مصداقيتها وقدرتها على تحقيق الهدف الخاص باستقرار الأسعار، سوف تكون أفضل إذا ما زادت درجة إستقلالية البنك المركزي عن السلطة التنفيذية، ذلك أن البنك التابع للحكومة لا يمكنه الالتزام بطريقة ذات مصداقية بهدف تحقيق الاستقرار في الأسعار لأن الأعوان الاقتصاديين سوف يلاحظون في هذه الحالة عدم التناسق في تصريحاته وتصرفاته، ومن ثم فقدان الثقة في إمكانية إلتزامه بتحقيق مثل هذا الهدف.

وخير مثال على ذلك ما قام به البنك المركزي الألماني في عام 1991 حيث أدرك أنه يواجه موجات تضخمية متزايدة، وكان بإمكانه أن يقلص الكتلة النقدية ويزيد أسعار الفائدة قصيرة الأجل حتى يتمكن من إيقاف زحف موجات التضخم، الأمر الذي كان سيتم على حساب الإنتاج والعمالة ولكنه رغم ذلك إختار مواجهة التضخم بشكل تدريجي بهدف الحفاظ على مستويات الناتج والعمالة .

فهل حقيق أنه باستقلالية البنوك المركزية قد تكون هناك جودة وفعالية في تطبيق السياسة النقدية عدا عن كونها مجموعة من الإجراءات والقوانين ؟

الكلمات المفتاحية : البنك المركزي ، السياسة النقدية ، التضخم.

Abstract : The importance of the independence of central banks has become one of the main issues on the banking front. Many economists support the central bank's independence in the field of monetary policy, based on the fact that its credibility and ability to achieve the goal of price stability will be better if the degree of independence of the central bank The government's bank can not commit itself in a credible manner to stabilize prices because economic agents will notice inconsistencies in its statements and actions and thus lose confidence in its commitment to achieving such a goal.

A good example of this was the German central bank's move in 1991, when it realized that it was facing increasing inflationary pressures. It could have reduced the monetary mass and increased short-term interest rates so as to stop the acceleration of inflationary pressures, which would have been at the expense of production and employment. He chose to confront inflation gradually in order to maintain output and employment levels.

Is it true that with the independence of central banks there may be quality and effectiveness in the application of monetary policy other than a

set of procedures and laws ?

Mots clés : central banks, monetary policy, inflation

The importance of the study :

The importance of the study is to analyze the independence of central banks as a necessary condition for their effective role in monetary and overall stability and to achieve the objectives of the monetary policy of any country by using the experience of a country that has left its mark on the independence of central banks, Germany, and based on the point that the independence of the Central Bank supports and encourages Working on managing monetary policy more effectively and contributing to the achievement of monetary stability.

Introduction :

The Central Bank is the authority responsible for monetary policy in different countries, so there is broad agreement on the importance of granting an appropriate degree of independence to the central bank for the government administration and the parliament so as to be able to develop an effective policy in achieving and maintaining price stability, in addition to supporting the government's economic policy. The importance of achieving the independence of the central bank in isolating it from political pressures as a remedy for the government's tendency towards inflationary financing. This has resulted in a general tendency to grant or increase the independence of central banks in many countries. This trend included the central banks of the EU countries except Germany, Its central bank with a high degree of independence, the European Central Bank, the New Zealand Central Bank and others.

The first axis: What is the Central Bank, its characteristics and objectives:

The First Part : Definition of the Central Bank:

The bank is the body that issues banknotes, and includes, by various means, the integrity of the banking system. It is entrusted with overseeing the credit policy in the country. This policy has important effects on the economic and social systems. It is not a bank or a regular institution. , The central bank with its ability to issue and

destroy money on the one hand and the ability to influence the possibilities of commercial banks in issuing deposit money on the other hand, represents the supreme control authority over commercial banks.

As for monetary policy, it consists of two words: policy, management, and money. Thus, the combination of the two words means a set of measures and measures taken by the monetary authorities represented by the central bank to affect the volume of money supply, either in excess or in order to achieve a set of objectives using a set of Gadgets.

The Second Part: Functions of the Central Bank:

Contribute to economic activity effectively by implementing monetary policy that is compatible with the general economic objectives of the state.

Achieve Stability and integrity of the banking system through the implementation of a credit policy, and through the control of all financial institutions operating in the State.

Central banks have developed a special approach to the rules and practical practices that lead to what can be described as "the art of central banks", but in a world of constant change and subject to various modifications and working methods from time to time. And also coincided with the development of payment techniques, which means a close link between the development of central banks and the evolution of monetary and banking systems.

Although the function of cash issuance is the main function of central banks, it has become a secondary function, from a partial perspective is focused on the integrity of the functioning of the banking system, and from the macro perspective, attention is on the size of the mass and control of expansion in order to stabilize the general level of prices, Economic development.

Organization of the monetary (currency) of the state, which is the most important functions, which was called the banks «issuance». In most countries, the right to issue money has been linked to the

establishment of central banks. Therefore, the Central Bank is a government bank subject to government supervision and guidance and according to the laws governing its relationship with the state based on the nature of the economic system prevailing in the country.

Third: Characteristics of the Central Bank: The Central Bank has the following characteristics:¹

- Takes the lead and the top of the banking system: with the supreme control of commercial and non-commercial banks, and the ability to create and destroy legal money without either.
- Has the ability to convert real assets into monetary assets and vice versa, that is, able to create legal money, and the dominant in the affairs of cash and credit (credit) in the national economy is not a regular monetary institution.
- Is unique to other banks in being a public institution that regulates and supervises banking activity and participates with the government in the formulation of monetary policy, and this policy is used through intervention, direction and control.
- The Central Bank does not envisage profit through its operations. The central bank's objective should be the public interest and the regulation of monetary, banking and economic activity. Therefore, the central bank is often owned by the state.

The fourth Part: The objectives of the Central Bank:

The objectives of the Central Bank vary, and whenever the objectives are clear and limited, this indicates a great degree of independence.

The Goals	Degree
A. Stabilize the overall level of prices	1
B. The above objective has objectives that do not conflict with it	6.0
C. With other objectives inconsistent with him	4.0
D. There are no goals	2.0

The Fifth Part: Restrictions on government borrowing:

The controls and restrictions on government borrowing from the central bank are important criteria in determining the degree of independence of the central bank. Some expect the central bank as the bank acting on behalf of the government to fill the deficit in the public budget automatically² and as was the case in previous years in Iraq or In some developing countries where governments are now in control of monetary policy, restrictions on government borrowing are generally divided into the following :

Enrollment	Class
a. Borrowing is prohibited	01
b. Grant borrowing in cases of extreme necessity	66.0
c. The possibility of borrowing is available to a large extent	0

There are several other criteria and indicators used to illustrate and clarify the degree of independence of central banks that can be consulted for further details.³

Axis II: Independence of the Central Bank:

The first requirement: What is meant by the independence of central banks?

In 1824, **D. Ricardo** expressed his opinion about the establishment of a national bank. "We can not be sure of relying on the government to control the issuance of paper money, since giving the government power will often lead to excessive use of this power, Which means that the issue of the independence of the Central Bank is relatively old, but what is new is the increasing demand to give central banks more independence in the development and implementation of monetary policy,⁴ which led to a radical change in the institutional relationship of the Central Bank in the face of the government, and the success achieved by some central banks Germany, and the United States of America have increased interest in the independence of central banks. Legislation has been enacted in several countries such as France, New Zealand, Mexico, Chile, Venezuela and some

developing countries, as well as the Maastricht Treaty on the Independence of the European Central Bank.

1. The concept of independence of central banks:

At first sight, the concept of central bank autonomy may mean full independence from the government in everything from monetary policy management to credit control. However, the real concept of central bank autonomy does not mean total separation from the state. It is only one of the institutions of the government operating within the framework of the state system. However, the meaning of independence is reflected in decisions issued by it, so that decisions must be given priority in maintaining price stability (a main objective), ie, monetary policy is largely independent from politics Economic development of the State.

The concept of the independence of central banks is based on the idea of isolating monetary policy from the ongoing political pressure exerted by the executive authority to serve its interests. This is confirmed by some field studies such as the study of Bad and Barkim in 12 countries. Inflation has been low, and independence is constraining governments' tendency to approve the budget deficit as a result of their reluctance to finance the budget deficit through monetary issuance, or to increase the sale of government bonds and treasury bills.⁵

It is also necessary to distinguish between independence in setting goals and independence in identifying tools:

- **Independence in Goal Setting:**

If the objectives of the central bank or monetary policy objectives are precisely defined, it means that the independence in setting the goals is weak and vice versa. If the objectives are not precisely defined, then its independence is greater, and if the objectives are many and multiple, If the central bank's job is to stabilize prices, it is more independent.⁶

- **Independence in identifying tools:**

To achieve the central objective of the central banks is to maintain the stability of prices and currency, several tools must be used for monetary policy, whether direct or indirect. If these instruments are imposed on the central bank, it has no independence, but if it has the ability to choose effective tools to achieve its objectives It has a wide range of autonomy.

Of course, the independence sought by the central banks now is based mainly on giving them full discretion in the development and implementation of monetary policy and the selection of the appropriate tools necessary to achieve their objectives, especially since the main objective has already been determined and confined to the need to stabilize prices and maintain the value of the currency, That the stability of prices is divided into internal stability (the general level of prices) and external stability (exchange rate) with a strong and reciprocal relationship between them, and thus the correlation of the independence of monetary authority with the aim of internal and external stability of prices stems from the conflict between fiscal policy and monetary policy on the one hand As a result of the Government's tendency to finance the budget deficit and the contradiction between exchange rate policy and monetary policy on the other, as a result of the Government setting exchange rate targets (which the law grants in most countries of the world the right to set exchange rate policy) Central to stabilize prices.

Thus, the desire to make the central bank independent is not only the importance of isolating it from political pressure as a remedy for the government's tendency towards inflationary financing but also to give the central bank freedom to formulate monetary policy through the management of the monetary base so that it is able to reject the implementation of the exchange rate policy set by the government Which may have inflationary consequences.⁷

As a conclusion to the concept of independence of central banks, we say that:

"The independence of central banking is linked to its independence in the management of monetary policy away from the intervention of the

executive authority, which does not allow the use of monetary policy to finance the deficit in the general budget, which can lead to high inflation, and linked to the independence of the Central Bank of the nature of monetary policy objectives, Stability of prices as much as they are independent, and when assigned to other objectives, it limits its independence. "

2. Criteria for the independence of the Central Bank:

Several indicators are used to measure the degree of independence of the Central Bank:

- The length and duration of the appointment of the Governor.
- The body that appoints the Governor (the Central Bank Council, a joint body of the Board of the Bank, the Government and the Parliament).
- Possibility to exclude portfolios.
- The extent to which the Governor can exercise other functions and the authority authorized to do so.
- The uniqueness of the central bank in the formulation of monetary policy.
- The authority to resolve the conflict in the area of monetary policy.
- The extent of the contribution of the Central Bank in the preparation of the general budget.
- Central Bank targets a single goal : : Price stability, price stability with other objectives consistent with the stability of the banking system, price stability with conflicting objectives such as full employment.
- The extent to which loans can be granted to the public treasury, ie to the government.⁸

The second requirement: the reasons for calling for the independence of central banks:

Economic literature is rich in many studies that have been subjected to research and analysis of the content and importance of the independence of the Central Bank and its role in establishing the foundations of growth and economic and monetary stability. Most of these studies revealed that central banks are more independent of the

executive branch in general and the financial authority in particular. In this regard, the trend of supporters of the independence of the Central Bank is a number of arguments, the most prominent of which are:⁹

1. Monetary affairs should be kept away from the influence of politicians, since members of the government and parliament give priority to appeasing their constituents and adopt policies consistent with their political and electoral interests (including subjecting the bank to political pressure for expansionary monetary policy ahead of elections) Inflation, so these matters should be assigned to a central bank independent of the government.

2. The ability of the central bank to achieve, and maintain long-term stability of prices, will improve if the formulation of monetary policy by officials away from politics can be seen in the long term.

3. If the Central Bank is independent, its policy in this case will lead to lower inflation and stable price levels. This understanding was based on several studies that examined the relationship between the degree of independence of central banks and inflation and ended with an inverse relationship between them, In the sense that the higher the degree of independence of the central bank, the lower the rate of inflation, which supports the view that providing a higher degree of independence of the central bank helps to reduce the burden of inflation and increase the credibility of monetary policy.

4. Central banks with high degree of independence can resist government requests to finance the budget deficit either by issuing more money or by holding public debt securities. More precisely, the central bank's independence from the government means that the latter can not force the central bank to finance Deficit in the general budget.

5. The central bank is responsible for monitoring and directing the financial system in the country, as well as finding the required coordination between its various institutions, which requires the independence of the Central Bank.

6. The independence of the Central Bank will lead to the removal of the effects of the government from these banks in terms of determining their expenditures and revenues, and then separating the budget of the Central Bank from the state budget.

7. The increasing globalization of financial markets coupled with recurrent financial crises calls for the independence of the central bank in addressing these crises through the use of appropriate monetary instruments.

Thus, the independent central bank can resist the pressures of financial and political power and then adopt a prudent monetary policy that is in the public interest, represented by better macroeconomic performance, greater productivity and more efficient use.

Third Part: Evaluation of the independence of the Central Bank:

The case for the independence of the Central Bank plays an important role in stimulating and raising the rates of savings, investment and production and thus raising the rates of growth, employment and standard of living in general and controlling inflation rates to maintain the stability of prices and the value of currency and purchasing power. However, there is criticism directed at the independence of central banks, especially in the results of special studies. The independence of the central bank in practice shows that there is no absolute independence from the government, but there is a certain limit in which the government succeeds in imposing its policy, and there are many real factors that limit the effect of legal independence often gather in developing countries. New Zealand takes into consideration the nature of the overall climate in which this experiment took place.

Many other countries continue to grow at low inflation rates, although their banks, such as the Bank of Japan and the Bank of France, are not as independent as Germany and thus assert that the independence of the central bank is not a necessary condition for lowering rates of inflation.¹⁰

The Fourth Part: The Degrees of Bank Independence:

The degree of independence varies from country to country, and research has been conducted to include central banks in a sequence according to the rank of independence, which is estimated to be a balanced aggregation of all legal and administrative dimensions and the context of monetary decisions. In 1997, for example, the Bank of

England was declared independent of the Treasury, Until the same year, Japan enacted the legal amendment that granted the Central Bank independence in the management of operations without monetary policy objectives. In the United States, independence was established in 1978 and strengthened in subsequent years, while the Norwegian Central Bank's objectives, for example from the government and administered The Ministry of Finance prepares an annual report on the performance of the Bank in monetary policy to be submitted to the Parliament Committee for Financial and Economic Affairs, in the presence of the Governor of the Bank of South Korea to appoint President of the Monetary Policy Authority, and the Government is involved with the Bank in the formulation of monetary policy objectives, according to the latest amendment to the Bank's law, which came under pressure from the International Monetary Fund.

Axis III: The independence of the Central Bank and the effectiveness of monetary policy:

A number of economic studies have been conducted to examine the nature of the relationship between the degree of independence of central banks and the effectiveness of monetary policy by studying the relationship between the independence of the Central Bank and some economic variables such as inflation. The following is a review of the nature of the relationship between the independence of central banks and the most important economic variables Is inflation.

The first requirement: the relationship between the degree of independence and inflation:

A number of economic studies have been conducted on the relationship between the degree of independence of central banks and inflation rates. Supporters of the opinion of the independence of central banks believe that if the central bank is independent and far from political pressure by the government or parliament, the monetary policy of the central bank will lead The study of the Central Bank's Laws and Monetary Policy, in which inflation rates were compared in 12 developed countries and at specific times with an independent degree Central banks in these countries and the same period, and the study recognized the existence of an inverse relationship between the degree of independence and inflation rates, that is, the greater the

degree of independence of the Central Bank, the lower rates of inflation, and the study pointed out that control inflation in developed countries will not reduce rates Growth or increased unemployment.

A second study was prepared by Masiandro & Jabellini to measure the independence of central banks. Two measures were adopted for this study. The first is based on economic criteria, foremost of which is the ability of the government to determine the conditions for government borrowing from the Central Bank and monetary instruments, Based on political criteria similar to the scale used by Bad and Barkin. In this study, the researchers adopted inflation data and the degree of independence of five other countries. The results of the study showed that there is an inverse relationship between the degree of independence of central banks and inflation rates.

Axis IV: The independence of the German Central Bank:

Some speak of the ECB as the most independent, but it is committed to supporting the EC's general economic policies. The Council of Ministers has a major role in exchange rate policy. Empirical studies have supported the link between independence and the reduction of inflation, but logically, independence is not a necessary and insufficient condition To control inflation.

Experts agree that the Bundesbank is the most independent central bank in the world and one of the leading countries in the independence of central banks, especially as Germany experienced two periods of hyperinflation in the first half of the last century that led to the collapse of the German currency, Its monetary system in 1948 to fight inflation.¹¹

The Bank is the most independent bank in the world. The Bundesbank is institutionally independent. It is responsible for defining and implementing monetary policy away from any intervention by the government. The Bundesbank also has a personal autonomy, meaning the bank's governor and vice president are appointed by the President for eight years. As well as the members of the Board of Directors, and no one has the right to dismiss any of them from office unless they wish to resign or if they have committed

acts of notorious, and the Bundesbank has full financial independence, that is, the executive authorities do not interfere in the identification of expenses or ways of financing.

The first Part: the definition of the Bundesbank and the basic features of its independence:¹²

Headquartered in Frankfurt, it has a constitutional mandate to preserve the value of the Deutsche Mark. The Bundesbank has gained considerable fame for its financial caution and monetary stability.

The following are the main features of its independence:

- The German Central Bank is responsible for the design and implementation of monetary policy. In this respect, the Bank is independent of any intervention by the Government, Parliament or any other institution.
- The German central bank's main task is to stabilize the price level. The Bank's independence does not prevent its cooperation with the government. It is obliged to support the federal government's economic policy by helping the government achieve economic policy objectives, On the economic situation in a way that does not contradict with its main role in stabilizing the general level of prices.¹³
- The bank imposes severe restrictions on government financing, except in some cases allows the purchase of goods or selling a volume of securities on the secondary market to control the cash mass and regulate the money market, or provides short-term cash advances maturing after 30 months. Loans and maximum allowable.¹⁴
- The German Central Bank Act provides for a set of measures that restrict the authority of the federal authorities to appoint senior officials of the Central Bank in order to preserve the independence of the bank and reduce the government influence. As for dismissal, the law did not provide for the possibility of dismissing senior officials in the Board of Directors. No one shall be exempted from office before the expiry of the period specified for them, unless he wishes to resign or if he has committed indecent acts.

The second Part :the degree of independence of the German Central Bank:

Countries	Independence The bank's budget	Manage Tools Monetary policy	Absolute and complete powers In the monetary field	Tasks and objectives
USA	Yes	Yes	Separate	A lot
German	Yes	Yes	Yes	One
Japan	No	Separate	Separate	A lot
Belgium	No	Separate	No	No
France	Yes	Separate	No	No
Italy	Yes	Yes	No	No

The Bank of Germany, as shown in the above table, which is considered the most independent central bank in the world, has a clear and general experience in the monetary field. It does not have to take into consideration the government policy. As for financial independence, we note that the budgets of central banks of some countries, Italy is actually independent, while not the same in other countries, such as Japan, Belgium and France.¹⁵

Third Part : Effect of the independence of the German Central Bank on the effectiveness of monetary policy:

The German model has been the most influential in the recent period to define the concept of the independence of central bankers in Europe. The German central bank is only responsible for protecting the value of the currency and fighting inflation, and enjoys full independence vis-à-vis the government. This is not due to economic theory as much as it is due to the historical circumstances of Germany. Let us not forget that after the First World War Germany suffered from the problem of excessive inflation, so that the German people became very sensitive to any rise in prices.

After the Second World War, Germany was occupied by the four Allied Powers, the United States, England, France, and the Soviet Union. These victorious countries managed the areas under their

control before the declaration of the Federal Republic of Germany. 1948, it was necessary to issue a new currency, the Deutsche Mark, instead of the old currency Mark Reich, and the American occupation forces used the Central Bank of the Lander province for this purpose.

In the light of the bitter experiences of inflation in Germany, the function of this bank was limited to protecting the value of the currency only. As this bank played a role under the occupation authorities that had been declared by the Federal Republic of Germany in 1949, it was natural for the Bundesbank to become independent. The German government, which had not yet been established, had its historical roots before the existence of the German government itself. Thus, the full independence of the Bundesbank was decided upon by the German government as a result of an exceptional historical coincidence.

It is not the historical circumstances. What is more important is that the Bundesbank has been an unrivaled success in protecting the stability of the Deutsche Mark, helping to achieve economic prosperity from the end of the war until the creation of the euro zone. And its success on the one hand, with the importance of the German economy in the European framework and the German government's adoption of the German model on the other hand, it was natural that the system of the European Central Bank on the model (Bundesbank) on the basis of complete independence to the government, and its sole task is to protect Currency value.

In the light of these well-established monetary traditions in the German mind, it was not surprising to have some criticism, especially in German circles, of the European Central Bank's position when, under Trichet's presidency, the bank facilitated government operations in issuing bonds and subscribing to help them deal with the consequences of the financial crisis. It is not strange that the most criticism is the Bundesbank itself. Old traditions are still firmly rooted in the German mind. However, Trichet's position is not without a strong logic. If the ECB is primarily responsible for protecting the euro, the first duty is to maintain a sound monetary and financial system.

Conclusion :

It should be said that the independence of central banks should be better insured in many countries without this make the central bank tower ivory or a castle shackled without transparency and any kind of accountability by the political authority in the country, as sometimes happens , And the limits of the independence of the Central Bank should be clear and that the bank should not be subject to almost daily guardianship by the Ministry of Finance or Economy and that the powers related to the channels of banking finance shall be restricted and managed in the hands of the Central Bank. Rational and logical without the entanglement of powers between the government apparatus and the monetary authority, which must actually exercise authority in directing financing channels and balance the supply of money and financial balances and demand by the productive sectors.

Results and Recommendations:

- ✓ Grant central banks the right to determine monetary policy if we want to be independent without conditions that limit the effectiveness of their instruments in achieving monetary stability and fighting inflation and achieve internal and external balance and away from the effects of government.
- ✓ Extending the term of appointment of the Governor of the Central Bank because it is difficult for the Central Bank to achieve independence in the short term.
- ✓ The functions of the Central Bank have evolved in tandem with economic developments, which necessitated granting central banks full autonomy and freedom to use monetary policy instruments.
- ✓ The need to give greater autonomy to the Central Bank in the field of drawing, practicing and implementing monetary policy to ensure effective control over the control of monetary supply.
- ✓ The need to activate indirect monetary policy instruments, especially open market operations, and reactivate the rate of re-discounting tool in order to diversify the indirect monetary policy instruments.

Reference :

¹ الدكتور سلمان بودياب، إقتصاديات النقود والبنوك، الطبعة الأولى، المؤسسة الجامعية للدراسات و النشر و التوزيع ، بيروت 1996 ص 9.

² Grilli.V, Masciandro, G.Tabellin, Political and monetary institution and public financial policies in the industrial countries.

³ Luis I. Jacome, Legal Central Bank Independence and Inflation in Latin America During the 1990.

⁴ الأستاذ منصور زين، الملتقى الوطني حول المنظومة المصرفية الجزائرية والتحول الاقتصادي، ديسمبر 2004، جامعة الشلف، مداخلة حول استقلالية البنك المركزي وأثرها على فعالية السياسة النقدية، ص 423.

⁵ عبد المجيد قدي، المدخل إلى السياسات الاقتصادية الكلية، دراسة تحليلية و تقييمية، ديوان المطبوعات الجامعية، الجزائر، 2003، ص94.

⁶ محمد دويدار، أسامة القول مبادئ الاقتصاد النقدي، دار الجامعة الجديدة، الطبعة الأولى، مصر، 2003، ص:275.

⁷ الأستاذ منصور زين، الملتقى الوطني حول المنظومة المصرفية الجزائرية والتحول الاقتصادي، ديسمبر 2004، جامعة الشلف، مداخلة حول استقلالية البنك المركزي وأثرها على فعالية السياسة النقدية، ص: 425-426.

⁸ مجلة الواحات للبحوث و الدراسات، العدد 16، سنة 2012، ص111.

⁹ سهر معتوق، استقلالية البنك المركزي المصري، مجلة كلية التجارة، جامع حلوان، 2002، ص7.

¹⁰ مجلة تكريت للعلوم الإدارية والاقتصادية، جامعة تكريت، كلية الإدارة والاقتصاد المجلد، 7، العدد 23، سنة 2011.

¹¹ زكريا الدوري و يسرى السامرائي، البنوك المركزية والسياسات النقدية، الأردن، دار البازوري العلمية للنشر والتوزيع، 2006، ص212.

¹² Deutsche Bundesbank, "the monetary policy of the Deutsche Bundesbank" Deutsche Bundesbank Book, march 1994, p02.

¹³ أحمد شعبان محمد علي، انعكاسات المتغيرات المعاصرة على القطاع المصرفي ودور البنوك المركزية، ص308.

¹⁴ شملول حسينة، أثر استقلالية البنك المركزي على فعالية السياسة النقدية مع دراسة حالة الجزائر، رسالة ماجستير، الجزائر، جامعة الجزائر، كلية العلوم الاقتصادية و علوم التسيير، 2001، ص103.

¹⁵ مارتا قاستيللو برانكو و مارك سوينبون، استقلالية البنك المركزي هل يمكن أن يساهم في تحسين الأداء في مجال التحكم في التضخم، مجلة التمويل والتنمية، مارس 1992، ص20.