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## Evaluating the Effectiveness and Development of Monetary Policy from a Historical Perspective

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### Abstract

*We cannot consider the current state of banking and central banking without the formation of money and the development of monetary policy without the discussions and ideas in this historical process. For this reason, this study examined the path of money from a historical perspective with the development of central banking and monetary policy. This period also revealed two different views on the effectiveness of monetary policy under the concepts of endogeneity and exogeneity. This study evaluates the effectiveness of monetary policies from a two-way perspective and the change in the historical period.*

**Keywords:** *Concept of Money, Development of Central Banking, Exogeneity of Money, Endogeneity of Money*

### 1. Introduction

This study examines monetary policy and its effectiveness from a different perspective and evaluates the development of policies in the historical process. It is impossible to consider the development of monetary policy separately from the formation of the concept of money and the process in which the development of money shapes central bankers' policies. For this reason, this study primarily focuses on the concept of money, the development of central banking, and the current state of contemporary policies. During the periods when central banking policies were being shaped, a fundamental area of debate emerged, and policy effectiveness was tried to be explained with the concepts of endogeneity and exogeneity of money. For this reason, this study includes evaluations of the endogeneity and exogeneity of money while different perspectives on the effectiveness of monetary policies are examined.

The first part explains the concept of money, its evolution, and how banking and central banking were shaped along with this

process. The second part emphasizes two perspectives that have come to the fore with the economic conditions encountered from the Middle Ages to the present. Although these views, shaped specifically by the endogeneity and exogeneity of money, have come to the fore under different names in the historical process, their starting points are the same. The importance of these two perspectives also guides today's practices, as they present two different crossroads in discussions of the effectiveness of monetary policies. While the exogeneity approach suggests the same effectiveness of monetary policy, the endogeneity approach emphasizes that policy effectiveness is shaped according to market demand.

In summary, this study examines the banking system, central banking, and monetary policy that have been shaped since the formation of money while also investigating different perspectives on policy effectiveness today.

## 2. The Concept of Money and Development of Central Banking

Defining the concept of money is useful before discussing monetary policy and evaluating different perspectives. However, the definition of money is primarily based on its functions; with current developments, what will be considered money and what will not be a separate matter of debate. In its most general definition, everything generally accepted as used in buying and selling goods and services is defined as money<sup>1</sup>. However, when money is mentioned, the functions of being a means of payment, accumulating value, and being a unit of the account come to the fore. Meanwhile, the payment tool function of money enables its use in buying and selling. The introduction of money also replaced the exchange of goods for goods. On the other hand, money can be used as a means of payment as well as a means of accumulating value for savings purposes. The fact that money is also a unit of account prevents the pricing of each good relative to another good, as well as transaction costs and confusion that may occur with multiple pricing. (Graham: 1940; Asmundson and Öner, 2012)

It can be said that assets used or can be used as money have changed shape and form from the Middle Ages to the present day, but their functions have remained almost the same. Although the most widely known money application was gold and silver until the introduction of paper money, many different coins have been used throughout history. For example, fur was used as money in Canada in the 1800s, goat standards in Uganda in the early 20th century, tobacco in colonial Virginia, salt in a period, etc. While Florence and Genoa began minting gold coins in the 13th century and Venice in the 14th century, most European countries also minted gold and silver coins. In Sweden, in 1645, coins made of copper and silver were minted, and after a while, copper was overvalued due to its use in industry, and a standard based on copper was developed. The weight of the mines and the transportation problem brought paper money to the agenda in Sweden during this period when the copper equivalent was converted into paper money. This process also coincides with when the first known central bank was established in Sweden. In 1745, when the copper standard became unsustainable due to high money printing, the practice of printing non-convertible money was started. These periods also brought to the agenda discussions that printing large amounts of money caused inflation and needed to be controlled. The non-convertible monetary standard, accepted globally today, has been used as a tool throughout history, especially during war periods. For example, England minted non-convertible coins that were not based on metal during the Napoleonic Wars, France during the French Revolution, and many countries during the First World War. During and after the 1929 depression, the coin standard was completely disabled, and a non-convertible currency standard was adopted, as it caused problems in practice. Although the gold standard came to the fore again with the transition to the Bretton Woods system in 1946, with America selling gold to countries in exchange for dollars, with the discontinuation of this system in 1971, the non-convertible paper money standard became the accepted practice all over the world. (Brinton: 1934; Allen, 2003: 74-100)

It can be said that the development of monetary policy is simultaneous with the development of central banking. The

<sup>1</sup>[https://acikders.tuba.gov.tr/pluginfile.php/4392/mod\\_resource/content/2/hafta01-para-%28s1%2C1%29.pdf](https://acikders.tuba.gov.tr/pluginfile.php/4392/mod_resource/content/2/hafta01-para-%28s1%2C1%29.pdf)

problems caused by the prevalence of free banking in the economies before the transition to central banking, the need to collect the resources needed in times of war, etc., and the desire to restrain the inflationary effect resulting from excessive money printing made it necessary to switch to a more controlled monetary policy. In the free banking system, which was widespread in the 18th century, each bank had the authority to print money as long as it had gold or silver in return, which led to a search for a new way out of the problems experienced. Some of the problems experienced in this system can be summarized as the fact that these banks issue a large number of different banknotes, the replacement of some banknotes with different discount rates, their uncontrolled spread due to the lack of a clear limit in bank establishment, and the fear that the inflationary effect will emerge due to excessive money supply increase. For example, the necessity of having all banknotes against mortgages and government bonds against the risk of banks going bankrupt was intended to be taken under control with the Free Banking Law enacted in America in 1838. (Kenneth, 1988) During these periods, debates began to emerge about whether uncontrolled increases in money supply caused inflation. Although the establishment of central banks occurred at the end of the 19th century and the beginning of the 20th century, it is also possible to say that banks with central banking characteristics date back to the Middle Ages. For example, a public bank<sup>2</sup> established in Venice in 1587 controlled public debt papers circulating in the market like money. While the money deposited by the citizens supported the government debts of the period, only interest payments were made instead of principal money, ensuring that records and circulation were kept only on the ledger. Thus, records transferred from hand to hand, controlled by a single bank and through ledgers, ensured circulation in the system, thus ensuring the money supply. (Dunbar, 1892) A similar structure was established in Genoa in 1407<sup>3</sup>. This bank not only supported the government's indebtedness but also served to collect customs duties. While it ensures the circulation of money through registered books, it is also known as the first bank to print banknotes, albeit to a limited extent. Unlike contemporary banknotes, banknotes could represent a specific share, gold or silver. While the Riksbank, established in Sweden in 1656, provided the first money printing in 1879, this bank was authorized to be the only institution that could print money. Steps towards the development of central banking began to be taken in England in 1694. While it was established in the early periods to support government debts, both its establishment as a joint stock company and the granting of the banknote printing monopoly to the bank<sup>4</sup> in later periods supported the development of central banking. In France, the central bank, established in 1800, took on the primary task of paying off government debts. It can be said that the central banks established in the first period were generally established for reasons such as wanting to pay off the indebtedness that occurred after the war and the inflationary effect becoming evident. It is seen that central banks in this period also continued their normal banking functions, unlike today. In America, the first idea of central banking dates back to 1791. The first central bank was established to increase the amount of money in circulation, solve the money shortage in certain regions, and recycle differentiated banknotes. While the

<sup>2</sup> Il Banco dell' Piazza del Rialto

<sup>3</sup> Casa di San Giorgio

<sup>4</sup> With the amendment of the Bank Charter Act in 1833, the era of free banking in England ended and the authority to issue banknotes was given to a single bank.

first central bank was regulating peripheral banks' reserves and credit conditions, it could not receive the support of small city banks and a wide segment of the public and had to be closed. After this process, the second central bank experience ended due to poor management and speculation. The problems caused the transition to the free banking system again in 1864. The civil war during this period, the balance of payments problems, the uncontrolled proliferation of the free banking system, and the increase in counterfeit banknotes led to the need for re-control. In the free banking system, each bank prints its banknotes and the counterpart is only in the bank that prints the banknotes, which has caused problems in the system. For this reason, the transition to central banking, as it is known in America, coincides with 1913. Similarly, central banks were established in Japan in 1882 and Europe in 1998. (Allen, 2003: 101-126) In practice, the existence of the gold standard until 1914 forced central banks to fix their currencies to gold, which caused them to keep high gold reserves. If the gold reserves decreased due to the balance of payments or some domestic problems, this resulted in steps to attract more gold domestically through interest increases. Limiting the money supply in the system to the amount of gold in reserves enabled the general price level to be controlled. In the 1920s and 1930s, the Fed implemented the real bill doctrine, regulating that banks should not give loans in a way that would lead to speculation and that loans should only be given in return for 30-60-90-day guarantee bills covering the receivables from the production of goods and services. It is aimed that the central bank will provide liquidity to the banks in return for the banks using these papers as collateral. However, this situation resulted in banks not borrowing from the liquidity window for emergencies and caused a recession. (Mints, 1923 and 1945) With the Bretton Woods System in 1946, 1 ounce of gold was equal to 35 dollars, and the gold bullion standard was introduced. The transition to the new system was achieved by other countries determining their currencies in fixed gold or dollars. However, when America began to experience a balance of payments deficit, sold dollars to countries in exchange for gold, and after a while, its gold reserves began to melt, resulting in America ending this system. It is seen that the transition to today's central banking system has accelerated with the idea that globalization and the gold standard limit global liquidity<sup>5</sup>.

It is seen that the development of central banking and monetary policy took place since the Middle Ages as a result of the control of the money supply, the need to pay off state debt caused by wars, etc. inflationary effects, and the need for a solid system. Although it seems that the main starting point started with the payment of state debts initially, all subsequent discussions were about ensuring the control of the money supply in the system, developed with the need to limit the authority, and inflation maintained its place as the main discussion point. It can be said that more emphasis was given to the discussions on the control of money supply and inflation in the 18th century and later, and from the 19th century onwards, policy criticisms regarding interest policies and policy development on interest control came to the fore. Policy sets have also been changed due to the impact of economic problems and crises experienced since the foundations of central banking were laid; a much broader set of policies has replaced the more traditionally known interest and money supply control policies.

<sup>5</sup> <https://www.clevelandfed.org/publications/economic-commentary/2007/ec-20071201-a-brief-history-of-central-banks>

### 3. Debates on Monetary Policy and the Endogeneity and Exogeneity of Money

In the 19th century, when the effectiveness of monetary policy and its transmission mechanism began to be discussed, different views began to emerge regarding money supply or interest policy, both of which were endogen rather than exogen. Exogeneity of money, in its most general definition, is the approach that accepts that the amount of money in the economy is determined outside the economy. This view argues that the monetary amount can be controlled by the intervention of central banks in the amount of money in the system. However, discussions of the endogeneity of money accept that money supply cannot be independent of money demand and will be determined by endogenous variables outside the direct intervention of central banks. While these views are criticisms of policies that accept the exogeneity of money put forward by classical economics and the monetarist perspective, some opinions focus on whether the money supply in the market can be increased or decreased at the same rate through monetary policy, and some opinions focus on the fact that interest rates are determined internally within the market, not at the same rate through monetary policy. In other words, these perspectives, which endogenize monetary variables and interest rates, have also developed new suggestions for implementing monetary policy.

In the literature, the basis of these discussions is the Bullionists (John Wheatley, David Ricardo, Henry Parnell, Francis Horner, Thomas Robert Malthus, etc.) after the conversion of gold into paper money was banned in England in 1797, due to the lack of sufficient gold after the war between England and France in the 18th century) and the Anti-Bullionists (Henry Boase, Nicholas Vanistart, Charles Bosanquet, Robert Torrens, James Mill, etc.)<sup>6</sup>. The high inflation level of the period and the devaluation of money increased the discussions. The basic point of view of the bullionists was that the ability to convert money into gold should not be limited to control the increase in the money supply. In this way, by controlling the money supply in the system, the depreciation of money and excessive inflation can be prevented. (Wheatley, 1807; Ricardo, 1810) On the other hand, Anti-Bullionists adopted the reflux principle and argued that banks would print money only to the extent demanded in trade; that is, money was endogenous and would increase according to demand, not to banks. For this reason, if more money is in the system than is needed, it will not cause inflation as it will return to the banks. The real bill doctrine, also included in Adam Smith's book "The Wealth of Nations," defends the view that the money supply in the system will be determined not externally by the banks responsible for printing money at that time but according to the demand in the economy, that is, it will be internal; it also initiated discussions on the endogenous of money. (Smith, 1976: 323-324; Law, 1760) According to this perspective, the increase in money supply does not cause an inflationary effect; they attribute the period's inflation to the effects of war and famines.

When England allowed the conversion of gold into paper money again in 1821, the discussions between the banking school and the cash school continued on the same plane. It is possible to see the cash school (Samuel Jones Loyd, James R. McCulloch, Samuel Montiford Longfield, George Warde Norman, William Ward,

<sup>6</sup> <https://www.hetwebsite.net/het/schools/bullion.htm>

George Arbuthnot et al.) as bullionists and the banking school (Thomas Tooke, John Fullarton, John Stuart Mill, James Wilson etc.) as the continuation of the anti-bullionists. Because it is seen that the advocates of the cash school, just like the bullionists, focus on the inflationary effect of the increase in money supply and accept it as exogen, it seems that the banking school, like the anti-bullionists, takes the money endogenous and adopts the law of return. Proponents of the cash school argued that the cash rule should be introduced and that the money printed by banks should be equivalent to 100 percent gold reserves. In the same period, Lloyd also suggested that a single bank should do money printing to prevent the uncontrolled increase in the money supply<sup>7</sup>. (Lloyd, McCulloch et al., 1857:10, 148) This view was adopted by the Banking Act in 1844, and while the authority of British banks to print money was limited, the basic authority was given to the Bank of England. The amount of money printed is limited to a certain proportion of gold reserves<sup>8</sup>. On the other hand, representatives of the banking school opposed limiting the amount of money in this way and emphasized that the money supply is determined by demand and is endogen. They said that the money supply determined by demand would not have an inflationary effect and that the excess money in the system would return, just like the anti-bullionists. Tooke, Fullarton, and others developed the real bill doctrine, arguing there would be no inflationary effect if short-term loans were given to trade and other profitable projects. (Tooke, 1838: 147-158; Fullarton, 1844: 30-38, 56-68)

During these discussions, Friedman, one of the pioneers of monetarism, advocated that the amount of money in circulation should be controlled and considered money exogen. According to Friedman, monetary policy can only be healthy by controlling the amount of money in circulation. For this reason, he argued that the circulation of money in the market should be controlled through banking channels, and this money should be withdrawn from the market through mandatory reserves - especially in cases where the state budget is in surplus. This withdrawn money should be released to the market when the state budget is in deficit. (Friedman, 1948:2) In his quantity theory published in 1956, Friedman accepted the money supply as a completely exogenous variable and emphasized that the central banks determined it. While explaining the linear relationship between the increase in money supply and the general level of prices and growth, he argued that the money supply should be controlled at a certain level. (Friedman, 1956) This perspective continued as a view defended by the classics in later periods. For example, according to Smith, the amount of money that should be circulated in a country for the total purchase, sale, and other transactions is certain. If the money in circulation exceeds this amount and remains in the country, its value decreases, and the general level of prices increases. However, Smith also emphasizes here that, as the circulation of money increases, it will not have the same effect if it is replaced by metals such as gold and silver, as its circulation will decrease. (Smith, 2015; 314-351) Ricardo similarly emphasized that the abundance of money in circulation would reduce money's value and that circulation should be limited. (Ricardo, 2008: 19) Generally speaking, it can be seen that the pioneers of monetarist and classical perspectives accept money as exogen and emphasize that central banks are the main determinants of the amount of money in the system. Looking from a similar starting point as

bullionists and cash school advocates, they emphasized that the money supply should be controlled and that the increases in money supply in the system are controlled by the institutions that print the money.

The Radcliffe report, which included criticisms of the monetary policy implemented in England, was published in 1959 and brought a new perspective to the issue of the endogeneity of money with an emphasis on the liquidity channel. The report also considered the high inflation of the war and post-war period. This report emphasized that inflation control was insufficient by intervening in interest rates and limiting banks' loans. One of the main emphases of the report is that money supply control has become unimportant and that the main determinant is the liquidity in the system. Here, expenses are not only determined by existing money but also by expected income, such as the amount of money available, sales, etc., and the money obtained by selling existing assets or borrowing. It has been stated that adjusting interest rates in a way that balances and controls alternative liquidity areas is more important than limiting the money supply. The report also stated that if the real sector is limited by monetary policy, turning to alternative channels may continue the inflationary effect. (Katz, 1959) For this reason, while the Radcliffe report puts the amount of money supply in the background, the report pointed out that the main determinant, beyond interest policy and limiting the amount of credit requested, is the liquidity in the system.

The pioneers of the post-Keynesian approach also adopted the view that money is endogenous. In his study in 1957, Minsky emphasized that the demand in the system would shape the effectiveness of monetary policy. It has shown that contractionary money supply and interest rate increases, especially for inflation control, will be insufficient if the money demand in the economy is high. In this case, if there are no restrictions, financial companies and banks will develop new products, introducing fewer liquid products into the system instead of cash, thus meeting the demand for money. These processes, which increase the speed of money circulation, introduce risky new financial products into the system rather than restraining the inflationary effect. These fewer liquid products will also need to be checked against possible crises. For this reason, while Minsky supported an extreme limitation of the money supply, he also suggested interest increases. However, he emphasized that the main determinant is the demand for money and that this demand will continue to be met with financial innovations. While Minsky accepted the endogeneity of money, he also brought the concept of structural endogeneity to the agenda by discussing the impact of financial innovations. (Minsky, 1957)

Kaldor also criticized the approach that regards money as exogen because it assumes the demand for money is constant. According to Kaldor, money demand is more dynamic. Friedman accepts that people keep a certain proportion of their real income as money. The demand for money is not constant, as it will change depending on who these people are, short-term expectations, and the returns of alternative financial assets. While focusing on the Radcliffe report, Kaldor supported the idea that the monetary policy's limitation of loans through the interest rate channel increases the circulation speed of money because it directs companies to alternative channels. In other words, he criticized the monetarist approach for keeping the velocity of circulation of money constant. For this reason, Kaldor rejected approaches that considered both the demand for money and the velocity of circulation of money as constant. Kaldor, just like Minsky, emphasized that even when the

<sup>7</sup> <https://www.hetwebsite.net/het/profiles/overstone.htm>

<sup>8</sup> <https://www.legislation.gov.uk/ukpga/Vict/7-8/32/section/10>

money supply is limited and interest rates are increased, if banks and companies can find loans through alternative channels in the system, the money supply will continue to increase, and the loan demand will continue to be met. The increase in money demand is not relative to the increase in money supply; The increase in money demand determines the increase in money supply. In other words, it is endogen, not exogen. (Kaldor, 1970)

On the other hand, Moore argues that central banks must ensure that there is always a sufficient money supply (at target interest rates) to meet the demand for credit and that the ability of commercial banks to provide loans is limited only by the money demand of creditworthy borrowers. This perspective is also the basis of Moore's view of horizontalism, which explains that loans cause deposits and reserves to increase, contrary to the mainstream. According to the horizontal view, central banks do not manage private bank reserves. On the contrary, the interest rate determined by the central bank is determined by demand. While the met loan demand supports the deposits, it increases the reserves and meets the new loan demand in the new situation. Moore's view of horizontalism also supports the post-Keynesians' approach, which regards money as endogen differently. (Moore, 1988; Moore, 1988a)

Post-Keynesians' discussions on the endogeneity of money are divided into two views: adaptationist and structural endogeneity. Adaptationists argue that when central banks determine interest rates, the money supply is shaped by the demand for credit and is endogenous. However, structuralists state that the money supply below the determined interest rate is determined according to the loan demand. It supports that even if central banks limit the money supply, the money supply can be increased by banks with new products and different resources. (Pollin, 1991) Discussions on the endogeneity of money supply emphasize the observation of implemented policies, including bank behavior and credit demand, not at the macro level but at the micro and broader levels. However, some post-Keynesians mentioned above also internalize interest policies and emphasize that interest rates are shaped in the domestic market. All these discussions also show that the effects of implemented macro policies will differ according to country-specific dynamics.

Although the New Consensus approach (new neo-classical synthesis) includes the synthesis of classical and Keynesian movements, It emerged as a movement against the views that variables such as unemployment, inflation, and growth could be controlled by controlling the money supply. It began to be seen that unemployment and inflation could not be controlled by controlling monetary aggregates from the policies implemented in 1980 and before. For this reason, the new consensus approach treats money as endogenous. Accordingly, in the case of monetary expansion, internal dynamics, not the increased money supply, determine the amount of money and, therefore, the growth variables. Since the credit mechanism, credit dynamics, banking structure, and financial markets within countries determine the amount of money, the direction of money demand in economies determines prices and growth dynamics. The prevailing opinion is that monetary policy is effective because it directly affects the credit mechanism through the interest rate channel. (Goodfriend and King, 1997: 237) This perspective accepts that the change in credit growth increases deposits; that is, credit does not increase because deposits increase. For this reason, the impact of monetary policy on an expansionary policy by increasing the money supply is determined by internal

dynamics, not the money supply. In cases where the money supply is endogenous, it has been advocated to use interest rates as a policy tool and to control inflation by directing demand through expenditures. Although it is thought that monetary policy can control the deflationary or inflationary effects of fluctuations in demand through the interest rate channel, the prevailing opinion is that it will not have a growth effect in the long run because prices and wages are flexible.

#### 4. Conclusion

This study covers monetary policy and its development, the concept of money, and the development of central banking to understand the point at which contemporary policies have reached. The evolution of money, shaped by the needs brought by economic conditions such as war, indebtedness, inflation, and so on from the Middle Ages to the present day, together with the emergence of modern central banking, also led to the formation and change of monetary policy. The transition from free banking to establishing a central structure and the emergence of central banks also led to the shaping of discussions on the control of money supply and interest policies in the system. The emergence of different views on the effects of the policies implemented in these periods and the increases in money supply in the system have led to questions in the literature about whether monetary policies are endogen or exogen. While the perspective accepts it is exogenous and argues that central banks can directly reflect monetary and interest policies to economies, endogeneity discussions have carried the effectiveness of monetary policies to a wider area by focusing on policy effects shaped according to demand, innovations, and needs in the market. For this reason, this study also includes discussions of endogeneity and exogeneity that question the effectiveness of monetary policies.

While the concept of money can be generalized in terms of its functionality (being used in buying and selling, being a means of payment, a unit of account, a means of savings); the historical process of what will/could become money shows us that change is also an ongoing process. While many goods could be used as money from the Middle Ages to the present day, the use of precious metals came to the fore, and eventually, the paper money system was introduced. The evolution of money has progressed in parallel with the changes in banking and central banking due to current economic conditions, war, inflation, and government indebtedness. It is impossible to consider the exchange of money and monetary policy separately as monetary policy and central banking. The policy changes in the historical process have been shaped by inflationary effects, depression, etc., caused by the money used and money circulation. While all these changes are also reshaping the banking structure, they appear to have accelerated the formation of central banking. Each period has caused new discussions to emerge in the literature, and perspectives on the effectiveness of policies have differed, as have policy sets.

The starting point of the debates on whether money supply and interest policy are endogen or exogen also highlights the effectiveness of central banks in the system. In a system where increases or decreases in the money supply are determined by the supplier, the net effect can be expected to be in the same direction. Similarly, the interest channel is expected to affect the credit mechanism and processes similarly. However, discussions on whether policies are endogen rather than exogen emphasize that both the demand channel and the credit providers and innovations

in the system are effective, which causes policy effects to differ. Here, the market mechanism, credit demand, and financial innovations become more important as they determine the direction of money supply increases and interest policies. For this reason, if the money supply is determined internally in the systems of the countries, that is, according to the demand within the system, then it can be concluded that we cannot expect the increase in the money supply in shrinking economies to go directly to production and investment and to be reflected in the credit channel. Similarly, the limited money supply may not have the same contractionary effect as innovations will develop according to the demand in the system. For this reason, this situation may change the effectiveness of policies not only in the short term but also in the long term and may vary depending on the country.

When monetary policy and its effectiveness are mentioned, money supply and interest policies come to the fore in the most general sense. Like all other policies, one of the debates on the effectiveness of these two policies is the endogeneity/exogeneity of money. While the exogeneity of money supply and interest emphasizes that central banks directly determine these two economic policies, the endogeneity approach emphasizes that they are shaped in the market by focusing on the demand channel and market innovations. It is argued that money supply cannot be independent of money demand and that production, trade, etc., should be increased according to demand. If the money supply increases below the amount demanded by the market, banks find a way to increase the money supply by resorting to innovations. This perspective advocates that deposits do not increase credit, but credit increases deposits. In some endogeneity discussions, it is said that interest rates are also endogenous and are determined by banks by developing new products according to demand conditions.

In summary, all these discussions also cause the policy effectiveness of central banks to be questioned. Because in a system where money supply increases and interest policies are determined directly by central banks, the net effect of the policies is as much as the implementation. However, endogeneity discussions also reveal the importance of market mechanisms, credit demand, and financial innovations and cause the net effects of policies to be questioned. For this reason, this perspective also clarifies that the reflection of both money supply increases and interest policies on shrinking economies is not at the same level in every country. Similarly, if the limited money supply is shaped according to the demand in the system, the development of innovations may not provide the same contractionary effect. Policy effects shaped according to demand conditions explain that expansionary policies will not affect production and investment under all circumstances, will not be reflected in the credit channel, and short- and long-term results will change. This may also explain why the market's production of alternatives according to need does not have the same net effect as the policy direction in contractionary policies.

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