

A BALANCED APPROACH TO MONETARY POLICY

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Abstract

Monetary policy, which together with fiscal policy forms the basis of the economic policy of the state, is currently receiving unprecedented attention – including the of the general public, as a result of the protracted global financial crisis in 2009. In this context, attention should be focused namely on central banks, which have been in the middle of economic troubles in the past. The influence of the central banks grew mainly through political in the 70s and 80s of the last century. From this period, we can see the growth of central banks all independence around the world as a currency guarantor, which resulted in a relatively quiet period without major economic crises, but ended as a result of the irresponsible fiscal policy of political elites. Therefore, the aim of our research paper is to analyze monetary policy as a significant part of the economic policy of the state, with the accent on the position of the central bank, which has a decisive influence on the way and performance of monetary policy. The concept of monetary policy from the very beginning to the present has undergone a number of changes. The central bank has almost every country in the world. The role of central banking is generally perceived in individual economies as irreplaceable, but the suitability or necessity of setting up these institutions was seen by different states depending on many factors.

Key words

monetary stability, price stability, central bank

JEL Classification: E44, E52, E58

Introduction

Monetary policy forms, in addition to fiscal policy, a basic instrument of economic authority (governments and central banks) to influence the economy's performance. For monetary policy, in the broadest sense, we can regard the conscious activity of an entity/entities that, through monetary instruments, seeks to regulate the development of the amount of money in circulation, thereby achieving certain goals. In other words, monetary policy is a process under which pre-defined objectives are or should be achieved using the monetary instruments available to the central bank. However, the monetary instruments at the disposal of the central bank do not lead directly to achieving the set objectives, but act on a number of economic variables that ultimately affect the achievement of the target. Achieving a set goals is therefore achieved through mediation. We call this monetary policy mechanism a transmission mechanism. The transmission mechanism represents the causal relationship between the currency instruments used and the objective of achieving these instruments. Furthermore, the general scheme of the monetary policy transmission mechanism is constituted by monetary policy instruments that act on the *operational* and *mediatory criterion* to achieve the ultimate monetary policy objectives. Whether the transmission mechanism will be effective depends in

particular on the extent to which the central bank is able to influence the operational and mediatory criterion of the currency instruments available for that purpose and, in particular, on the existence of stable or at least forwardly predictable links between operational and intermediary criteria and monetary policy objectives (Rustinci, 2015). The effectiveness of monetary policy, that is to achieve the set objectives, is further influenced by degree of independence, credibility, accountability and transparency of central banks, depending on the type of transmission mechanism chosen.

1. The Objectives of Monetary Policy

Monetary policy is one of the areas of macroeconomic stability policy that seeks to achieve the broad economic policy objectives. In this sense, monetary policy in the broadest sense can be considered the economic activity of an entity that, through monetary instruments, seeks to regulate the amount of money in circulation and thereby achieve certain goals. The overall objective of the monetary policy process is therefore to achieve predetermined targets, in particular with regard to developments over recent decades, the promotion of price stability, other monetary policy objectives are support for economic growth, high employment rates, a stable exchange rate, stable interest rates, and the stability of the

financial system. However, the ultimate objectives of monetary policy are not completely identical in market economies. They are often legally supported and are therefore binding on the central bank. Defining monetary policy objectives is not easy. Since the 1970s, in advanced market economies, opinions about the clear priority of the internal stability of the currency as the only long-term objective of monetary policy prevail. Its onset is mainly related to the so-called oil shocks, when monetary policy and its objectives have proved ineffective and failed to respond effectively to the economic situation of rising price levels and declining real production. As a result of this situation, there has been a change in the way monetary policy has been implemented, as well as changes in its objectives.

Therefore, the central objective of most central banks is now considered to be the internal stability of the currency, respectively fight against inflation. The preference for this goal is based on the belief that price stability is a prerequisite for economic growth over a long period of time. However, central banks may also pursue other objectives in pursuing monetary policy, thereby supporting the government's economic policies leading to sustainable economic growth. But only if the achievement of these goals is not in contradiction with the main objective. These targets, especially in the short term, may be inconsistent in the sense that their achievement may require contradictory solutions, especially in a situation where the central bank seeks to control the movement of the exchange rate or interest rates. In these cases, one or more goals must be preferred to the expense of others. For the central bank, it is therefore appropriate to work only with one priority objective - the internal stability of the currency. The hypothetical second place is the promotion of economic growth and the stability of the exchange rate (Jones, 2017). Employment support and the equilibrium of the current account of balance of payments stands in the background as an accompanying goal of economic growth, respectively the exchange rate. Some of the above-mentioned goals (e.g. interest rates or exchange rates) can also be transformed into the role of an operational or mediating criterion, and so serve other endpoints.

1.1 The Nature of Monetary Policy regarding Different Objectives

According to Keynesian economic theory, monetary policy should have been activist and aimed at eliminating cyclical fluctuations in the economy. This theory was based on the view that the central bank is able, through its currency instruments, to influence both the price level and, in particular,

employment, product and aggregate demand. Thus, real economic variables in the long run. This was a fine-tuning policy, which however focused too much on short-term goals and was not able to capture the effects that occurred with a longer time deviation, especially the rise in price levels. In practice, this policy, which pursued anti-cyclical action, and whose goals included a reduction in unemployment and an increase in a real product, led to pro-cyclical activity and increased difficult-to-anticipate cyclical fluctuations. As a result of these phenomena, theory and practice have been forced to seek a way out of the situation. The starting point was precisely the price stability, which was defined as a new monetary policy objective. In this sense, a central bank that implements monetary policy has a choice between a restrictive or expansive monetary policy that slows or accelerates the growth rate of money in circulation and a neutral monetary policy in the form of stabilizing a "reasonable" rate of growth in the amount of money in circulation. Furthermore, expansive monetary policy is taking place at a time when it is necessary to stimulate the economy. This is most often the case with high interest rates, a weak economy, high unemployment and little fears of inflation. Economy stimulation is carried out by the central bank despite the reduction of its interest rates, on which commercial banks respond with a higher willingness to provide new loans, and the clients of these banks are willing to accept these loans.

Increases in money supply and lower interest rates lead to an increase in investment and consumption, resulting in an increase in aggregate demand and consequently in a fall in unemployment coupled with rising inflation. Such economic stimulus ends when interest rates go down enough and the central bank again needs to be interested in price level developments. Conversely, restrictive policy is based on an increase in market short-term interest rates. The interest rate managers react in the opposite way than in the case of stimulating the economy. The central bank performs a restriction in conditions of high inflation, where the economy can be described as overheated (Simpson, 2014). How will it impact on the end goals? A decline in aggregate demand due to a fall in investment and consumption will result in lower inflation, but unemployment will rise. As soon as there is a sufficient increase in the interest rate and the decline in inflation concerns, restrictive policy moves into an expansionary attempt to re-stimulate the economy. At first glance, an expansionary and restrictive monetary policy may seem to have affected the level of unemployment, inflation and balance of payments. But the reduction/increase in unemployment is only temporary as well as the impact on the current balance of payments. All the final monetary policy objectives, apart from price stability,

are central bank able to achieve only in the short term. In the long run, monetary policy can only influence inflation.

2. Perspectives on Monetary Policy and Price Level Stability

The basis of price stability as a monetary policy objective is the theoretical concept of monetarists, the quantitative theory of money and the resulting neutrality of money over the long term. According to the theory of money neutrality, money in the long run does not affect real economic variables, but it is only able to influence the price level. The basic is what is considered to be price stability – prices in constant absolute terms, or is a certain price increase, on a very limited scale, still considered price stability? Monetary stability means the situation where households and businesses do not take inflation when deciding into an account. In the practice of central banks and the theoretical outcomes of economic experts, *price stability* is considered to be inflation up to 2-3%. Moderate inflation in the 2-3% band is considered to be price stability mainly because of inaccuracies and deviations in its measurement. Price stability brings security to the economic situation and to economic development (Galí, 2015). Due to price stability, the probability of a correct estimate of future developments increases, resulting in pro-growth, as economic and business moods are improving.

It follows that one of the central banks' monetary policy's priority objectives in the market economy is the *fight against inflation*. Inflation often coincides with a rise in price levels. However, this is merely a simplified view. Although inflation can be defined in a variety of ways, most economists now generally agree on the general formulation of inflation. Inflation can therefore be defined as a continuous long-term rise in price levels, which is associated with excessive money issuance and which leads to a decline in the purchasing power of money. But the question remains what is long-term growth? A long term may also mean a relatively short period, for example two consecutive quarters. Secondly, it has to be stressed that prices cannot grow in the long run and continuously unless the amount of money in circulation simultaneously grows. In addition, it is important to note that not every rise in price level is worth mentioning as inflation. The price level may also increase sharply, for example due to changes in the tax system, deregulation of prices, etc. Then it is more appropriate to talk about price increases and not about inflation. From the above it follows that if we deal with price stability as a monetary policy objective, inflation is at the center of our interest. The broad definition of inflation, to which most

economists agree, considers inflation to be a longer-term (two calendar quarters, immediately following), continuous price level rise that is associated with excessive money issuance and leads to a decline in the purchasing power of money. Furthermore, it is the repeated growth of most of the prices in the economy, this is a weakening of the real value of the currency in relation to the products and services the consumer buys. It is important to note that not all price changes associated with its growth are perceived as inflation, as it can only be a sharp rise in prices. As an example of such a sharp increase in prices, we can list changes in tax rates or the release of regulated prices. Influence as a negative monetary phenomenon is connected with a number of negative manifestations and consequences.

The main negative impact of inflation is the *redistribution of wealth*. Redistribution of wealth means the transfer of resources between groups of economic subjects. However, the redistribution effect itself has no negative impact on all groups of economic subjects. The most redistribution is between creditors and borrowers when funds are transferred to borrowers as interest rates lose their effect due to inflation. Other groups of entities that have a significant impact on non-distributive effect are employees from which resources are transferred to employers, progressive taxpayers from which resources are transferred to the recipients of these taxes, and, last but not least, the redistribution effect, the subjects predict correctly predicting price developments the detriment of the entities predicting price developments wrongly. By the redistributive effect, however, the list of negative effects of inflation does not end – i.e. in situations when the economic entities are trying to keep as little money as possible for immediate consumption and hold the other funds on interest-bearing accounts, where the interest is not the loss of the real value of money literally in front of the eyes, and for every slightest amount they undergo the way to the bank soiled. Likewise, the *menu costs* or *re-pricing costs* are related to the costs that need to be incurred, such as revaluation, change of bid forms, etc., which would not have to be incurred in price stability and further raise the price level. However, inflation also has an impact on the pace of economic growth. In the short run, higher economic growth can be achieved at the cost of higher inflation. Moreover, in order for the central bank to maintain price stability, it is imperative that it be able to act on inflation. However, it cannot act on inflation without the ability to measure it. We can measure the inflation rate in two basic ways. The first is the gross domestic product deflator (GDP deflator), while the second measure is done by the consumer price index (CPI). CPI inflation means that changes in the price level through the consumer basket are followed by

comparing the prices of the given period to the prices in the previous period. The *consumer basket* contains a selection of goods and services that are assigned a different weight in a given consumer basket. It is precisely in the selection of items and the determination of the different weights of individual items that one of the possible inaccuracies of inflation measurement using the CPI index, as this choice may not correspond to real consumption. The CPI index can be used to track changes in price levels even in a very short period of time.

On the other hand, GDP deflator is based on a comparison of the prices of all goods and services that make up gross domestic product in the current period with prices in the base period. The advantage of the GDP deflator compared to the CPI is its complexity as GDP deflator includes all produced goods services, unlike a consumer basket, which contains only selected goods and services to which a certain weight is still allocated. The disadvantage is the time delay, which is due to the fact that data on GDP are collected only quarterly. Likewise, *inflation targeting* represents a monetary policy regime whereby the central bank seeks to influence the evolution of real inflation in a predefined quantified framework. Another price index used is the producer price index (PPI) (Champ, 2016). This mainly shows how domestic inflation affects the competitiveness of our producers compared to foreign ones.

2.1 The Direct and Indirect Monetary Policy Instruments

Direct monetary policy instruments can be characterized as administratively and predominantly selective, since they can directly influence the behavior of financial market participants. The advantage of their use lies in the possibility of their differentiated use. The central bank has the possibility to regulate, for example, in the regulation of credit resources to selectively determine the monetary strategies according to the category of loan applicants, the loan object, etc. In general, direct instruments can be considered more effective as they have a direct impact on the bank's decision-making mechanism, yet their use in the market economies should be exceptional and limited in time as they lead to a reduction in the business autonomy of banks. Direct monetary policy instruments include liquidity rules, credit limits, bank interest rate limits, and mandatory deposits. *Liquidity rules* are an instrument that serves to directly influence bank stability. The principle on which they are based is the determination of a certain structure and ratio of the assets and liabilities of commercial banks. Determining a certain structure and ratio of assets and liabilities to be complied with

by commercial banks ensures the bank's level of liquidity. *Bank lending limits*, commonly referred to as credit ceilings or credit contingents, are one of the most effective monetary policy instruments, but in spite of their high efficiency, their use in advanced market economies should be exceptional and short-lived since they are strict directives, which severely restrict the decision-making autonomy of commercial banks. The credit limits are the direct impact of credit aggregates based on the determination of the maximum extent of loans granted. We distinguish between *absolute credit limits* and *relative credit limits*. Absolute credit limits represent the maximum amount of loans that banks can provide to their clients. On the other hand, the relative credit limits represent the volume of loans that commercial banks can obtain from the central bank. Furthermore, *mandatory deposits* are not a very important monetary policy instrument that is used against state authorities or state-owned enterprises. These authorities and businesses are required to have a current account exclusively with the central bank. This instrument controls the liquidity available to these entities, which would otherwise have an impact on the monetary and credit aggregate. On the contrary *interest rate limits*, influence the rate of population savings and stabilizing interest rates.

On a similar note, *indirect instruments* are the most frequently used monetary policy instruments in market economies. Their advantage is the global impact on the whole banking sector, unlike direct instruments, they cannot be selectively applied by central banks and there is no interference with the independent decision-making of commercial banks, as banks may not respond to them. Indirect tools, therefore, lack directivity, another typical feature of direct tools by which these tool groups can be distinguished. Indirect instruments of monetary policy include, in particular, open market operations, discount instruments, exchange rate interventions and mandatory minimum reserves. *Free market operations* are among the most effective and most frequently used monetary policy instruments at present. High efficiency, which is not typical of indirect monetary policy instruments, stems primarily from the ability of central banks to arbitrarily adjust the price of securities in open market operations in such a way as to achieve the intended intentions. Free market operations represent purchases or sales of securities by a central bank to commercial banks and other domestic banks in order to regulate bank reserves or short-term interest rates. From a currency perspective, we distinguish three basic types of open market operations *direct operations* (one-way operations – purchase or sale with foreign securities that have a direct and sustained impact on bank reserves and short-term interest rate); *repo operations* – distinguish

between simple repo operations and reverse repo operations (in simple repo operations, securities are sold with a warranty and redemption, which temporarily reduces bank reserves, while for reverse repo operations, the mechanism is exactly the opposite. As a result, the central bank purchases securities, which leads to a short-term increase in bank reserves); and *switch operation* – a simple exchange of securities for securities in the same volume but with another maturity, which only changes the maturity structure of the securities without affecting the bank reserves.

In a similar sense, *discount instruments* are a traditional monetary policy instrument, which are used to a large extent at present. Discounting instruments mainly affect bank reserves and short-term interest rates. Among the discount instruments are mainly non-cash loans provided in domestic currency to commercial banks by the central bank and the interest rates on these loans. Discount loans are usually secured short-term (maturity does not exceed 3 months) loans that are provided by the central bank to commercial banks. For the granted loan, commercial banks generally pay the central bank a set discount rate. Discount loans are the most accessible and, to some extent, the *cheapest source of liquid funds* for commercial banks. For the central bank, then, discount credits are a means of influencing bank reserves and a discount rate primarily as a means of influencing short-term interest rates. *Recessive loans* can be considered one of the types of discount credits. It is also a characteristic short-term, but the difference lies in the lower quality of securities being collateralized. *Lombard loans* are used by commercial banks in cases where they can no longer obtain funds cheaper, in the form of discount and recession credits, and need funds due to liquidity problems or because of the need to add mandatory minimum reserves. Additionally, *exchange rate intervention* is a monetary policy instrument whose primary objective is to influence the stability of the exchange rate. The importance of exchange rate interventions as monetary policy instruments varies considerably depending on whether they are used in a monetary policy mode using the fixed exchange rate regime where they are an important and permanently used instrument or a freely floating rate regime.

For exchange rate interventions, we distinguish *direct interventions* where the central bank directly buys or sells foreign currencies abroad for the purpose of influencing the exchange rate, and *indirect interventions* where the central bank operates on the exchange rate by changing interest rates that affect foreign capital movements and thus affect supply and domestic currency demand. *Mandatory minimum reserves* set out the rules for receivables that

commercial banks and other banks have to create at a central bank, with the primary goal of influencing the monetary multiplier. It is an instrument that cannot be categorized as indirect instruments because the central bank directly prescribes commercial banks the obligation to have a certain percentage of primary deposits deposited with it and, in case they fail to do so, they are sanctioned. Lastly, *recommendations, challenges, and agreements* are verbal or written amendments to monetary policy instruments through which the central bank concretizes its monetary policy intentions. Recommendations, challenges and agreements are differentiated on the basis of the characteristics of their content. While the recommendation is generally very general, the challenge is already a concrete expression of intent and instruction to commercial banks. Although these are not formally binding rules they can be considered as effective instruments of monetary policy. Their effectiveness stems from mutual trust between banks and from the possibility of indirect sanctions by the central bank in the event that commercial banks will not follow recommendations, challenges or agreements (Walsh, 2017). With the growing credibility among banks their importance as monetary policy instruments is also growing.

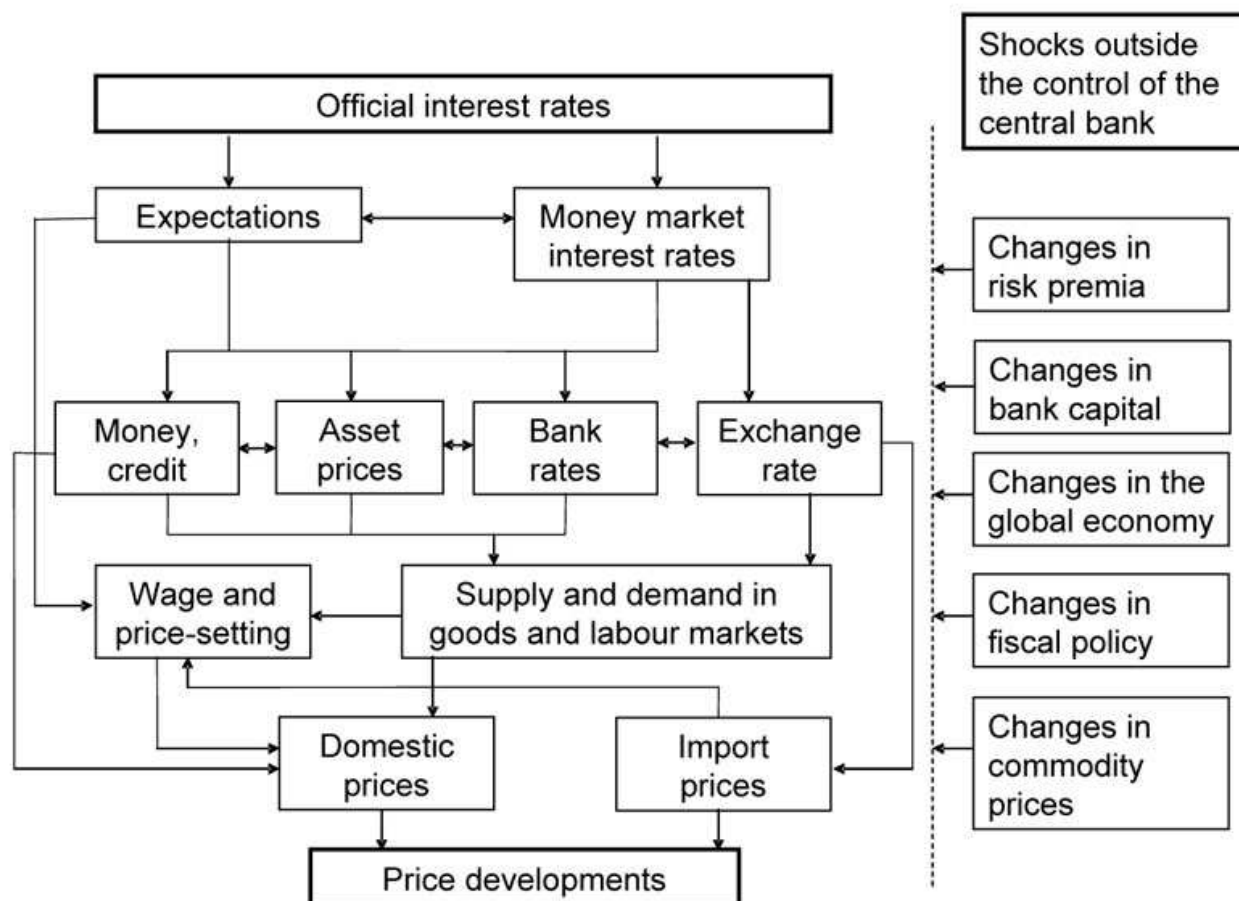
3. The Channels of Monetary Transmission: Lessons for Monetary Policy

The transmission mechanism is one of the basic building blocks for understanding monetary policy. The transmission mechanism is the process by which the central bank is trying to achieve the final objectives by using the monetary policy instruments available for that purpose – the practical implementation of monetary policy. However, the central bank has no direct impact on the final objectives, but indirectly influences them, by acting on an operational and mediatory criterion. Therefore, it represents the causal relationship between the central bank's monetary instruments used and the objective to be achieved by these instruments. We can see that the central bank does not necessarily have a direct effect on the final objectives, while their achievement is conditioned by the ability of the monetary authority to influence the operational criteria, or the ability to predict the links between the development of operational and intermediary criteria and/or the link between mediating criteria and monetary policy objectives. The choice of criteria depends on the choice of the final target, the available tools, and the belief in certain channels of the transmission mechanism that transfer the impulse triggered by the use of a tool over the criteria to the target change (Moenjak, 2014). In the end, monetary

instruments can affect a variety of macroeconomic aggregates. Economic theory distinguishes three basic types of transmission mechanisms: currency, credit, and exchange rate (Scheme 1) (ECB, 2018). In practice, however, we are more likely to encounter

their modifications, or central banks can use multiple types of transmission mechanisms at the same time. Even within the EMU, the transmission mechanism has different forms, dynamics and strength in individual national economies.

Figure 1. Main Transmission Channels of Monetary Policy Decisions from Interest Rates to Prices



Source: ECB, 2018.

At the beginning of the 21st century a clearer definition of the transmission mechanism process was made. Since the standard central bank is in a market environment and does not regulate administrative price developments, the only available operational criterion for achieving the ultimate goal – monetary or price stability – is interest rates. The long distance between the operational criterion and the final target of the central bank overcomes three transmission phases. First, the central bank explicitly sets the final target, which serves as an anchor of economic operators' expectations. At the same time, market interest rates (nominal and real) are influenced by the base rates, which are then reacted by the financial sector. All financial variables interact with the real economy and aggregate demand and supply on the commodity market are formed. In the final phase of

the transmission, the resulting interaction is taken into account in inflationary developments, which are then compared to the final objective of monetary policy. Since monetary instruments ultimately result in a number of macroeconomic variables, it is difficult to identify only one channel of transmission from tools to targets. The central bank usually only works with a single channel but monitors the other channels. In practice, we distinguish four basic monetary policy channels, namely the credit channel, the interest rate channel, the asset price channel, and the exchange rate channel. The first three of which have an impact on domestic demand for domestic goods and services, where the credit and partly asset price channels operate indirectly over money supply. On the other hand, expenditures and, again, partly asset price channel, act directly on the demand for domestic

goods. The *credit channel* represents a range of loans from banks and loan demand from clients. The volume of loans granted is reduced by banks and is based on the level of market short-term interest rates. The short-term interest rate is the main criterion in the decision-making of economic subjects whether to take the loan or not. Reducing the short-term interest rate will increase the interest in loans from households and businesses and vice versa. An increase in the interest rate also carries certain risks – a higher probability that a loan will be requested by an entity that does not intend to repay it. Commercial banks therefore tighten the terms of credit provision. The credit channel may also have a different impact in different sectors – higher for small businesses and households, smaller for large corporations (they have better information and the possibility of lending abroad). It follows from this that the volume of credit has a direct effect on the money supply and consequently mediates the final monetary policy objectives. *Asset price channel* represents a channel of increase or decrease of business activity (acts on domestic demand, both directly and indirectly through money supply). Reducing the market short-term interest rate causes increased business activity, which increases domestic demand for domestic goods and services directly or indirectly (by increasing money supply) and then increases inflation, GDP and employment.

The *interest rate channel* is a preference for spending or savings for households and businesses. Saving affects only the rate of money circulation but does not affect the size of monetary aggregates. Households and businesses decide whether they prefer spending on consumption or prefer saving on short-term market interest rates. A fall in this interest rate will cause a rise in current consumption expenditure to the detriment of savings, reflecting a rise in demand for domestic goods and services. As a result, there is an increase in inflation, growth in GDP and employment. The *exchange rate channel* is a channel operating through capital flows that respond to a change in the interest rate differential. The decline in market short-term interest rates in the domestic economy leads to an immediate outflow of speculation capital from a given economy abroad, which directly affects the exchange rate (Mishkin, 2015). There is pressure to depreciate the currency. A parallel fall in the domestic interest rate will cause an increase in import prices. Thus, there is an increase in inflation in the domestic economy. Foreign goods are becoming more expensive. Businesses are changing their preferences, increasing interest in domestic goods, both domestically and foreign, which ultimately increases GDP and employment growth.

3.1 Inflation Expectations

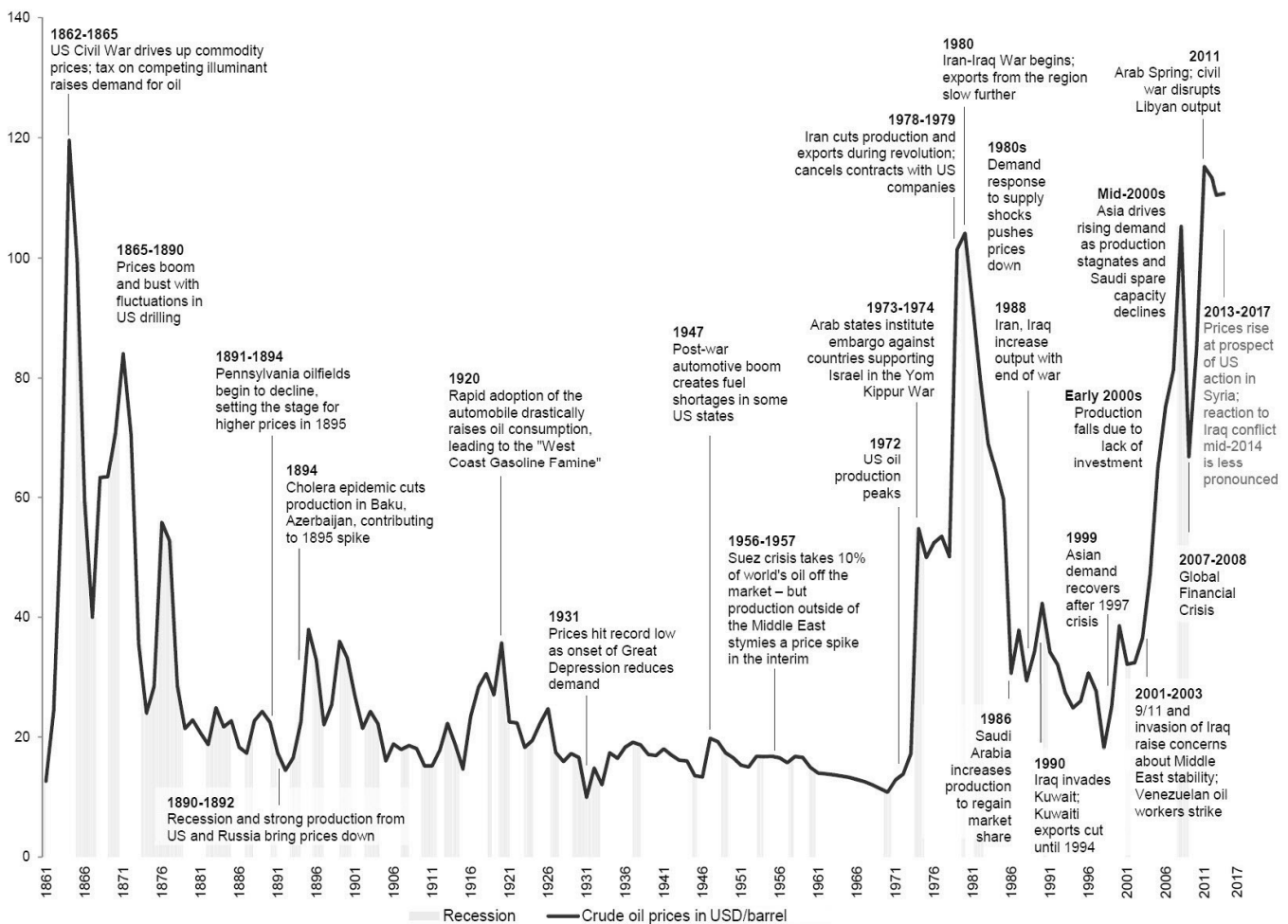
Inflation expectations is currently one of the most powerful transmission channel. The basis of everything is to set an explicit goal, since more than half of all central banks nowadays use an explicit *inflation target* as a tool to anchor inflation expectations and thus increase the availability of information. Following the announcement of the central bank's inflation target, the public does not expect real inflation to be the same as the declared target. That's what the central bank is aware of the inflation target it announced, which is lower than the currently observed inflation. This provides a climate that contributes to the expectation of low inflation. Since the early 1990s, therefore, central banks have started to use combinations of transmission channels with the transition to the inflation targeting regime. For inflation targeting, central banks focus directly on the ultimate target, which is the medium-term inflation target. The central banks therefore declare a certain inflation target in the form of an inflation forecast, which is ultimately pursued by the central bank policy. The key issue in inflation targeting is the central bank's ability to convince the public that they will do everything to achieve this goal. But it is not just a central bank who is entitled to set an inflation target. Depending on the position of the central bank, in particular the so-called target independence, we distinguish the three basic regimes of setting the inflation target. Central banks with target independence determine the inflation target themselves, independently of other entities. On the other hand, the central banks, which are not legally designated as independent, are the inflation target set outside the central bank, usually by the government or the Ministry of Finance. A certain unusual regime for determining the inflation target is an agreement on an inflation target between the government and the central bank. After solving the question of who sets the inflation target, there is a need to clarify how the inflation target can be quantified. In practice, targeting is most often the point value or the inflation band. When determining the inflation target by a point value, a specific point needs to be specified as an inflation target, and the central bank must strive to achieve that point. This option requires a very strict monetary policy, as the central bank must try to remedy the slightest deflection of inflation, which is very difficult in practice. By contrast, the *inflation band* provides the central bank with more flexibility as the bank is not forced to respond by using monetary policy instruments if inflation is within the specified inflation band. This band should not be too broad, which would jeopardize the credibility of the central

bank, which, together with the independence and transparency of the central bank, is an essential condition for inflation targeting to be an effective monetary policy regime (Daniels, 2012).

The operation of the whole mechanism is based on the confidence of economic operators in the effectiveness of monetary policy. If people do not believe that the central bank is trying to reduce inflation, there is a rise in prices and then wages. Loss of credibility may occur for various reasons, such as the political crisis, international financial turbulence, the commodity shock (Scheme 2 – the tumultuous 156-year history of oil prices) in the opposite direction (1973 oil crisis; 2007–08 world food price crisis) or

previous monetary policy defects. The factor of inflation expectations has thus become an important part of central government monetary policy. Furthermore, the *asset price channel* maps the impact of interest rate changes on relative prices of financial assets and real estate. The rise in rates will mostly bring down asset prices. It follows that the net asset value of companies and households is lower. Businesses are responding to a reduction in consumption because they feel that their provision for a future economic shock has diminished. The importance of the role of the asset price channel has deepened in the period of the monetary and financial crises in the early 1990s.

Scheme 2. The 156-year Timeline of Oil Prices in US Dollars and Related Historical Events



Source: Holodny, 2017.

The independence, credibility, transparency and accountability of the central bank cannot, however, be associated only with the concept of the transmission mechanism, as these are characteristics that have a significant impact on the performance and efficiency of monetary policy as a whole. Despite the undeniable

benefits of inflation targeting that affect the real inflation rate and the positive impact of market players due to the low expected low inflation, the question arises recently whether there is no time to abandon inflation targeting and replace it with another monetary policy regime.

3.2 Independence of the Central Bank

The legal framework has a major impact on the whole monetary policy process, by which it is determined. The cardinal question is, in particular, the statutory regulation of the central bank's position. The position of central banks in the last period (since the 1980s) has undergone significant developments. In particular, a shift towards central bank independence is evident. With the concept of central bank independence, it is also necessary to link the concepts of CBs' credibility, transparency and accountability. In general, central bank independence can be defined as the ability of the central bank to implement monetary policy independently of its own decision-making processes, without the government, parliament or other political institutions having powers to influence central bank decisions (therefore is not subject to external influences and political pressures in the performance of its functions) (Jones, 2013). Likewise, under the notion of independence, we mean the independence of the central bank from the government and the government executive. Independence as such can be broken down by different criteria. According to the ability of the central bank to decide autonomously about the use of instruments and the setting of monetary policy objectives, we distinguish between instrumental (operational) and targeting independence. *Instrumental independence* is the freedom of the central bank to select monetary policy instruments and how to use them in order to achieve the specific objectives set out in this case outside the central bank, as a rule, by the government. *Target independence* expresses the central bank's entitlement to set a specific monetary policy objective. It can be determined exclusively by the central bank, in agreement with the government and the central bank, or completely outside the central bank. Instrumental independence is the freedom of the central bank to select monetary policy instruments and how to use them in order to achieve the specific objectives set out in this case outside the central bank, as a rule, by the government. Target independence expresses the central bank's entitlement to set a specific monetary policy objective. It can be determined exclusively by the central bank, in agreement with the government and the central bank, or completely outside the central bank.

A further breakdown is offered in terms of areas where central banks should have a high degree of independence. In this sense, independence can be divided into political, economic and financial. For the purpose of assessing *political independence*, it is particularly important to examine the manner of appointment and the possibility of appealing to the

members of the central bank's decision-making bodies, the length of their term of office, the reappointment and the need to approve third-party monetary policy decisions of the central bank. Political independence would also have a strong influence on the membership of government representatives in the management of the central bank, which should be explicitly excluded for its achievement. The threat of political independence also represents the possibility of conflicts between the central bank and the government. Under the *economic independence*, we understand the statutory authority of a central bank to choose the monetary policy instruments to be used to achieve the set objectives and to exclusively determine the conditions for lending to banks. Economic independence is also linked to possible monetization of sovereign debt, where direct bans should be banned and strict, legal rules and boundaries are set indirectly. Another area that falls under economic independence is to set up a *system of exchange rate* that, in the case of absolute economic independence, would fall within the exclusive competence of the central bank, including the decision on ways to influence the exchange rate. The last of these types of independence, *financial independence* is characterized by the method of compilation the central bank's budget and the central bank management rules (in particular, the rules for the distribution of profits or reimbursement of losses from the central bank's management).

According to the above-mentioned types of independence, the different positions of the central bank can be conceived, but this should be avoided by both extremes - *absolute independence* on the one hand, and *excessive bindings* with the executive on the other. A strong dependence on the political cycle may destabilize monetary policy, but the extreme independence of the central bank in turn raises the risk that the central bank behaves only in its own interest as it has no political responsibility. With the notion of central bank independence, the notion of accountability, sometimes referred to as the folding of accounts, is indisputably linked. Although these two concepts are opposed to each other, they must be balancing for optimal construction of the legal framework. If this were not the case, the central bank would lose the *optimal position* – balance between a high degree of responsibility and absolute irresponsibility (Mishkin, 2014). However, finding a certain balanced combination of independence and accountability is very difficult in practice. It is often found as determining the central bank's responsibility to achieve the main monetary policy objective, defined by a different entity than the central bank. In some theories, one can find the theorem that the central bank is fully responsible to the public. However, this assertion cannot be accepted because

the public has no real possibility of controlling the policy of the central bank. In this sense, however, the overwhelming majority of authors construct the notion of central bank transparency (openness, accessibility and clarity of central bank policy). Transparency is generally implemented by disclosing detailed information about monetary policy and monetary policy decisions. The central bank policy is based on disclosure of the ultimate goal and the way it will be achieved. The central bank publicly explains in detail the steps and the reasons which led to them. Transparency is closely linked to the last characteristic of the monetary policy framework (credibility). In conclusion, we can say that the link between the *transparency* and the *credibility* of the central bank is quite logical, because a credible policy cannot be imagined if it is not known and fully understandable to the public. A central bank is credible that the public believes it will do everything that has been proclaimed. The path to the credibility of the central bank is on a long track. Its achievement is dependent on monetary policy in the longer term, notably to achieve the objectives set and sufficient transparency. The greatest contribution to the credibility of the central bank lies in the possibility of attaining monetary policy objectives at the lowest possible cost and in influencing real economic processes by influencing the psychological aspects of the public.

Conclusion

As we can see, the concept of monetary policy from the very beginning to the present has undergone a number of changes. The central bank has almost every country in the world. The role of central banking is generally perceived in individual economies as irreplaceable, but the suitability or necessity of setting up these institutions was seen by different states depending on many factors. The origins of modern central banking date back to the second half of the 19th century. Scales of central bank targets and their competencies changed in different countries in response to, for example, changes in the political system, international conflicts or economic fluctuations, etc. These competences were given by specific legislation of the state. However, debate responding to the abundant use of unconventional monetary policy instruments after the onset of the 2009 global financial crisis has so far failed to generate a consensus on a commonly accepted definition of monetary policy based on these instruments (i.e. balance sheet policy – expansion or change in the central bank's balance sheet structure; signaling future monetary policy; quantitative/loan

release; availability of external financing of banks; interventions through various non-standard measures; zero or almost zero interest rates or a serious breach of the transmission mechanism to ensure financial or macroeconomic stability). As we have closely analyzed through our research, a standard practice of monetary policy implementation represents the basis, which is predominantly founded on the regulation of the short-term interest rate of the domestic currency on the interbank market through open market operations. The factual management of the short-term interest rate allows the central bank to achieve its primary objective, which is typically a stable price level expressed by a certain inflation rate. This way of realizing monetary policy proved to be reliable both in terms of economic downturn, high unemployment and low expected inflation rates, when stimulus was needed, on the contrary, in case of too rapid economic growth, i.e. overheating of the economy and the need to curb inflationary pressures. At the same time, the stable functioning of the money market is also ensured. Free market operations are not the only conventional monetary policy instrument. From a methodological point of view, we can divide these tools according to several aspects, by default they are divided into so-called direct (non-market) and indirect (market). Direct monetary policy instruments directly affect banks' decision-making mechanisms and restrict their independence. These instruments include liquidity rules, mandatory deposits, interest rate limits, or bank loans. Direct instruments, however, use the central banks of developed countries only marginally and more often by choosing indirect instruments, which act on a massive scale for the banking sector and markedly affect the conduct of banks. In conclusion, we see that a national bank is able to influence the basic economic indicators (inflation rate, exchange rate, GDP in a short period), but its possibilities are considerably limited due to the size and degree of openness of an economy. Long-term interest rates are influenced indirectly by the central bank by adjusting its short-term interest rates, which are also influenced by other effects (expectations, uncertainty, supply and demand, etc.), reflecting their level. On the other hand, there are a number of external factors in an economy (world prices, investor behavior, foreign demand, etc.), whose development is difficult to predict. Keeping inflation in the narrow target band will therefore always be problematic. The development of the course is left to the market by the national bank, with sporadic attempts to influence it (e.g. too strong a course, pushing exporters to narrow ones) is only successful with the help of all the strength and goodwill of much stronger foreign capital.

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