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CENTRAL BANK COMMUNICATION IN THE XXI CENTURY: A SURVEY OF THEORY AND EVIDENCE

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CENTRAL BANK COMMUNICATION IN THE XXI CENTURY: A SURVEY OF THEORY AND EVIDENCE[2]

After the recent global financial crisis, central banks in advanced and developing economies found themselves unable to stick to their mandate goal of price stability by resorting to traditional instruments of monetary policy. When key interest rates approached the zero bound, the need to develop a new toolkit of liquidity provision arose. Central banks embarked on numerous non-standard monetary policy measures aimed at ensuring financial stability and restoring economic growth. Communication has become an effective auxiliary instrument of economic policy, and markets started paying precise attention to the way central bankers report information regarding the future path of monetary policy. The purpose of this paper is to provide an overview of recent trends and developments in central bank communication strategies. By resorting to the existing literature, we analyze the origins of central bank communication and the evolution of its role in time. We also study the main instruments of communication strategies of large central banks. In the final part of the study, we investigate the communication strategy of the US Federal Reserve and the way it may cause spillovers to fragile markets abroad. We outline at least three major channels of international policy transmission: through stocks, bonds and exchange rates fluctuations.

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Introduction

Over the past three decades, the way in which central banks conduct monetary policy has undergone remarkable changes. The ideas of independence, transparency and accountability of a central bank have become central components in viewing the role of this institution. Along with the advent of new tools of influencing financial markets and maintaining the economy known as unconventional monetary policy tools, the need for a communication mechanism that would allow conveying essential information to the general public arose. The recent global financial crisis has proved that traditional tools of monetary policy are not sufficient anymore to mitigate the consequences of recession in an effective way. This led to the development of a broad set of unconventional monetary policy tools.

The purpose of this paper is to provide an overview of the role of central bank communication strategies in the era of inflation targeting and unconventional monetary policy tools. We review numerous theoretical and empirical papers to develop our own opinion on the role of central bank communication. We firstly discuss the origins of central bank communication and its role in the contemporary monetary policy environment. After that, we investigate the instruments of communications employed by central banks in advanced economies (Bank of England, the ECB etc.) and compare them with the current communication strategy of the US Federal Reserve. Finally, we assume that communication instruments may exert a particular influence on fragile and short-term investment-dependent emerging economies and cause high volatility on their markets. We try to outline the channels of monetary policy transmission through communication overseas. The main indicators that are significantly exposed to unexpected financial turbulences are asset prices, bond yields and exchange rates in emerging market economies.

The papers may be of great use for those who wish to get initially acquainted with the topic of central bank communication. The text may also serve as a survey of the existing literature for further research.

History of central banks communication and trends towards greater transparency

With the development of a central bank as an integral part of the governmental system, the role of this institution has been significantly altered. In the past, the activities and intentions of central banks could be described as latent and covered in mystery. They were relatively closed organizations without any direct access to the general public. However, with the development of new and more sophisticated tools of monetary policy aimed at impacting the economy in a more efficient and less unexpected way, the idea of a new vision of a central bank as an independent money authority was born. Such issues as transparency and openness to the general public have become integral attributes of a central bank`s agenda (Masciandaro & Romelli, 2016).

Transparency is the means of reducing asymmetric information between financial market players and policymakers. The need to make central banks more transparent and open to the public was generated by the emergence of inflation targeting in many advanced economies. Institutions needed to deliver the relevant and up-to-date information to their audience in order to increase the efficiency of policies they conducted (Issing, 2005).

Another accelerator of the trend towards greater transparency was the need to manage the consequences of severe financial crises effectively. In times of significant economic turbulence and political maneuvering, the confidential and relevant information is highly appreciated and, thus, can play an essential role in combating economic upheavals. In addition, transparency has always been a key tool for maintaining accountability of a central bank, as clear and well-explained economic policies help to establish trusting relationship between policymakers and markets.

The effectiveness of revealing necessary information by central banks has been repeatedly proved by numerous research papers on this topic (Cukierman, Webb et al., 1992; Briault, Haldane et al., 1996; Blinder & Ehrmann, 2008). The main goal of central banks communication is to reduce uncertainty and to anchor expectations regarding the economy. The information revealed by a central bank generally falls into two broad categories. First, central bankers report key statistics about the economic performance of a country. The data are usually supported by brief comments and possible outcomes for the economy. This type of information is crucial for analytical forecasts and long-term planning, whereas the comments made by central bank representatives help to understand their attitude towards the current situation and to anticipate further policy responses. The second category encompasses the announcements about further actions that a central bank intends to undertake and is usually accompanied by solid arguments in favor of the decisions made. In most cases these two kinds of information are used together in order to provide a clear and complete understanding of central bank`s incentives.
The type of information provided by a central bank could also be differentiated by its delivery time. Recent news and policy responses appear immediately on media after central bank representatives have made announcements at conferences and briefings, whereas some other kinds of information could be found in final reports published several days after the meeting has been held.

In pursuing its goal of delivering the information, a central bank is generally oriented at four major groups: financial market participants, the government and particularly the parliament, media, and the general audience (Siklos & Sturm, 2013). For financial market participants, the information transmitted by a central bank acts as a trigger that helps to anticipate and forecast further fluctuations of asset prices, bond yields and exchange rates. The awareness of markets about the central bank`s vision helps its participants to adjust their expectations to current economic conditions and to alleviate uncertainty. The government and those policymakers who are not directly related to this institution may use the announcements conveyed by central bank employees and consider them when developing policies in the long run. The media acts as a transmitter of the information between the governmental institutions

and the general public. Journalists play an essential role in receiving, reworking and delivering the information to a broader audience. The fact that media is considered to be one of the most important channels of communication by issuing financial news poses a significant challenge to a central bank. In order to avoid information distortions and misinterpretations, the data provided by a central bank should already be simplified and carefully selected before going to media. The last group called the general public and is represented by those whose day to day decision making might also be affected by changes in economic policies. This group pays precise attention to interest rates, since they impact their ability to borrow money for daily purposes: to buy a house or a car, to go to the university or college, etc. The general public may also be interested in inflation and domestic currency rate fluctuations, as both of them could become repercussions (sometimes goals) of monetary policy tools. When revealing the information, all the named groups that make up the audience of a central bank should be taken into account.

Transparency of a central bank is closely linked to its credibility. Establishing trusting relationship between a central bank and markets has always been within the main priorities of this institution, since it has a direct influence on the way monetary policy is conducted. Credibility of a central bank is referred to be a commitment made by this institution to follow its previously identified policies without any significant deviations. It is also closely correlated with reputation of a cntral bank. The higher the credibility rating of a central bank, the broader impact it may exert on the financial market when conducting monetary policy, because market players in this case have a higher degree of trust and adherence.

The main indicators to which central bank`s credibility is exposed are inflation and inflation expectations. Having a clear understanding of central bank`s inflation target and being aware of what instruments are employed to the economy allows market players to make more accurate forecasts and anchor their expectations about future price fluctuations. On the other hand, more anticipated behavior of investors on the financial market helps a central bank to accommodate monetary policy to satisfy the needs of the economy.

Theoretical framework of central bank communication

To keep inflation low, control interest rates and supervise financial institutions: these three goals have always been the mantra of any central bank. Since the moment when monetary policy was ultimately separated from fiscal policy in 1970s, it has evolved into a substantive set of policies conducted by a central bank or money authorities. With the development of financial markets and the growth of financial sectors all over the globe, policymakers started inventing new and more sophisticated toolkits in close collaboration with academia to achieve the mantra goals. Such tools as open market operations, discount rate and reserve requirements are referred to the attributes of traditional monetary policy. Central banks use open market operations to purchase (or sell) particular securities on the financial market and thus to impact the interest rates in the economy. The seconds tool in known as the discount rate in the US (this interest rate in called differently in different

countries) is used by central banks to increase or decrease the interest rate at which commercial banks can get loans from it to expand their balance sheets or to meet the requirements on reserves. When changing the requirements on reserves, a central bank can influence the ability of banks to issue loans. All the tools are proved to be effective when combating economic shakeups. However, among the traditional tools of monetary policy open market operations are more frequently used and preferred by policy makers due to their relatively low implementations costs (Vayid, 2013).

The shift from controlling the money supply to targeting inflation has generated the development of a new set of economic policies known as unconventional monetary policy measures. The need to adopt new tools to reach precise goals appeared because of the limitations to efficacy of traditional monetary policy tools when interest rates approach the zero bound. The main goal of unconventional monetary instruments is consistent with the objectives of traditional tools. Their aim is to further ease financial conditions. Unconventional tools had been actively used by many advanced and some developing economies during the global financial crisis started in 2008 and in the post-crisis period. The major emphasis of these policy measures is put on the communication toolkit of central banks, as it is believed to be one of the most influential channels of transmission from central banks to the economy in the recent decades (Santor & Suchanek, 2015).

Numerous debates have been generated in economic literature regarding the classification of unconventional monetary policy instruments. However, scholars have agreed to group the tools into four broad categories: credit easing, quantitative easing, forward guidance and signaling.

Credit and quantitative easing are similar in their aims and are usually used together. The goal of providing additional liquidity to the economy through commercial banks and intensified lending is reached by purchasing different kinds of corporate assets and securities (credit easing) or government bonds (quantitative easing) by a central bank. In comparison to traditional open market operations, these non-standard tools embrace a broader set of assets and securities from both governmental and private sector to be purchased, which allows to mitigate the financial meltdown in a more effective fashion.

Forward guidance and signaling are the tools of unconventional monetary policy exercised by using central bank communication strategies. Albeit these tools were developed and have been actively involved by central banks in their policies over the past decades, the frequency of using forward guidance and signaling is ever increasing. Their major goal is to manage expectations and to alleviate uncertainty over economic conditions in the future. As a part of non-standard toolkit of monetary policy, these options mostly serve as complements to traditional measures of monetary policy. In this paper, we mostly focus on these two instruments, as their implementation implies sophisticated techniques of delivering essential information in order to manage market expectations. Businesses and individual agents use this information to determine their investments and spending in the future. As a result, a central bank prepares the financial market for future changes in its monetary policy and thus mitigates a potential shock. A central bank transmits the information on its target interest

rates and provides an economic outlook paying precise attention to the inflation rate and the unemployment level. These data help investors and other market participants to shape their expectations and to build forecasts.

One of the main problems that has been actively debated over the past decades is known as the time-consistency problem (Masciandaro & Romelli, 2016). When a central bank announces that it will set a new inflation target and will array its policies towards reaching this goal within the next several years, a bank makes an official commitment. This assertion serves as a major indicator for market players in defining their both short-term and long-term goals. In the short run, central bank`s policies are not exposed to significant alterations and thus act as a reliable and credible indicator for them. By long-term planning, companies, institutions and other market players may face several difficulties, as a central bank may decide to alter its intentions in line with current economic conditions to address new challenges. Generally, central banks tend to reassess their policy goals on a monthly or a yearly basis and to adjust their actions based on the recent performance of an economy. Typically, such economic indicators as unemployment, consumer price index and economic activity in general are taken into consideration. The time-inconsistency problem reflects the idea that market players may form their expectations with a significant time lag in comparison to a central bank that may unexpectedly alter its policy direction. This may also generate space for information asymmetry, which may adversely affect the market.

Contemporary central bank communication strategies

Contemporary communication strategies of central banks always involve two main issues that should be addressed: what to communicate and how. The information that could be considered as necessary and vital for market participants is explained in detail in the previous sections. However, the ways in which these data could be successfully delivered is a more sophisticated process. Modern central banks all over the globe use a broad set of communication strategies when conducting monetary policy. Such instruments of communication as periodic reports, short after-meeting notices and transcripts, conferences and briefings, visual materials, personal interviews with central bank representatives are used nowadays to achieve the main monetary policy goals (Herri, 2016).

Generally, communication strategies fall into two broad categories: verbal communication and communication via readable and visible sources. Almost all central banks in developed and developing countries issue periodic reports and outlooks (e.g. Inflation Report of Bank of England, Monthly Bulletin of ECB), as it is believed to be the most common tool of central bank communication. Such reports contain short-term (up to three years) forecasts on the economic performance and market conditions. However, the Federal Reserve in the US also provides a longer-term forecasts for up to ten years with the emphasis on inflation and unemployment targets.

Central banks in developed countries mostly focus of the analysis of three major economic indicators: labor market (i.e. unemployment), short-term inflation and economic

activity. Some central banks publish periodic reports on unemployment and labor market conditions. Some of them also reveal the information on labor price levels and costs.

Reports and forecasts on inflation fall into two broad categories: analysis on headline and core inflation. Headline inflation is calculated on the basis of consumer price index over a precise period of time and reflect changes in prices of a fixed basket of goods. Core inflation represents a longer-term perspective and excludes unexpected short-term fluctuations in prices. Core inflation is considered to be a less volatile measure than headline inflation.

One of the effective measurements of economic activity in the short run is a potential output and/or output gap. Central banks of New Zealand, Norway, the Czech Republic, Sweden, and Hungary include this information in their reports (Blinder & Erhmann, 2008). The other way of delivering necessary information could be presented in the form of interest rates projections. It implies that a central bank provides a precise and accurate guidance on its future path of actions. Some banks went even further and started issuing a quantitative guidance that reflects numerical path of future policy rates (e.g. Bank of New Zealand, Bank of Sweden). Issuing short after-meeting notes (meeting minutes) and transcripts is also considered to be a valuable tool. Meeting minutes usually reveal detailed results of voting on a particular issue.

All the tools mentioned above could be united into one powerful tool known as forward guidance. Forward guidance is referred to be the assurances of a central bank given to a country where it operates that reflects its intentions on monetary policy. These messages always give hidden clues to market participants and rarely direct instructions. They are aimed at outlining the general trend that a central bank will be pursuing in the nearest future.

Verbal communication implies that a central bank provides information at briefings and conferences. Usually these events are held after meetings so that businesses, investors, households and other market participants receive first-hand information. For example, the ECB holds question and answer sessions after every open conference, so that the general public may pose questions to bank authorities. Information revealed by individual central bank committee members during interviews or briefings also plays an important role in a bank's communication strategy. However, opinions of individuals bankers may lead to significant information distortions and misleading among market participants, because sometimes the communication mechanism between bank committee members does not work appropriately (Cœuré, 2017).

Overall, there are numerous tools and instruments of verbal and nonverbal (via written and visible sources) communication that central banks all over the world use to enhance the effectiveness of their monetary policy. The main question is still to be answered: which of them is proved to be the most efficient tool?

US Federal Reserve forward guidance: Current communication strategy

The Federal Reserve is believed to be one of the most complicated and at the same time powerful central bank systems in the world. The mandate of "maximum employment, stable prices, and moderate long term interest rates" has always been top priority from the outset. Currently, the long term target inflation rate of the Fed stands at 2%.

The Fed has a broad set of tools to achieve its mandate goals. The central bank has an exclusive ability to alter money supply and adjust credit conditions in the country. There are three traditional tools that the Fed uses to achieve monetary policy objectives. Firstly, it implements open market operations by purchasing or selling Treasury bonds on the secondary market or carrying out repos. Secondly, the Fed is in charge of altering reserve requirements, which specify the fraction of deposits of commercial banks that should be remained in reserves and not given away as loans. Consequently, the Fed controls the liquidity on the federal funds market. Thirdly, the Fed conducts its policy by setting a target for federal funds rate, which is referred to as the rate at which banks can lend and borrow funds on an overnight basis. The policy of low interest rates was the response of the central bank to the challenges in the post-crisis period. At that time, the target federal funds rate had been decreased to the range of 0-0.25%. However, after conducting the three rounds of quantitative easing, the Fed admitted significant improvement in the US economy and announced a new course in its monetary policy by the end of 2015. Currently, the interest rates are expected to gradually increase (Labonte, 2017).

The Fed has been using forward guidance as a primary communication tool over the past decades. It describes its policy as 'accommodative' and 'data dependent', since the forecasts provided by the Fed are highly connected to the data on unemployment issued periodically. Thus, the policy goals may deviate or be altered in the short run to provide a maximum accommodation to current economic conditions.

The Great Recession proved that the traditional toolkit of monetary policy employed by the Federal Reserve could not affect some significant parts of the financial system. This caused a shift towards unconventional monetary policy instruments (Vayid, 2013). The Fed started providing assistance through numerous additional liquidity facilities in the course of the recent financial crisis. The next step of mitigating the crisis was the introduction of the policy known as quantitative easing aimed at putting downward pressure on interest rates in the economy.

One of the most important toolkits of US unconventional monetary policy is forward guidance. In economic literature, it is sometimes refereed to forward commitment, as the central bank gives the commitment it will stick to over a particular period. The mechanism of forward guidance in the US is similar to traditional monetary policy tools. It operates through interest rates channel, however, does not imply any changes in target federal funds rate. It influences the term premium and the expected path of future interest rates (Smith & Becker,

2015). Forward guidance anchors expectations of market participants and alleviates the risk of unexpected changes in monetary policy.

The active phase of forward guidance implementation as an integral part of monetary policy fell on the recent financial crisis. Later, the Fed revealed primarily quantitative information on labor market conditions and current headline inflation in its reports and forecasts. However, since 2013 verbal communication tools such as conferences, briefings and meetings have been successfully incorporated into the Federal Reserve communication strategy. Currently, the Federal Reserve issues the Monetary Policy Report twice a year where such issues as inflation goals and further interest rates projections are discussed. In addition, eight times per year every federal bank gathers anecdotal information on current economic conditions in the respective region. The summary of these short reposts is known as the Beige Book. Four times per year, the Board of Federal Reserve Governors issues the Report on Federal Reserve Balance Sheet Developments, where it sheds light on major changes in the balance sheet and what causes them. Moreover, the Fed publishes minutes and transcripts of speeches after meetings and conferences, which helps market participants better understand the attitude of the committee towards the economic situation. The Fed also publishes all enforcement action, orders, and regulatory policy laws that it passes.

However, there are some difficulties when analyzing the efficiency of forward guidance as a tool of monetary policy. First of all, numerous research proved that it is impossible to insulate and quantify the effect of forward guidance without being influenced by further unconventional instruments (Kool & Thornton, 2012; Hirose & Kurozumi, 2017; Labonte, 2017). We can only assert that this effect exists and exerts influence in combination with other tools. Secondly, forward guidance encompasses a broad set of actions implemented by central bank representatives, which may generate uncertainty about what exactly caused changes in market participants` expectations. Kevin Warsh, a former Fed governor, calls this phenomenon “the cacophony of communications”.

A survey conducted in 2016 among academic and private-sector Fed watchers found out the degree to which the information and the way it is revealed by the Fed is useful when determining their inflation and interest rates expectations (Olson & Wessel, 2016). Half of the respondents (53%) assigned a B- to the overall communication strategy of the Fed. The respondents believe the main problem of the Fed is the uncertainty caused by the difference in opinions among the incumbent Fed governors when they are asked about perspective policies of the central bank. The majority responded that the then Fed Chairwoman, Janet Yellen, should talk more to the public, whereas the Reserve Bank Directors should resist from giving ambiguous comments. Generally, the survey also showed that sometimes the actions taken by the Fed are inconsistent with its policy agenda, which also results in a degree of uncertainty among market participants.

Federal Reserve communication and channels of international spillovers

It is not a secret that the US Federal Reserve is one of the most impactful central banks in the world. The decisions of the committee representatives have power to affect not just domestic markets, but also to cause international spillovers to other economies.

Numerous research has been conducted over the past decade to determine the quantitative impact of US monetary policy on both developed and emerging market economies. The majority of studies has been dedicated to the impact of such unconventional tools as quantitative easing and liquidity facilities. A small portion of research papers discloses the influence of forward policy and communication strategy on asset prices abroad (Moessner, 2014).

First of all, it is important to outline possible channels of policy transmission. To better understand how US monetary policy causes international spillovers, we will briefly discuss the theoretical channels in the domestic economy. Forward guidance is believed to be an effective supplementary tool to both conventional and unconventional monetary policy. It acts as a facilitator for decision making and an anchor for inflation and interest rates expectations. Market participants react very quickly to any changes in prospective economic policies, as they pursue a goal of increasing profits from their investments. When the Fed announces that the US economy is still in weak condition, this information acts as a clue for investors which implies that no hikes of the target federal funds rate are expected. Hence, interest rates on Treasury bonds will remain at the same level. On the other hand, when the Fed announces that the US economy is strong enough (based on the labor market conditions and headline inflation), it may raise expectations about future rates hikes. The higher the federal funds rate, the higher rates commercial banks will charge when issuing loans. On the other hand, a stronger economy implies that it will generate a higher GDP and, thus, is worth investing. With an increase in the federal funds rate, the yields of Treasury bonds also rise, which may attract international investors due to relatively higher interest rates. With an increase of investments in the US economy, the dollar also appreciates. From the consumption point of view, a stronger local currency will cut the demand for export goods, and, therefore, the aggregate demand in the economy. A lower level of spending in the final goal of discretionary monetary policy.

It is not always clear how exactly forward guidance transmits its effects to the economy. One potential issue is the time-inconsistency problem. As businesses, investors and households usually have a long-term perspective, they may not be willing to adjust their financial decisions to every changes in the Federal Reserve policy. Some of them use hedging instruments of long-term contracts to anchor asset prices and to anticipate future cash flows.

Nevertheless, all market participants are exposed to some extent to US monetary policy changes (Moessner, 2016). An intention to hike the target federal funds rate means that the US will provide higher returns on assets, deposits and other investors. For example, a stronger economy gives space for business expansion and thus contributes to higher profits. Higher profits of companies, in their turn, will bring higher dividends on corporation stocks.

Hence, the demand for US stocks will also increase in response to a Fed announcement on rate hikes. Higher production level will also result in an increase in US GDP. This sequence of events affects expectations of market participants regarding future cash flows and better opportunities for money allocation. As a result, asset prices in developing countries may go down because of higher yields offered by US securities.

The same logic could be applied to exchange rates. With all other indicators being unchanged, higher interest rates in the US may attract investors who currently hold funds abroad, e. g. in developing and emerging market economies. Massive withdrawals of short-term and portfolio investments, especially from investment-dependent countries, may result in a dramatic currency depreciation (Chen, Mancini-Griffoli et al., 2014).

Since the US Federal Reserve is considered to be a credible central bank with a high level of transparency and low dependency on the government, we assume that the influence it exerts with its announcements is strong enough to reach the final stage of international policy transmission. It is also important to mention that the channels of transmission we determined above are rather indirect due to the complicated system of pricing on the global markets and a great number of external and internal factors that may lead to price fluctuations.

Concluding Remarks

In this research paper, we investigate the role of central bank communication as a tool of contemporary monetary policy. The recent global financial crisis demonstrated that some large central banks found themselves unable to further employ classical tools of monetary policy in order to fulfill their commitment, and the need for a new toolkit arose. By that time, central bank balance sheet operations replaced interest rates as the major policy tool. However, a more comprehensive approached to policy accommodation needed to be developed in order to mitigate severe consequences of the crisis.

Communication is considered to be an integral part of monetary policy conducted by many central banks in developed and developing countries. The way in which a central bank conveys messages with essential information on basic economic indicators and economic performance in general may have a significant impact on market participants` behavior. Since a central bank has exclusive rights on altering interest rates, businesses, households and investors adjust their interest rates and inflation expectations to the policies of a central bank. Such issues as credibility and transparency play a vital role for a central bank when developing an effective communication strategy.

The paper also focuses on the Federal Reserve as a highly influential central banks system. It uses a wide range of unconventional monetary policy tools to conduct its policy effectively. One of these tools is known as forward guidance. Forward guidance is the instrument which allows the Federal Reserve to deliver necessary information on possible changes in the target federal funds rate and, thus, to manage expectations of market participants. This mechanism has been proved to be effective for the domestic economy. However, since the US has one of the greatest and most developed economies in the world, policy changes made by the Federal

Reserve may have adverse impact on emerging market economies. We outlined several channels of international spillovers caused by Fed forward guidance. One of them is the transmission of expectations through asset prices. With higher interest rates in the US, international investors may withdraw their funds from investment-sensitive economies and cause fluctuations on their financial markets. The same logic is applicable to bond yields exchange rate fluctuations.

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