IEL Classification: *E58* **DOI**: https://doi.org/10.31521/modecon.V25(2021)-25

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Central Bank Communication: Forward Guidance

Abstract. Introduction. Incomprehension and misinterpretation of central bank actions by the markets lead to uncertainty. As a result, the volatility of inflation, prices, and assets increases. The low-interest-rate in today's macroeconomic environment is a common thing. In such circumstances, the economy is so difficult to adapt to internal and external shocks, so inefficiencies caused by incorrect or untimely statements by the regulator can exacerbate the problem and provoke unjustified risks. These new conditions have led to changes in the way information is covered and create a new communication approach.

Purpose. Thus, the article aims to systematize the main patterns of forwarding guidance mechanism as a communication tool in monetary policy. Its use in such developed economies as Japan, the United Kingdom, the United States, and the European Union. Identification of major trends in the use of forwarding guidance form during the crises of 2008 and 2020. Determination of why targets are 2% inflation with the description of monetary and communication tools, research of information coverage approaches.

Results. The central bank statements affect to decisions of various market participants and can be divided into economic forecasts and forward guidance. According to the forwarding guidance classification, the analysis was made of 2020 statements and compared with the 2008 statements, for each of the studied countries. The finding shows that there has been a shift from economic forecasts to forward guidance. A model consisting of four elements has been identified for the four central banks: target, monetary instruments, statement approach, and information tools.

Conclusions. In general, new types such as state-contingent and calendar-based statements began to be used during the last crisis. The most common monetary instrument that appears in statements being the interest rate. The common goals for all central banks are to focus on price stability, which is expressed in inflation of 2%. This target must be long-term and in numerical terms to effectively management inflation expectations and bring down volatility. All banks strive for simplicity and clarity in their statements, and they use a wide range of information tools.

Keywords: central bank communicatiom; forward guidance; non-traditional monetary policy instrument.

УДК 336.027

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Комунікація центрального банку: заява про наміри

Анотація. Нерозуміння та неправильне тлумачення дій центрального банку ринками призводять до невизначеності. Як наслідок, мінливість інфляції, цін та активів збільшується. Низька відсоткова ставка в сучасному макроекономічному середовищі— звична справа. За таких обставин економіці так складно адаптуватися до зовнішніх змін, тому неефективність, спричинена неправильними або несвоєчасними заявами регулятора, може погіршити проблему та спровокувати невиправдані ризики. Ці нові умови призвели до змін у способах висвітлення інформації.

Таким чином, метою статті є систематизація основних закономірностей механізму прямих вказівок у монетарній політиці із застосуванням у таких розвинутих економіках як: Японія, Велика Британія, Сполучені штати Америки та Європейський союз. Визначено основні тенденції у застосуванні заяв під час криз 2008 та 2020 років. З'ясовано, чому цілями є 2% інфляція з описом грошово-кредитних та комунікаційних інструментів.

Визначено, що заяви центрального банку впливають на прийняття рішень різними суб'єктами ринку і їх можна поділити на економічні прогнози та заяви про наміри. Згідно з класифікацією заяв про наміри було зроблено аналіз заяв 2020 р. у порівнянні з класифікацією заяв 2008 р. для кожної із досліджуваних країн. Встановлено, що відбулося зміщення з економічних прогнозів в сторону заяв про наміри. Для чотирьох центральних банків було виділено модель, яка складається із чотирьох елементів: ціль, монетарні інструменти, підхід до заяв, комунікаційні інструменти.

Встановлено, що під час кризи почали використовувати такі нові типи заяв з умовою та заяв на основі календаря. Найпоширенішим монетарним інструментом, який фігурує в заявах це відсоткова ставка. Спільними цілями для усіх центральних банків є зосередження на ціновій стабільності, яка виражається в інфляції 2%. Ця ціль обов'язково має бути довгострокова та в цифровому вираженні, для ефективної стабілізації інфляційних очікувань та зниження волатильності. Всі банки прагнуть до простоти та чіткості в заявах, тому використовують для цього широкий спектр інформаційних інструментів.

Keywords: комунікації центрального банку; прямі вказівки; інструмент нетрадиційної монетарної політики.

Стаття надійшла до редакції: 14.02.2021

Received: 14 February 2021

Formulation of the problem. Today, many central banks are moving to inflation targeting through the transmission mechanism of monetary policy, which, in turn, requires a transition to open communication with the mass audience. Desynchronization between central bank actions and market expectations can hamper regulatory policy. This is because the central bank is a factor that goes against the trend, especially during the crisis, for restarting the business cycle. In such a situation, low-cooperation with the market during the crisis will lead to a weak effect in the stimulus policy, and the costs of its realization will be significant.

If the actions of the central bank are a surprise to the public, then the creation of effective communications is impossible. The main reason for such situations is the uneven distribution of information and its misinterpretation. To achieving synergies in monetary regulation, it is crucial to consider these aspects.

Analysis of recent research and publications. The basis of this work is research, publications, speeches, representatives of four central banks, who use forward guidance in their monetary policy: FRS [4; 5; 14], ECB [1; 11; 12; 13], Bank of England [7; 10], Bank of Japan [3; 8].

Also, in the study of long-term communication strategy and its impact, attention is paid to such scientists as Brent Bundick and A. Lee Smith [2], Michael Ehrmann, Gaetano Gaballo, Peter Hoffmann, Georg Strasser [6], Anna Samarina, and Nikos Apokoritis [9], Bernanke, B. S. [15].

Formulation of research goals. Thus, the aim of the article is to systematize the main patterns of forwarding guidance mechanism in monetary policy with its use in such developed economies as Japan, the United Kingdom, the United States, and the European Union. Identification of major trends in the use of forwarding guidance form during the crises of 2008 and 2020. Determination of why targets are 2% inflation with the description of monetary and communication tools, research of information coverage approaches.

Outline of the main research material. Forward guidance is a tool used by central banks to inform the public about possible future monetary policy. When central banks provide direct guidance, individuals and businesses will use this information to make cost and investment decisions [4].

The regulator seeks to influence the financial decisions of households, businesses, and investors by providing guidance, for example, on the expected path of interest rates. The central bank's clear messages to the public are one of the tools to prevent surprises that could disrupt markets and cause significant asset price fluctuations.

Thus, statements on future policies may affect today's financial and economic conditions. To exercise such influence, forward guidance has a specific mechanism of action:

1. The central bank shall make a statement of plans, such as an inflation forecast or a change in the discount rate.

- 2. As a result, commercial banks issue longer-term loans at lower interest rates. This is because, if necessary, they will always be able to take a loan from the central bank at the calculated interest rate, thus providing themselves with liquidity. So there is confidence.
- 3. This in turn means that businesses can get cheaper loans. Obtaining statistics on inflation, price levels, you can build larger projects with less risk, more accurately measure the level of income in the future [1].

Two communication tools that have been actively used by the analyzed central banks in the crisis years include economic forecast and Forward Guidance.

Publishing projections have been normal among central banks even before the crisis. Since 2008, all the analyzed central banks started also publishing staff's forecast of economic indicators, such as output, output gap, and (un)employment. Two central banks also publish policymakers' projections. In particular, since 2007 the Fed publishes a Summary of Economic Projections as a supplement to the minutes of FOMC meetings. It includes FOMC participants' forecast for real GDP growth, unemployment rate, inflation, and the appropriate level of the federal funds rate, accompanied by the 'dot plot'. The Bank of England includes MPC's projections - MPC's best collective judgment about the most probable paths for inflation and output – in its Inflation Reports since the late 1990s [8].

The second communication tool is forward guidance, which can be divided into 2 types:

- Delphic forward guidance (Delphic or foggy) instructions, in this case, may take the form of indirect signals about the future position of monetary policy through the publication of comments and forecasts on the prediction of prices and economic indicators [5].
- Odyssean forward guidance (Odyssey policy) datadriven central bank is committed to contracting a longer adaptive monetary policy than is usually expected by markets and the public. Forecasts have analytical and scientific-macroeconomic support [5].

There are also 3 main forms of manifestation that help to understand what forward guidance is based on:

- Open-ended based (open instructions) may refer to an abstract description of the duration of the monetary easing policy (e.g. "significant period" or "long period") or the economic conditions under which the adaptation policy will be maintained (e.g. "until the problems of deflation are dispelled") [3].
- Calendar-based (calendar-based instructions) use specific date expressions to ease monetary policy, such as "over the next six months" Expectations are firmly fixed relative to a specific period, which reduces uncertainty [6].
- State-contingent (conditional provision) gives a clear description of the economic conditions under which the adaptation policy will be supported - for example, it is stated that the bank rate is not expected to rise above its current level until the unemployment rate reaches a certain level or increases production will exceed a certain

level, provided that this approach will remain appropriate to achieve the inflation target in the medium term [7].

The holistic picture of forwarding guidance policy, its end product, for central banks will be accurate, clear, transparent, balanced, concise statements that answer the following questions to improve the effectiveness of guidance statements:

- -target what is the benchmark of stability and development?
 - monetary tools what tools to use for instruction?
- statement approach what is our approach to the coverage of information in statements?
- information tools through what tools are our policy broadcast?

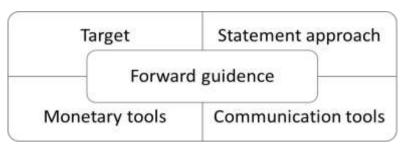


Figure 1 - Forward guidance model

Source: compiled by the author

Generalized differences of existing characteristics of forwarding guidance for four countries are considered in Tables. 1, 2, 3, 4.

Given the amount of global media attention given to QQE, it seems that its content is The role of the forward becoming more familiar to many experts and market participants. Currently, some central guidance policy in terms banks in developed economies, which face a zero lower limit of short-term interest rates of Japan (hereinafter referred to as a zero lower limit), are used as a forward policy Target Exit from the deflationary spiral, increase inflation to 2% Forward guidance Quantitative and qualitative monetary easing (QQE) with yield curve control; active Monetary tools purchases of ETFs and J-REITs; interest rate Statement Hardness; clear signaling; aggressiveness

news; statistics; announcements; reports

Outline of Monetary Policy; statement; research and studies; publications; speeches;

Table 1. Generalized differences of existing characteristics of forwarding guidance in Japan

Source: generated and supplemented by authors based on materials [3; 9]

The Bank was a pioneer in the use of forwarding guidance as a tool for adjusting monetary policy in the context of zero lower limits, starting the practice in 1999 when the policy of zero interest rate was adopted. Since then, the Bank has used various forms of further guidance for each period of monetary easing.

In 2008 Bank of Japan, use economic forecast and Odyssean forward guidance type with the open-ended base form [8].

Statement during 2020 crisis:

approach Information

tools

"The Bank continues Quantitative and Qualitative Monetary Mitigation (QQE) with yield curve control", aiming to achieve the target stability of 2 percent, as long as it is necessary to maintain this goal. It will continue to expand its monetary base until the annual growth rate of the observed CPI exceeds 2 percent and remains stable above the target" [9, p. 1].

This statement from Japan provides for Odyssean forward guidance and is open-ended based (as long as it is necessary) together with the state-contingent (until - CPI 2 percent).

The MRC began its course to combat inflation in 1990 after the publication of its first reports on inflation, but switched to a focused policy later, after the 2008 crisis. The Bank of England views forward guidance as a fight against uncertainty and misunderstanding, which results in negative inflation expectations.

In 2008 MRC's, use only economic forecast [8]. Statement during 2020 crisis:

"The Monetary Policy Committee of the Bank of England (MRS) sets monetary policy to achieve the inflation target of 2% and in a way that helps support growth and employment. The MPC will monitor the range of actions that could be taken to achieve its objectives. The Committee does not intend to strengthen monetary policy until there is clear evidence that significant progress has been made in eliminating spare capacity and stable achievement of the inflation target of 2%" [10].

Table 2. Generalized differences of existing characteristics of forwarding guidance in England

The role of the forward guidance policy in terms of England		Clarity of monetary policy intentions leads to better results, as it reduces economic and financial uncertainty and thus helps people to make more informed decisions. People need to make decisions based on their expectations about future interest rates. Decisions on expenditures and savings of households and enterprises depend on interest rates on loans and offered on deposits, and these interest rates can be set for a certain period	
Forward guidance	Target	The main target of MRC is price stability and inflation of 2%	
	Monetary tools	QE, which provides for the redemption of corporate and government bonds; interest rate; small and medium business lending programs	
	Statement approach	Informativeness; full transparency; brightness; clarity of instructions; correct interpretation and competent explanation	
	Information tools	Monetary Policy Committee meetings (MRC); Financial Policy Committee (FPC) youtube videos; research; publications; speeches; education; articles; events; news; statistical releases; bank overground	

Source: generated and supplemented by authors based on materials [7; 10]

This guidance provides Odyssean forward guidance (to achieve) in combination with open-ended based (as long as - significant progress) and state-contingent (as long as -2% inflation).

Table 3. Generalized differences of existing characteristics of forwarding guidance in USA

The role of the forward guidance to policy in terms of USA		Empirical models show a direct link between statements and the impact on the economic situation, forward guidance raises not only the expected future state policy but also corporate borrowing rates. That is, direct management influences interest rates that are directly related to private investment decisions
Forward guidance	Target	The committee seeks to achieve maximum employment and inflation at 2 percent in the long run.
	Monetary tools	Rate of federal funds; redemption treasury; overnight operations
	Statement approach	Efficiency; following the developed sample
	Information tools	Federal Open Market Committee; press release; speeches; testimony; videos; conferences; reports; review of monetary policy strategy, tools, and communications; economic research

Source: generated and supplemented by authors based on materials [5; 14]

FOMC uses direct instructions through the speeches and testimonies of its members and official statements of the committee, the Federal Open Market Committee in the early 2000s began to publish reports of its meetings.

In 2008 FORM's, use economic forecast and Odyssean forward guidance type with the open-ended base form [8]. Statement during 2020 crisis:

"As inflation will be consistently below this long-term goal, the Committee seeks to achieve inflation for a time moderately above 2 percent, with inflation averaging 2 percent over time and long-term inflation expectations remaining firmly at 2 percent. The Committee expects to maintain a positive monetary policy stance towards achieving these results. The Committee has decided to maintain the target range of federal fund rates at 0 to 1/4 percent and hopes that it will be appropriate to maintain this target range until labor market conditions reach levels that meet the Committee's estimates of maximum employment and inflation at 2 percent and sometimes gradually exceed 2 percent. In addition" [14].

This US guidance provides Odyssean forward guidance (seeks to achieve) in combination with state-contingent (maintain a positive monetary policy - inflation of 2 percent,) and open-ended based (rate range from 0 to 1/4 percent – until labor market conditions will not reach levels consistent with the Committee's estimates).

Following its meeting on 4 July 2013, the Governing Council of the ECB stated that it "expects key ECB interest rates to remain at current or lower levels for a long period of time". This is the beginning of EU forward guidance.

In 2008 ECB's, use only economic forecast [8].

Statement during 2020 crisis:

"We will keep the key ECB interest rates unchanged. They will remain at current or lower levels until we see that the inflation forecast is reliably close to a level close enough to, but below, 2% within our forecast horizon. Net purchases under our asset acquisition program (APP) will last € 20 billion per month, together with purchases on an additional temporary envelope of € 120 billion by the end of the year" [13].

This statement of the ECB uses Odyssean forward guidance (unchanged, will remain) together with statecontingent (so far - close to, but below, 2%) and calendarbased (month, until the end of the year).

Table 4 Consustined differences	f existing characteristics of forwarding	auidanaa in Furanaan Union
rable 4. Generalized differences d	i existing characteristics of forwarding	guidance in European Union

The role of the forward guidance policy in terms of EU		Governance has become a valuable and effective tool for central bank policy in recent years. To date, there is compelling international evidence that direct guidance has been successful in contributing to inflation growth and performance, driving future interest rate expectations, while central banks have been constrained in their political space.
Forward guidance	Target	Inflation is close but below 2%
	Monetary tools	Interest rate; pandemic emergency purchase program (PEPP); asset purchase program (APP); third series of targeted longer-term refinancing operations (TLTRO III)
	Statement approach	Informing; increasing transparency in the actions of politicians at the Meetings of the Board of Governors; guiding the ECB on multiple sets of different indicators
	Information tools	Press conferences; speeches; interviews; Governing Council decisions; monetary policy accounts; the ECB Blog; podcasts & webcasts; research & publication; statistic

Source: generated and supplemented by authors based on materials [11; 12]

These characteristics are included in the statements provided for the following economic categories that are targeted:

- 1. Interest rate;
- 2. Inflation;
- 3. Unemployment rate and others.

All central banks have adopted strict targets, which included:

- better consolidation of inflation expectations around the (middle) point;
- reduction of inflationary uncertainty and inflationary deviations from the target;
- strengthening the commitment of the central bank to the goals of price policy stability;
- increasing the transparency and predictability of monetary policy.

The main goal of their monetary policy, the researched banks, chose inflation of 2%. Determining its level, they moved towards narrow goals.

After getting acquainted with the peculiarities of the countries, a logical question arises: "Why inflation, and why 2%?".

To comprehend the need for such a target, it is necessary to make the following causal chain, which begins with forwarding guidance:

- 1. Forward guidance affects long-term inflation expectations of the market through the announcement of long-term goals, in digital terms. There is a so-called anchoring process of inflation expectations.
- 2. Anchored inflation expectations have the following impact:
- anchored inflation expectations are less responsive to news and price changes in the consumer basket [2].
- decrease in inflation risk leads to a smoothing of the yield curve [15].
- 3. As a result, inflation stabilizes. Smoothing long-term rates, in essence, has a similar effect to lowering short-

term rates and will lead to lower interest rates on loans to businesses and consumers. Simply put, this effect can be described as control of the long-term discount rate.

Conclusion. The last two global crises make it possible to trace the evolution of forwarding guidance as a communication tool and do concludes.

The change of species from forecasts and abstract description during the first period of 2008 to more rigid and strong commitments - during the second crisis of 2020.

International experience shows that central banks start to apply different types of communication - sometimes in combination.

Summarize the basic patterns:

- 1. In 2008, use the only economic forecast *or* Odyssean forward guidance type with open-ended form and economic forecast.
- 2. In 2020, everyone uses economic forecast *and* Odyssean forward guidance type with open-ended and state-contingent form. During the crisis in Europe in 2014 and 2020, the ECB also adopted a calendar form.

The common patterns of forwarding guidance for the studied data of banks:

- all banks have long-term goals, in digital terms inflation of 2%;
- forward guidance was provided on a wide range of indicators, the main of which was the interest rate;
- in general, all banks strive for simplicity accuracy, and transparency of coverage of information in their statements;
- bank's use a wide range of information from short videos on YouTube to large-scale research and scientific conferences;
- all notice the positive effect of the forward guidance tool implementation.

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