Whatever it takes: central bank communication as an effective monetary tool?

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Workshop presentation

Kyiv, 18th April 2018
Central bank communication matters

However: is central bank communication useful for the economy and the public?

The answer to that had been some decades ago: „Never explain, never excuse“, Montagu Norman - Bank of England (BOE) Governor from 1920 to 1944

However: this has changed very much

Daily change in stock market uncertainty on ECB press conference days

Note: Changes in uncertainty measured as changes in 30-day VSTOXX index on ECB press conference days; sorted by size

Asset Purchase Programme (APP) announcements with impact higher than 10%
Example 1: Central bank communication meets its goal

- In July 2012, the eurozone was on the brink of collapse, with spreads of Italy and Spain hitting record levels, impeding access to capital markets.
- Speaking at a bankers forum in London, ECB President Mario Draghi made clear that the ECB „will do whatever it takes“ to maintain the stability of the eurozone.
- As a reaction, spreads went down significantly, without Draghi to use its „weapon“.

Source: HSH Nordbank Economics, Macrobond
Example 2: Central bank communication goes wrong

- Then Fed Chairman Ben Bernanke testified before congress and made an allusion that the Fed might exit its ultra easy monetary policy.
- In reaction to this, ten-year government bond yields jumped from 2% to 3%.
- This was an unwelcome move, because such a jump might jeopardize financial stability and the (still fragile) economic upturn.

Source: HSH Nordbank Economics, Macrobond
Structure

1. History of central bank communication
2. The theory behind central bank communication
3. First interim conclusions
4. Central bank’s way of communicating
5. Further issues

ANNEX. The situation in Ukraine
1. History of central bank communication
Central bank communication: from mystery to transparency

Alan Greenspan, 1988: „I guess I should warn you, if I turn out to be particularly clear, you’ve probably misunderstood what I said“

The same Alan Greenspan, 2003: „The Committee believes that policy accommodation can be maintained for a considerable period“

Ben Bernanke, 2013: „I began my time as Chairman with the goal of increasing the transparency of the Fed. ... Communication ... is ... a central element of the Fed’s efforts to achieve its policy goals.“
What are important reasons for avoiding changes in monetary policy that surprise markets?

Survey background:
- Survey performed by the Bank for International Settlements (BIS)
- Participants: 32 central banks, 60% located in emerging and 40% in industrialised economies (44% in Europe, 34% in Asia-Pacific)
- Roughly 62% of the participants target the inflation rate, 6% the exchange rate, 3% the money growth and 29% other or have multiple targets

Source: BIS Papers No 47 (2009)
A shift towards more transparency (1/2)

The development towards more transparency and communication was accompanied by historical changes:

- Switch to flexible exchange rate regimes in the 90s
- Introduction of Inflation Targeting (IT) in the early 2000s
- Global financial crisis in 2007-2009
- European debt crisis since 2009
- Interest rates hitting the zero lower bound for the first time

Source: Lustenberger and Rossi (2017)
Note: Sample includes 73 countries
A shift towards more transparency (2/2)

Source: Goldman Sachs Global Investment Research, own display
2. The theory behind central bank communication
Managing expectations

Example 1: interest rate for a loan for two years is 20% p.a.; the interest rate for a one year loan is at 10%, which loan would you take?

Example 2: a banker offers you to put money into a long term account for three years, yielding 15% p.a.. As an alternative, he offers you a short term account for half a year with 8% per annum. Where would you put your money?

The answer to both questions is: it depends on your expectations of the development of the short term rates in the future

Central bank communication is about managing expectations
Why is it useful to manage expectations?

- Central bank’s main tool is the short term rate, the **key policy rate**
- The main idea of central bank communication is based on the fact that short term interest rates influence longer term interest rates, and thus shape the term structure of interest rates (the yield curve)
- While the short term rates are important for financing working capital, long term rates are considered to be of higher importance for longer term investments, which drive productivity and economic growth
- Thus, the central bank’s task is mainly to manage the expectations of the public with respect to the evolvement of the policy rate, thereby influencing the evolvement of long term rates
- **Succeeding to steer the long term rates enables the central bank to steer the economy and thus inflation**
How do expectations impact the real economy?

- Imagine the central bank cuts its policy rate and tells the public it will continue to do so for a while.
- Now you have two offers for a loan: 20% p.a. interest rates for a long term loan and also 20% p.a. for a short term loan.
- You would go for the short term loan.
- The point here is, however: the bank would react and cut its long term rates for loans. If it did not, nobody would demand such loans.
- Bringing long term rates down has a positive impact on economic activity and inflation (and vice versa).
- This mechanism is central to the transmission mechanism of monetary policy to the real economy.

**US 10-year treasury and effective federal funds rate**

- **Effective federal funds rate**
- **10-year treasury rate**

Source: FRED

*Note: Constant maturity rate of the 10-year treasury*
Transmission mechanism of monetary policy

Source: ECB
Basic idea: to improve the effectiveness of monetary policy

Marvin Goodfriend, 1991:

“Greater openness might actually improve the efficiency of monetary policy . . . [because] expectations about future central bank behaviour provide the essential link between short rates and long rates.”

“By making itself more predictable to the markets, the central bank makes market reactions to monetary policy more predictable to itself. And that makes it possible to do a better job of managing the economy.”
3. First interim conclusions
Central bank communication is about **managing expectation** of the future development of the short term rate.

The short term interest rate influences long term interest rates, which impact the investment and spending behaviour of companies and households and therefore **economic activity and inflation**.

If the central bank can show credibly that it is able to influence economic activity and therefore inflation, it communicates in a credible way that it **targets a certain inflation rate**.

The result of this would be an **anchoring of inflation expectations**, bringing more **predictability and transparency** to the whole economy, given that interest rates move very much parallel to inflation expectations.

Therefore **an effective central bank communication is of particular interest for inflation targeting regimes**.
4. Central bank’s way of communicating
What kind of information should be communicated?

<table>
<thead>
<tr>
<th>Degree of Transparency</th>
<th>Communicated aspects of monetary policy</th>
<th>Number of central banks communicating the aspect (out of 47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>Mandate – price stability</td>
<td>ca. 40</td>
</tr>
<tr>
<td></td>
<td>Numerical inflation objective</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>General strategy that guides central bank decisions</td>
<td>General lack of transparency or hard to obtain information regarding loss functions etc.</td>
</tr>
<tr>
<td></td>
<td>Reasons for decision</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Assessments of inflationary pressures</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Current economic conditions, output gap</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Outlook for future growth of output relative to supply and information</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Principal risks around outlook and balance of risks</td>
<td>13</td>
</tr>
<tr>
<td>HIGH</td>
<td>Intentions for future policy interest rates</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Norges Bank, speech by Deputy Governor Jan F. Qvigstad, 4 November 2008; BIS
Note: Sample consists of members of the BIS Central Bank Governance Network (47 in 2008)
Who should be addressed by the central bank?

- Investors (banks, pensions funds, other financial institutions)
- Corporates
- Households
- Analysts and journalist serving as multipliers

Source: Own display
Central bank’s tool box of communication

Instruments of communication
- Statement/press release after the central bank meeting
- Press conference after the central bank meeting
- Minutes of the central bank meetings
- Speeches, interviews, newspaper articles (individual communication)
- Regular publications like an inflation report or a monthly report on the economy
- Further interaction with other stakeholders (analysts, researchers)

Tools of communication which are also motivated very much by the need of being accountable to the public
- Parliamentary hearings
- Open letter when missing the inflation target
Who should be addressed by the central bank?

<table>
<thead>
<tr>
<th>Country</th>
<th>Immediate announcement of policy decision</th>
<th>Press notice or conference after decision</th>
<th>Publication of minutes</th>
<th>Publication of votes</th>
<th>Inflation Report</th>
<th>Frequency of inflation report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>Yes, with a press release</td>
<td>Yes</td>
<td>Yes, after eight days</td>
<td>Yes</td>
<td>Yes</td>
<td>Four times per year</td>
</tr>
<tr>
<td>Hungary</td>
<td>Yes, with a press release</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Four times per year</td>
</tr>
<tr>
<td>Poland</td>
<td>Yes, with a press release</td>
<td>Yes</td>
<td>Yes, after three weeks</td>
<td>Yes, in inflation report</td>
<td>Yes</td>
<td>Three times per year</td>
</tr>
<tr>
<td>Romania</td>
<td>Yes, with a press release</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Four times per year</td>
</tr>
<tr>
<td>Russia</td>
<td>Yes, with a press release</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes (Monetary policy report)</td>
<td>Four times per year</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Yes, with a press release</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Four times per year</td>
</tr>
</tbody>
</table>

*Source: Own display, Hammond (2011)*
How central bank watchers analyse the statements of central banks

FOMC STATEMENTS: SIDE-BY-SIDE

March 21, 2018

Information received since the Federal Open Market Committee met in January indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Real gross domestic product growth was strong in recent months, and the unemployment rate has stayed low. Recent data suggest that growth rates of household spending and business fixed investment have moderated from their strong fourth-quarter readings. On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months but remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The economic outlook has strengthened in recent months. The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace in the medium term and labor market conditions will remain strong. Inflation on a 12-month basis is expected to move up in coming months and to stabilize around the Committee’s 2 percent objective over the medium term. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.

In view of realized and expected labor market conditions and inflation, the Committee decided to raise the target range for the federal funds rate to 1/4 to 1/2 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

Voting for the FOMC monetary policy action were Jerome H. Powell, Chairman; William C. Dudley, Vice Chairman; Thomas I. Barkin; Raphael W. Bostic; Lael Brainard; Loretta J. Mester; Raphael K. Qualls; and John C. Williams.

Source: Fed

Jan. 31, 2018

Information received since the Federal Open Market Committee met in December indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Real gross domestic product growth was strong in recent months, and the unemployment rate has stayed low. On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months but remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

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Voting for the FOMC monetary policy action were Janet L. Yellen, Chair; William C. Dudley, Vice Chairman; Thomas I. Barkin; Raphael W. Bostic; Lael Brainard; Loretta J. Mester; Jerome H. Powell; Randal K. Quarles; and John C. Williams.
Which information is included in the policy statement?

Disclosure at time of policy decisions: information announced in the policy statement

Source: BIS Papers No 47 (2009)
5. Further issues
a. Is there such a thing like too much transparency?
b. Should central bank’s actions be understood by the general public?
c. Is communication a promise?
d. Trade off between institutionalised communication and communication reacting to events (ad hoc communication)
e. Focus on your mandate in communication
f. The emerging role of social media in central bank communication
g. Assessing the effectiveness of communication
a. Is there such a thing like too much transparency?

Reasons for limiting information

Source: BIS Papers No 47 (2009)
b. Should central bank’s actions be understood by the general public? (1/2)

Example for central bank communication of the Bank of England

In a nutshell

Interest rates kept at

0.5%

The fall in the pound has led to higher prices
The world economy is growing strongly
The squeeze in living standards is easing
Inflation will fall back towards our 2% target

Source: Bank of England
Should central bank’s actions be understood by the general public? (2/2)

Do you have trust in the institution of the European Central Bank?

<table>
<thead>
<tr>
<th>European Union</th>
<th>Date of the survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>44,3</td>
<td>32,8</td>
</tr>
<tr>
<td>44,4</td>
<td>32,6</td>
</tr>
<tr>
<td>41,2</td>
<td>38,4</td>
</tr>
<tr>
<td>42,7</td>
<td>36,9</td>
</tr>
<tr>
<td>40,3</td>
<td>37,6</td>
</tr>
<tr>
<td>36,1</td>
<td>45,6</td>
</tr>
<tr>
<td>34,5</td>
<td>49,4</td>
</tr>
<tr>
<td>37,1</td>
<td>48,7</td>
</tr>
<tr>
<td>33,9</td>
<td>51,4</td>
</tr>
<tr>
<td>33,7</td>
<td>49,5</td>
</tr>
<tr>
<td>30,6</td>
<td>48,2</td>
</tr>
<tr>
<td>34,2</td>
<td>45,9</td>
</tr>
<tr>
<td>34,7</td>
<td>45,3</td>
</tr>
<tr>
<td>33,3</td>
<td>47,3</td>
</tr>
<tr>
<td>33,5</td>
<td>48,1</td>
</tr>
<tr>
<td>34,2</td>
<td>48,9</td>
</tr>
<tr>
<td>36,6</td>
<td>45,0</td>
</tr>
<tr>
<td>38,5</td>
<td>44,1</td>
</tr>
</tbody>
</table>

Don’t know

Source: Handelsblatt
c. Is communication a promise? (1/2)

- Former ECB President Jean-Claude Trichet’s mantra: “We never pre-commit”
- ECB President Mario Draghi (and other central banks) introduced the so-called forward guidance. The effectiveness of such guidance depends on how credible it is.
- To circumvent the issue of credibility, forward guidance is combined with certain conditions (conditioned announcement), mostly with respect to economic indicators like inflation and unemployment.
- Trade-off between the risk of external shocks and the usefulness of managing expectations in general and forward guidance in particular.
- The higher the uncertainty due to external shocks (about which the central banks has no control) the less credible will be most kind of forward guidance.
- In an uncertain environment, the central bank should be very careful with respect to any kind of forward guidance, as it may lose credibility using it.
## Examples of forward guidance in the statements of the Fed

<table>
<thead>
<tr>
<th>Date</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2008</td>
<td>“…weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.”</td>
</tr>
<tr>
<td>Mar 2009</td>
<td>“…economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period.”</td>
</tr>
<tr>
<td>Aug 2011</td>
<td>“…economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013.”</td>
</tr>
<tr>
<td>Sept 2012</td>
<td>To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens.</td>
</tr>
<tr>
<td>Dec 2012</td>
<td>“…the Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee’s 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.”</td>
</tr>
</tbody>
</table>

*Source: Fed*
Trade-offs in communication

Trade-off between institutionalised communication and communication reacting to events ("ad hoc communication")

- **Low flexibility**
  - Communication is very much institutionalised; not fit to react to short-term events, but anchors inflation expectations and reduces noise on the financial market.

- **High flexibility**
  - Communication reacts to single events. However, there is some danger of market participants losing the view of the central bank’s strategy. Expectations may go out of control.

**Source:** Own display
e. Focus on your mandate in communication

There is a need to explain what a central bank is able to do and what a central bank is not able to do or is not within its mandate. Examples:

- On one of her press conferences the then Fed Chairman Janet Yellen was asked that the central bank should do something about the over average unemployment of black people. In a way, the Fed can do something about unemployment, indeed, it is one of the two targets of the Fed to foster employment. However, there is no tool to foster the employment especially of black people.

- During the euro crisis the ECB was loaded with tasks that were rather fiscal tasks such as avoiding the insolvency of states and banks. Had the ECB communicated clearly and beforehand that it was not willing to take over these tasks the states would have been pressured to act by using their fiscal tools. The latter shows that communication could have a very important role to protect the integrity of the institution as such.
## f. The emerging role of social media in communication

<table>
<thead>
<tr>
<th></th>
<th>Federal reserve</th>
<th>European Central Bank</th>
<th>Band of England</th>
<th>National Bank of Ukraine</th>
<th>National Bank of Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Website</strong></td>
<td>federalreserve.gov</td>
<td>ecb.europa.eu</td>
<td>bankofengland.co.uk</td>
<td>bank.gov.ua</td>
<td>nbp.pl</td>
</tr>
<tr>
<td><strong>Monthly visits</strong></td>
<td>1,444,000</td>
<td>1,970,000</td>
<td>701,311</td>
<td>1,490,000</td>
<td>1,970,000</td>
</tr>
<tr>
<td><strong>Visits from (% share):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct clicks</td>
<td>28.5</td>
<td>38.0</td>
<td>26.8</td>
<td>47.8</td>
<td>52.5</td>
</tr>
<tr>
<td>External links</td>
<td>8.3</td>
<td>5.4</td>
<td>9.0</td>
<td>5.0</td>
<td>N/A</td>
</tr>
<tr>
<td>Search engine results</td>
<td>59.8</td>
<td>52.8</td>
<td>57.4</td>
<td>41.0</td>
<td>45.0</td>
</tr>
<tr>
<td>Social media, out of which (% share):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter</td>
<td>40.4</td>
<td>22.7</td>
<td>22.3</td>
<td>4.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Youtube</td>
<td>19.3</td>
<td>22.7</td>
<td>9.0</td>
<td>31.0</td>
<td>46.4</td>
</tr>
<tr>
<td>Facebook</td>
<td>11.3</td>
<td>26.4</td>
<td>27.3</td>
<td>37.2</td>
<td>48.7</td>
</tr>
<tr>
<td>Accessed from country of residency (% share)</td>
<td>55.5</td>
<td>N/A</td>
<td>57.3</td>
<td>89.0</td>
<td>94.0</td>
</tr>
<tr>
<td>Twitter follower</td>
<td>456,000</td>
<td>423,000</td>
<td>239,000</td>
<td>3,958 (UA)</td>
<td>14,200 (PL)</td>
</tr>
<tr>
<td>Facebook follower</td>
<td>20,771</td>
<td>No official page</td>
<td>18,262</td>
<td>34,708</td>
<td>24,315</td>
</tr>
</tbody>
</table>

*Source: Similarweb.com, own display*
g. Assessing the effectiveness of communication

How important are each of these tools for assessing the impact of central bank communication?

- Surveys of the general public
- Surveys of market participants
- Market intelligence, eg informal discussions with market participants
- Empirical studies eg of prices movements

*Source: BIS Papers No 47 (2009)*
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ANNEX. The situation in Ukraine
Recent history

- Monetary policy regime before “Maidan revolution”: exchange rate peg to the US dollar

<table>
<thead>
<tr>
<th>Period</th>
<th>Regime</th>
</tr>
</thead>
<tbody>
<tr>
<td>before 1993</td>
<td>Pure float</td>
</tr>
<tr>
<td>1993 - 1996</td>
<td>Fixed peg</td>
</tr>
<tr>
<td>1996 - 2000</td>
<td>Fixed band</td>
</tr>
<tr>
<td>2000 - 2008</td>
<td>De jure: crawling band</td>
</tr>
<tr>
<td></td>
<td>De facto: fixed peg</td>
</tr>
<tr>
<td>2008 - 2014</td>
<td>De jure: managed float</td>
</tr>
<tr>
<td></td>
<td>De facto: fixed peg</td>
</tr>
</tbody>
</table>

Source: NBU, own display

- The need for central bank communication was rather limited during this time, as monetary policy was almost rule based. Therefore only the rule (fixed rate as an example) had to be communicated
Move to inflation targeting

Monetary policy regime after “Maidan revolution”: Inflation targeting

- NBU independence was significantly strengthened in 2015 as one of the conditions of the IMF programme
- NBU follows IT since 2015 (de-facto) and 2016 (de-jure)
- Inflation target:
  - Headline inflation December 2016: 12% +/- 3 percentage points
  - Headline inflation December 2017: 8% +/- 2 percentage points
  - Headline inflation December 2018: 6% +/- 2 percentage points
  - Mid-term inflation target December 2019: 5% +/- 1 percentage point
The case of NBU: current policy stance

- After gradual disinflation and declining policy rates during 2015-2017, and the fulfilment of the inflation target in end-2016, the development worsened since September 2017.

- Inflation is much higher than target (missed in end-2017), which caused NBU to hike four times, for a cumulative increase of 450 bp in the key rate to 17%.

- Inflation expected to reach the target band only in the middle of 2019 (5% +/- 1 percentage point).