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TRANSPARENCY OF MONETARY POLICY – THEORY AND PRACTICE

The main goal of this article is the testing of the transparency of monetary policy in Poland by the reaction of financial markets to one event: the Monetary Policy Committee's decision concerning changing or not changing the reference rate.

Keywords: transparency of monetary policy, event studies methodology

INTRODUCTION

The present article concerns announcement effect in Poland in 1999–2003. The main goal of this paper is to find the answer if the yield curve reacts to some information published in the economy in connection with the financial market efficiency. We chose to investigate one event: Monetary Policy Committee (MPC) decisions concerning the reference rate. We will try to interpret the yield curve reaction concerning transparency of monetary policy. The financial market's reactions, particularly to the MPC decision, prove if the monetary policy is transparent or not.

We will use the event study methodology. The main goal of this test is to answer how fast market participants react to new information.

The initial analysis of yield curve determinants and announcements effects allows us to formulate the following hypothesis: reactions of the short part of the yield curve to the MPC decision about changing the reference rate in 1999–2003 indicate that Polish monetary policy was transparent.

1. TRANSPARENCY OF MONETARY POLICY IN THEORY

Central bank transparency could be defined as the absence of asymmetric information between monetary policymakers and other

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economic agents or as reducing asymmetric information by publication of the central bank's private information which is relevant for the policy making process (Hahn 2002, p. 430). The definition of transparency concerns both information to be in the possession of economic agents and its delivering. In M. Goodfriend's opinion revealing accurate information by the central bank reduces asymmetric information and uncertainty in the market, because the market acts in accordance with the efficient market hypothesis and the rational expectations theory (Goodfriend 1986).

Table 1

Some definitions of transparency of monetary policy

Author	Definition
R. E. Keleher (Keleher 1997, p. 2)	monetary policy is transparent when it is: • without secrets, • unambiguous, • understood outside: by people, banks, companies.
H. Dilen, J. Nilsson (Dilen, Nilsson 1998, p. 206-207)	transparent monetary policy: • guarantees appropriate style of communication, • uses appropriate tools to communicate.
B. Winkler (Winkler 2000, p. 8)	features of monetary policy: • openness, • clarity, • common understanding, • honesty.
K. Szeląg (Szeląg 2003, p. 32)	• in narrow sense – transparency of monetary policy concerns revealing of information about internal decision taken by central bank, • in wide sense – explaining how monetary policy achieves objectives of monetary policy.

The above definitions and features of transparency indicate that transparency concerns objectives of monetary policy, tools of monetary policy and procedures used to achieve these objectives.

Explanation of monetary policy objectives is a very important component of transparency, because it permits to identify tools and procedures which help reach this objective. Financial markets are functioning efficiently when information is widely accessible, when

objectives are known and when central bank reactions (decisions) are more understandable. If the central bank wants to conduct a transparent monetary policy, it has to bring into effect clear rules and procedures (which can eliminate uncertainty of financial markets and minimize the cost of reducing inflation). Thanks to transparency, the financial market is more efficient which is very useful for market participants and the central bank.

The time in which some information is published is also connected with a transparent monetary policy. For monetary policy to be transparent, the central bank should disclose important information punctually.

1.1. Determinants of transparency

In order to improve transparency of monetary policy, the central bank's information policy should aspire to maintain a balance between openness of monetary policy and clarity (Szeląg 2003, p. 32). The amount of information which is delivered by the central bank should be prudent. A way of transmitting this information should not be too complicated in order not to blur the essence of information. The central bank should not show outside only fundamental and simple information, when inside more complicated procedures and information are used. The lack of balance between information possessed by the central bank and the economic agents can lead to limited transparency.

In order to improve transparency of monetary policy one should:

• clearly formulate objectives of monetary policy and disclose them publicly – the best way of improving transparency is to publish strategic (long-term) objectives of monetary policy. Thanks to this announcement market participants can understand decisions taken by the central bank. The central bank can also define short-term objectives that can help in reaching long-term objectives,

• explain monetary transmission mechanism with documents and articles published by the central bank on how monetary transmission mechanism works – the central bank should explain the influence of decisions concerning the changes of base interest rates on market interest rates, inflation and output. The central bank should justify its decisions and actions taken, and of course reasons of missing its aims,

- systematically publish statistical data and analyses used by the central bank in the course of taking important decisions. The central bank attempts to increase transparency of monetary policy by publishing analyses of activities taken by the central bank and their influence on the economy and objectives of monetary policy. Among these publications are: quarterly and yearly inflation reports and monthly statistical bulletin,
- organize press conferences after each meeting of the MPC. The Monetary Policy Committee announces decisions taken during these conferences. Immediate transmitting of the central bank's decision along with its explanation and the publication of this announcement via the Internet assures suitable communication with market participants,
- publish MPC minute-book and voting of MPC members in order to reduce the asymmetry of information, thus enhancing knowledge of market participants on motives for central bank's decisions, their connections with objectives of monetary policy and views of Monetary Policy Committee members. Some authors think that publication of voting of MPC members is not a good instrument to increase the transparency of monetary policy. Publication of individual voting records will allow the personalization of the decision making process with the potential implication that outside agents try to influence committee members and adjust to such demands. The information about voting behaviour might make it easier for outside agents to forecast the future course of monetary policy (Neumann 2002, p. 358),
- submit annual monetary policy guidelines to the Sejm together with the submission by the Council of Ministers of the draft Budget; report to the Sejm on the performance of monetary policy guidelines within five months of the new fiscal year.

All of the above determinants increase the transparency of monetary policy. But the question is whether monetary policy will be perfectly transparent, once the central bank implements all the above activities. In the real world, this problem is much complex. "Perfect transparency" would imply that the central bank must disclose all the information which contributed to its decisions. But on purely practical grounds it cannot publish everything, such as the course and results of all workshops, all the committee meetings of the central bank, every discussion, and so on. There are some natural limits to transparency (Remsperger et al. 1999, p. 10). In practice, transparency is invariably partial and can never be complete and perfect, so the central bank has to select information to the public.

1.2. Consequences of transparency of monetary policy

A more transparent policy approach would make a number of contributions to the central bank, to the economy, to financial markets and to nonfinancial sectors. Improving transparency, for example, would (Keleher 1997, p. 5–6):

- help to clarify the long-term policy objective – a more open policy would create incentives for monetary policymakers to carefully outline the primary objectives of monetary policy and the central bank would create incentives to keep attention focused on such goals,

- improve the workings and usefulness of financial markets – financial markets work better when inflation objectives are known and more timely and detailed information is readily available. A more open policy improves the workings of financial markets because uncertainties are minimized and market volatility is reduced. More information enables market participants expectations to adjust faster to changes in monetary policy. This situation reduces premiums connected with uncertainty. The central bank helps market participants formulate inflation expectations by publishing the inflation objective. Inflation expectations and a creditable objective reduce the negative influences of unexpected shocks. Better informed financial market delivers to other participants more precise information about the future,

- improve predictability of monetary policy decisions and efficiency of financial markets – a more transparent policy enhances anticipation of the central bank decisions. When the central bank takes its decisions, it focuses its attention on some economic information, for example: inflation, output. If financial markets understand which factors influence inflation and know the function of the central bank reaction, market interest rates should change immediately to this information. In accordance with the efficient market hypothesis, prices of financial instruments will always include all available information. But we have to remember that it is not possible to completely eliminate surprises connected with central bank decisions, because the central bank does not possess full information about monetary transmission mechanism,

- improve central bank credibility – as monetary policy goals and procedures become well known and understood, the public more quickly learns about changes in policy. Additionally, as the central bank begins to achieve monetary policy goals with greater regularity, its credibility improves,

- improve efficiency of monetary policy:

- a more open and transparent explaining of the central bank decisions and understanding them by the public can reduce inflationary expectations,

which is especially important to efficiency of monetary policy in realizing its objective – to maintain price stability. Monetary policy will be efficient if inflationary expectations are stable and near inflation objective. If inflationary expectations change is essential, the nominal market interest rates will have to be changed in order to keep real interest rates at a suitable level. This situation will reduce the efficiency of monetary policy (Bernhardsen et al. 2002, p. 46),

– when financial markets understand and anticipate the actions of the central bank, the first step in the transmission mechanism between policy actions and economic activity and inflation work more smoothly (Freedman 2002, p. 155),

• improve the central bank responsibility to the public (Eijffinger et al. 2000, p. 2; Haan et al. 1998, p. 4) – responsibility demands explaining decisions and activities of the central bank. When all activities taken by the central bank are open, it is easier to evaluate the activities of the central bank and its responsibility. A. S. Blinder thinks that the central bank should explain its decisions to the public in order for monetary policy to be more responsible. If the central bank cannot explain its decisions, it means that its decisions are not suitable (Blinder 2001, p. 97),

• improve conducting business activity – a more transparent monetary policy helps planning business activities. Companies better informed about future central bank decisions can take business decisions easier and faster,

• minimize the chances that policymakers would manipulate policy for political purposes – a more open monetary policy prevents politicians from using monetary policy and the central bank to realize short-term (political) objectives. Market participants would quickly react to such manipulation by immediately revising inflationary expectations and such actions would readily be obvious to everyone. Analyzing the yield curve delivers this information to others,

• improve monetary policy – a more transparent monetary policy would encourage and lead to more open debate and criticism. Such criticism would obligate the policymaker to defend its policy objectives, decisions and procedures.

Not everybody thinks that a fully transparent monetary policy has only strong points. Some authors think that with transparency some costs are connected, for example: costs of changing things, costs of delivering information. In their opinion, too much transparency and too many publications, which cannot be suitably understood, can bring numerous bad outcomes (Issing et al. 2001, p. 134).

2. TRANSPARENCY OF MONETARY POLICY IN PRACTICE

We can research transparency of monetary policy in several ways. One of them is to analyse the reactions of short-term interest rates to information published by the MPC concerning changing the main interest rate.

2.1. The NBP public information policy in 1999–2003

In the Medium-Term Strategy of Monetary Policy (1999–2003) we can read a note that the central bank taking decision about implementing Direct Inflation Targeting (DIT) in Poland has to modify the role of the NBP public information policy (The Medium-Term Strategy of Monetary Policy 1999–2003, p. 12-13). In the MPC opinion, clearly presenting monetary policy objectives and monetary policy instruments are very important in the context of credibility of monetary policy. The NBP public information policy should be aimed at convincing the public about the central bank commitment to achieve a declared target (The Medium-Term Strategy of Monetary Policy 1999–2003, p. 13). The public information policy will be particularly instrumental for lowering inflationary expectations.

The National Bank of Poland has improved its information policy recently. Among essential elements of information policy used by the central bank to communicate with market participants are:

* presenting a strategy of monetary policy that contains a long-term objective of monetary policy,
* publishing monetary policy guidelines for each year that contains a short-term objective of monetary policy,
* publishing the Inflation Report quarterly and yearly,
* MPC Minutes,
* publishing information about voting of MPC members in "Monitor Sądowy i Gospodarczy",
* press conferences organized by the MPC,
* opinion on the subject of future inflation,
* opinion on the subject of project of the Budget,
* speeches and opinions of MPC members,
* educational materials published on the NBP website and in periodicals.

2.2. Event studies methodology

We are going to conduct our research using event study methodology. The main goal of these tests is to answer how fast market participants react to new information. The main goal of event studies is to check if some events have influenced prices of some financial instruments (how prices of some financial instruments react to new information). Conducting this research we assume that investors are rational. Therefore, the suitable direction of these reactions should accompany the fast reaction of prices. If we want to use this methodology to investigate transparency of monetary policy, we have to assume that the financial market (market participants) works in accordance with efficient market hypothesis.

Stage 1. Event definition
The initial task of conducting an event study is to define the event of interest and identify the time of beginning this event. The main goal of event studies methodology is to investigate how prices of financial instruments (interest rates, prices of bonds) react to some events. We should observe the trends of interest rates around the time of this event appearing. This event has to be defined explicitly. This event is defined as „the MPC decision on changing official interest rates".

MPC members take decisions concerning the reference rate during the MPC meeting. Meetings of the MPC are convened by the Chairperson at least once a month. The date of the next meeting should be known one month ahead. This is very important because of the behaviour of market interest rates expectations. The press conference takes place after each MPC meeting. MPC members try to explain their monetary policy decisions during this conference. At the same time the central bank publishes an announcement on the NBP web site and the press agency web site. The positions taken by MPC members during votes shall be published within six weeks, not later than three months after the date the resolution is adopted.

During 1999–2003 the MPC took different decisions concerning official interest rates: increase of interest rates (4), reduction of official interest rates (21) and no change (33). Characteristic for Polish monetary policy during this period were the so-called periodic changes. One of these periods (1999–2000) was characterized by increases in interest rates and

another period (2001–2003) included the MPC decisions concerning a reduction of official interest rates.

Stage 2. Identifying the event window

The next step is to identify the period over which the security (financial instrument) prices involved in this event will be examined – the event window. This event window begins before the event and ends after it. So, the event window is expanded to a few days (minutes), the day before the announcement and the day after the announcement. The length of the event window is given as follows by two points:

- day $T_{0+(-j)}$, the first day, the day before this event; the first day to capture the price effects of announcements which occur before this event – *T-7*,
- day $T_{0+(+j)}$, the last day, the day after this event; the last day to capture the price effects of announcements which occur after this event – *T+6*.

Some foreign authors use very short event window, which begins several days before the MPC decision and ends several days after this decision. Others use very long event window, which begins for example one day after the previous MPC decision and ends one day after the current MPC decision. In accordance with the second approach, market participants formulate their expectation concerning the future MPC decision after the previous MPC meeting. Moreover, during this period in the economy some macroeconomic data are published, which influence the expectations. In some developed countries, such as the US and UK, financial markets react to news in several seconds (Ederington et al. 1993; Clare et al. 2001a and 2001b). But in countries like the Czech Republic (Podpiera 2000) and Poland, this reaction can take several hours.
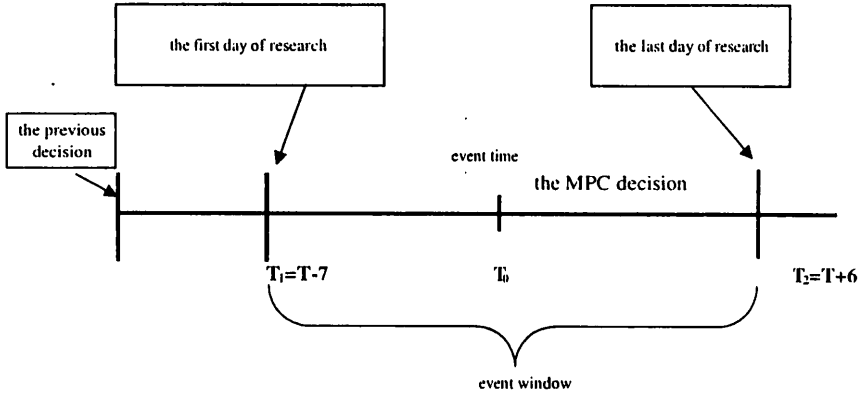
Figure 1. Event window
Source: author's own

Stage 3. Calculate relative changes in each day in the event window, and average and cumulated relative average changes

We calculated relative changes of market interest rates for each day:

$$WZ_{iT_{0+j}} = \frac{(r_{iT_{0+j}} - r_{iT_{0+j-1}})}{r_{iT_{0+j-1}}}, \qquad j \in < -6,6 >,\qquad (1)$$

where:

$WZ_{iT_{0+j}}$ – relative change of the market interest rate in the event window we in a period $<T_{0+j-1}, T_{0+j}>$,

$r_{iT_{0+j}}$ – the market interest rate in the event window we in a day T_{0+j},

$r_{iT_{0+j-1}}$ – the market interest rate in the event window we in a day T_{0+j-1}.

Next, we calculated the relative average changes in each moments (for each T_{0+j}) before and after event by using this formula:

$$\overline{WZ}_{T_{0+j}} = \frac{\sum_{i=1}^{N} WZ_{iT_{0+j}}}{N},\qquad (2)$$

where:

$\overline{WZ}_{T_{0+j}}$ – average return in a day T_{0+j},

N – number of events in a period.

In the next step we calculated the cumulated relative average changes in the event window:

$$\overline{CWZ}(T_1, T_2) = \sum_{T=T_1}^{T_2} \overline{WZ}_{T_{0+j}} ,$$

(3)

where:

$\overline{CWZ}(T_1, T_2)$ - cumulated relative average changes in the event window,

$T_1 = T_{0+j}$ for $j = -6$ $T_2 = T_{0+j}$ for $j = 6$.

All events were divided into 4 classes: class 0, class 1, class 2 and class 3. Separate classes were characterized in table 2.

Table 2

Class of events

Number of class	0	1	2	3
Feature	the reference rate was not changed	the reference rate was increased	the reference rate was reduced and relative change was higher than 5% or 5%, so-called big reductions	the reference rate was reduced and relative change was lower than 5%, so-called small reductions
Amount of events	33	4	14	7
Period	1999–2003	1999–2000	2001–10.2002	11.2002–06.2003

Source: author's own on the basis of NBP' data

We divided all events into 4 classes because the events analyzed are different. With some of them big reductions are connected (for example: 2.50 percentage point), with others – small reductions (for example: 0.25 percentage point), and with others – increases of the reference rate. In our opinion we should not treat these different changes (increase–reduction) in the same way.

Stage 4. Testing procedure

Important considerations are defining the null hypothesis. We focused on the null hypothesis that the given event has no impact on the behaviour of market interest rates. Hence, the null hypothesis says that: relative average changes of interest rates are zero.

H_0: $\overline{WZ}_{T_{0+j}} = 0$ H_1: $\overline{WZ}_{T_{0+j}} \neq 0$.

In this research $\alpha = 0.05$.

2.3. Short market interest rates used in research

We used in the research some market interest rates such as: one-month WIBOR (1M), three-month WIBOR (3M), six-month WIBOR (6M) and two-week WIBOR (2W). We had to choose the two-week WIBOR (the first day of quotations was 23 January 2003) because the NBP changed the reference rate of the open market operation from 28 days to 14 days. This change meant that the central bank started to directly influence the two-week money market interest rate. Data used in the research concerning 1M, 3M and 6M WIBOR cover the period from 4 January 1999 to 7 November 2003, and the data concerning 2W WIBOR cover the period form 23 January 2003 to 7 November 2003. It should be emphasized that WIBOR is quoted at 11.00 o'clock. If some events took place for example at 12.00 o'clock, WIBOR could not react to these events the same day, but the next day. We also used interest rates of FRA contracts: FRA 1X2, FRA 3X6, FRA 6X9, FRA 9X12. The data used are average between bid and ask prices. These data cover the period from 29 August 2000 (FRA 1X2 from 2 January 2001) to 7 November 2003.

All the data used is from the over-the-counter money market. Market participants of this market have easy access to professional news, they are very close to very important information, once it is published. Their access is also suitably fast. All data concerning interest rates were raised from REUTERS through the workers of one of the bank.

2.4. Results

The first money market interest rate used in the research was WIBOR 1M (2W). Relative average changes of quoted market interest rates for each instrument (Figure 2) and cumulated relative average changes for every day in the event period (Figure 3) indicate days when substantial reactions occurred of chosen interest rate in each class.

In the case of class 0, which includes events "no change of the reference rate", relative average changes are near zero. This reflects the lack of reaction of interest rates to MPC members decisions. These results are in accordance with our expectations – the reference rate unchanged caused that changes of WIBOR are near zero. Reactions of the short part of the yield curve in this class are in accordance with the principles of the efficient market hypothesis. The statistical value of p each day in the event window allows us to reject null hypothesis, that relative average changes equal zero. The impossibility of rejecting null hypothesis indicates that when the MPC publishes their information about the reference rate, the market does not react.
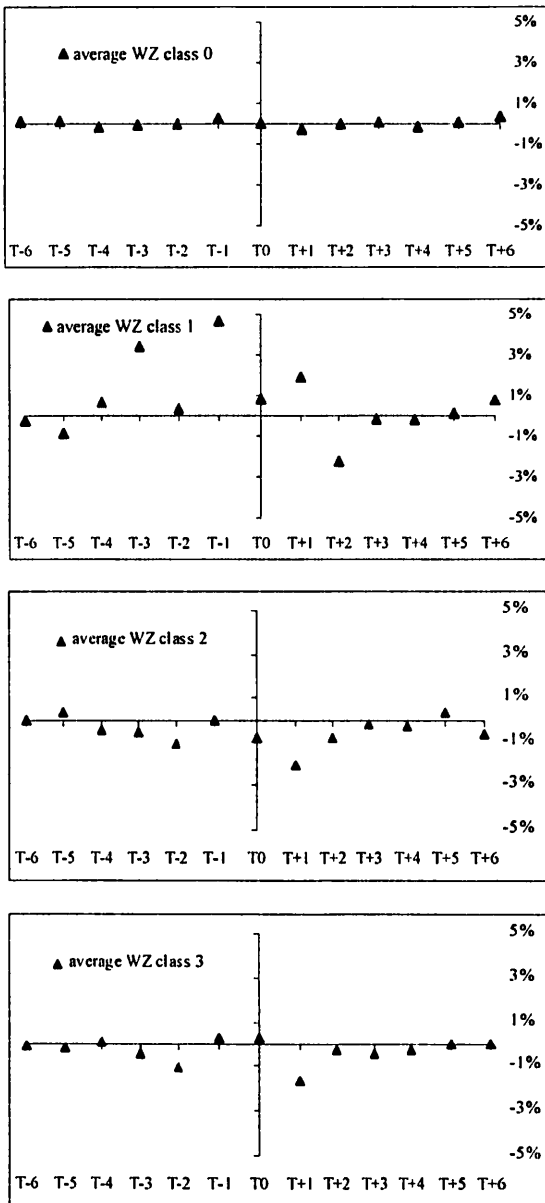
Figure 2. Relative average changes of WIBOR 1M in the event window
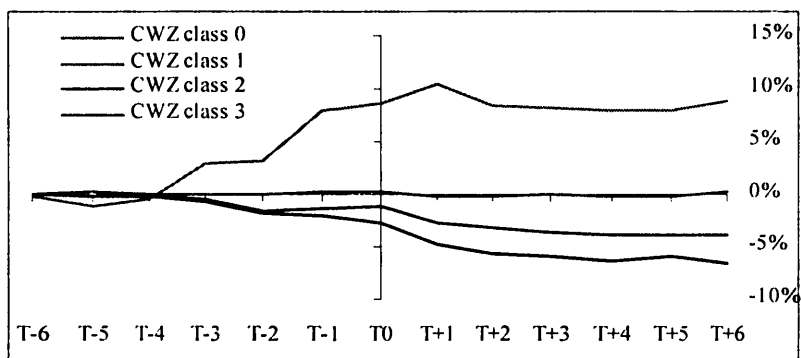Source: author's own

Figure 3. Cumulative relative average changes of WIBOR 1 M in the event window
Source: author's own

In the case of class 1, which includes events „increasing the reference rate", from day T-4 we can see that financial market participants expect that during the next MPC meeting MPC members will increase the reference rate. Relative average changes are positive to day T+1. We should not treat these reactions like delayed, because WIBOR used in our research is quoted at 11.00 o'clock (fixing). In the day of the announcement of this decision by the MPC, the financial market could not react to new information.

In the case of this class is very hard to conclude. Firstly, the sample in this class is very small, it includes only 4 events, because the MPC increased reference rates only 4 times during 1999–2003. Such a small sample can deliver incidental results. None of these reactions are significant in the statistical sense. Secondly, 4 events took place at the turn of 1999 and 2000, when financial market participants started to understand how the MPC worked and took decisions. Especially during 1999 the expected Year 2000 Problem has influenced on the financial market and WIBOR.

Classes 2 and 3 are connected with reductions of reference rates. This was the period 2001–2003. We can see from the figures that from day T-2 financial market participants expect reduction of reference rates. We can do so by observing relative changes of WIBOR. The adoption of market interest rates extends to day T+2 (class 2) and day T+1 (class 3). Essential reactions of short-term rates took place on days T-2 and T+1, that is before and one day after the MPC meeting.

In the case of class 2, reactions indicate that this part of the financial market is not fully efficient, because the reactions are delayed. In the case of class 3, reactions are fast, so this segment is efficient. It is worth saying that class 3 covers the period from November 2002 to June 2003 and class 2 covers the previous period. So, we can say that over the years the financial market reacts better and faster to the news. The statistical analysis indicates that in the case of class 3, the financial market reacts on days T-2 and T+1. This means that the financial market predicts a reduction of reference rates, but not completely. The financial market predicts reduction partly, and also partly reacts after announcement.

Thanks to the results we can say that financial market participants do not predict completely MPC decision, but these predictions are better and better. So, monetary policy in Poland is not fully transparent.

Analyzing cumulated relative average changes in figure 3, we can see clearly how the financial market reacts to MPC decisions in each class. Generally, we can say that the financial market starts reaction from day T-3 and ends reaction on days T+1, T+2.

Another measure which we can use in our research, is margin analysis for interbank interest rates (difference between the same WIBOR and WIBID). The increasing margin we can we interpret in the context of financial market participants uncertainty. When the margin is bigger, the uncertainty concerning future events (future MPC decisions) is also bigger.

The biggest margin is in the first class, so before MPC meetings connected with increasing of reference rates. We see their strong increase before the MPC meeting (from day T-4) and reduction after the MPC meeting. During day of T0 of the MPC announcement, uncertainty is stable.

In the case of classes 2 and 3 we can also see the increasing of the margin, but this increase is smaller. Over the course of time the margin is smaller and smaller. This is connected with the financial market development.
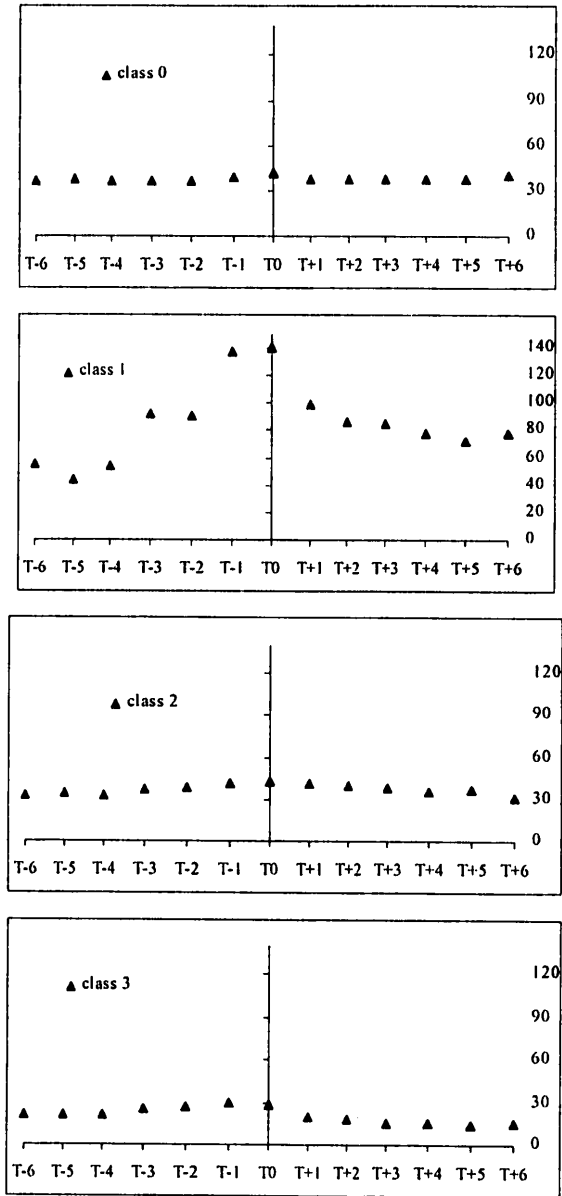
Figure 4. Average margin between 1M WIBOR and 1M WIBID in each day in the event window (in basis points)
Source: author's own

The next way to measure these reactions, also using event study methodology, is to calculate the difference (spread) between market interest rate and the reference rate in the event window. The case "unchanged" means that the MPC did not change the reference rate. The case „reduction" means that the MPC reduced the reference rate. And the third case „increase" means that the MPC increased the reference rate. The spread in the case of no changes can be treated as an indicator of normal behaviour of interest rates. On the basis of its behaviour we can compare it with the behaviour of spreads in case of „reduction" and „increase". Thanks to this analysis we can indicate the behaviour of financial market participants expectations concerning future MPC decision (before T0) and concerning reactions to this decision (after T0).
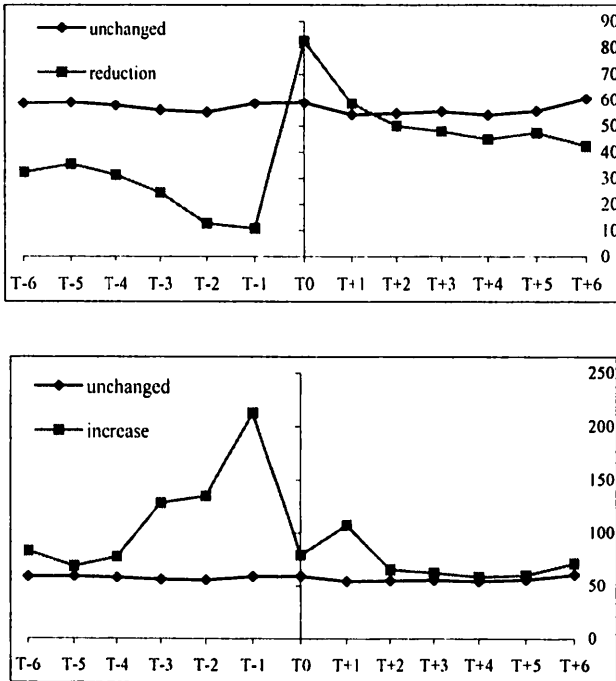

Figure 5. Average differences (spread) between 1M WIBOR and the reference rate for increases, reductions and no changes of reference rates (in basis points)
Source: author's own

During the period when the MPC did not change reference rates, we can see that the spread is at the stable level – about 60 basis points. The essential difference in behaviour of spread can be seen near the day T0 (the day of announcement of the MPC decision). Spread size in the event window before "reduction" is smaller than before "unchanged". Over the course of some days, the difference between spread "reduction" and spread "without changing" is bigger, and on day T0 this difference changes. This is connected with the expectations of the reduction in the reference rate. Financial market participants, before a reduction of the reference rate, want to lend others their money. The bigger supply of money causes a reduction of interest rates. The nearer T0 and T+1, the closer the spread back to its normal level.

In the second case, "increase" spread widens from day T-3 to day T-1. This is caused by expectations connected with increasing of the reference rate on T0. On day T0 the spread equals 200 basis points After T0 the spread comes back to the normal level.

Reactions of the short-term part of the yield curve to the MPC decision are the following:

• changes of interbank interest rates took place before and after events; reactions lasted to day T+2, but the market of FRA reacts before and during T0,

• direction of interest rates reactions were in accordance with our expectations and direction of MPC decisions,

• the financial market better predicted events of leaving interest rates without change than of changing them,

• the financial market was not surprised that the MPC changed reference interest rates, but the level of this changes was surprising. The confirmation of that were reactions of interest rates to the news several days after the decisions, especially in the case of 1M (2W) WIBOR, which is under the influence of the central bank decision. In the case of classes 1 and 2 reactions lasted two days. In 2003 (class 3) the financial market reacted to the news only during the first day after the decisions. This means that the market reacted faster and faster,

• in the majority of cases, except 1M WIBOR in class 3, there were no significant reactions in the statistical sense; this means that the current MPC decision was expected by the market before,

• the longer term to maturity the weaker were reactions, because the influence of the MPC was smaller.

Table 3

Results of event study

Market interest rates	Classes	T-2	T-1	T0	T+1	T+2
1M WIBOR	0					
	1					
	2			−	−	−
	3	−			−	
3M WIBOR	0					
	1					
	2	−		−	−	
	3	−				
6M WIBOR	0					
	1					
	2	−		−	−	−
	3					
FRA 1X2	0					
	2					
	3					
FRA 3X6	0					
	2	−				
	3					
FRA 6X9	0		−	+		
	2			−		
	3					
FRA 9X12	0					
	2			−		
	3					

+ or − denotes statistical significance (α=0,05) and indicates the sign of parameter
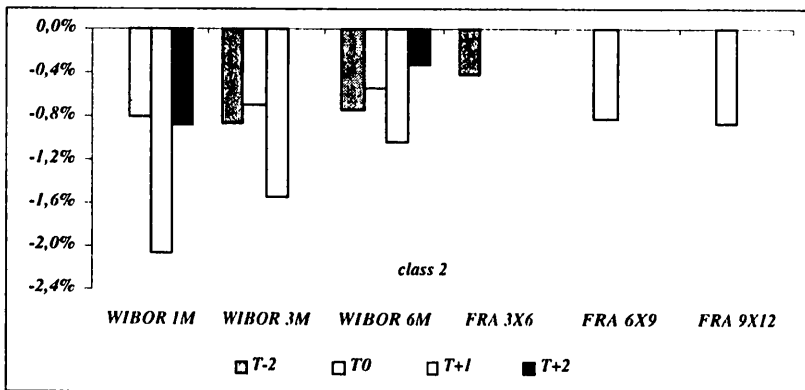Source: author's own

Figure 6. Chosen reactions of short-term interest rates to analyzed event
Source: author's own

Our results indicate that monetary policy in Poland and decisions taken by the MPC were not fully predictable. When we compare our results with those obtained by J. Zieliński (Zieliński 2001a and 2001b), also in connection with the transparency of monetary policy in Poland, we can say that they are coincident. The detailed analysis of the results indicates that over the course of time the predictability of monetary decisions has improved. During first years of the MPC, after the medium-term strategy of monetary policy began to function, financial market participants learned how the central bank worked. The Polish central bank, conducting its monetary policy, tried to improve the transparency of monetary policy during this time. The confirmation of this is implementation of new instruments of public information policy. So, we can ask the question why the results indicate that the monetary policy was not fully transparent. One of the reasons can be the fact that the financial market in Poland is not efficient, not developed, and not big enough. Moreover, if the central bank policy were perfectly transparent, we could expect that the announcement of the MPC decision did not deliver any new information. But we know of course that process of taking that decision is very complicated and its result depends on the votes of the MPC members. Each of the MPC members can understand economic information and their influence on economy in a different way.

We also tried to compare our results with the determinants of transparency of monetary policy that were presented in the first part of the paper. Thanks to this comparison we can say that if the National Bank of Poland begins to publish its inflation forecast, the transparency of monetary policy may be improved.

CONCLUSION

The main goal of this paper was to present the essence of transparency of monetary policy, the determinants influencing improvement and the consequences of open and transparent monetary policy. Since 1999 the National Bank of Poland has conducted transparent monetary policy using the Direct Inflationary Target strategy. The National Bank of Poland has been improving its information strategy and transparency all the time.

In this paper we presented the results of the research conducted using methodology of event study. We tested if the short part of the yield curve reacts to the MPC decisions concerning changes of the reference rate. We cannot say that monetary policy is transparent.

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