

FINANCIAL STABILITY AND CENTRAL BANK TRANSPARENCY IN EUROPE¹

Bogdan CAPRARU

Faculty of Economics and Business Administration
"Al. I. Cuza" University of Iasi
Iasi, Romania
csb@uaic.ro

Abstract

In this paper we assess the transparency level in the field of financial stability, using the Sotomska-Krzysztofik and Szczepanska index for the central banks from the European Union countries and European Central Bank (ECB) – 28 central banks, Norway, Switzerland, Iceland, Russia and 3 candidates to EU: Turkey, Macedonia and Croatia, totally 35 central banks. Also, we do a comparison between our results in 2010 and Sotomska-Krzysztofik and Szczepanska calculation in 2004, for the central banks that was commonly assessed. We conclude that the preoccupations of central bank communication policy in the field of financial stability have increased in the last period. The main factors that have been influencing these trends were the process of European integration and the actual international financial crises.

Keywords: central bank transparency, financial stability, Sotomska-Krzysztofik and Szczepanska index

JEL classification: E58, E59

1. INTRODUCTION

In these last years, central banks have become more and more preoccupied with communication, being more and more *transparent* and more *responsible*.

The central bank's communication consists in sending information to the *markets, the media, the politicians and the general public*, information which concerns decision-making analyses, actions and processes, so that the interested parties may understand the central bank measures applied in order to reach set objectives.

In this paper we assess the transparency level in the field of financial stability, using the Sotomska-Krzysztofik and Szczepanska index for the central banks from the European Union countries and European Central Bank (ECB) – 28 central banks, Norway, Switzerland, Iceland, Russia and 3 candidates to EU: Turkey, Macedonia and Croatia, totally 35 central banks. As a result we conclude that the preoccupations of central bank communication policy in the field of financial stability have increased in the last period. The main factors that have been influencing these trends were the process of European integration and the actual international financial crises.

2. CENTRAL BANK TRANSPARENCY: THEORY AND PRACTICE

The term of transparency comes from physics and it is the property of an object to transmit light, to allow seeing through it. From the perspective of the economic context, transparency means *the presence of symmetric information*, and lack of transparency, the presence of asymmetric information. At the same time, transparency *mustn't be understood as complete certainty or perfect information* [Geraats, 2002].

The notion of transparency as related to monetary policies involves a series of different interpretations. The wide majority of economists think that a high transparency level of the monetary policies is advisable, because it allows the private sector to make more efficient decisions by benefiting from as complete information as possible. Thus, a series of imperfections in the process of making business decisions, in the private sector, will be reduced.

Others consider that *an incomplete transparency is optimum* [Faust, Svensson, 2001] or that *there should be certain restrictions in what concerns the transparency of the monetary policies, for operational reasons* [Eijffinger, Hoerberichts, 2000].

In practice, many of the central banks have raised their transparency level by *publishing forecasts regarding inflation, by giving wider explanations regarding the premises that stood at the basis of certain decisions, the situation of the votes in the case of the decision-making process, etc.*

Many researchers link the notion of transparency of the central bank to that of *institutional credibility*. A credible central bank is one that has an efficient monetary policy due to the fact that it can manage the expectations of the private sector [Lyziak, Mackiewicz, Stanislawska, 2007].

Between the transparency and the credibility of the central bank, there is a determination relationship, on a proportional basis. *The higher the transparency level, the higher the credibility*. Transparency may discipline the monetary policy and the inflationist expectations are channeled according to the forecasts of the central bank, temporal inconsistency being diminished and eliminated. This relationship between credibility and transparency inspired the implementation of the inflation-targeting regime.

The Gordian knot of the central bank transparency issue is related to *measuring the transparency level*. As a rule, it is measured based on the amount of information that the central bank provides to the general public, ignoring the qualitative aspects.

There is a series of studies that empirically analyzed the transparency of the central banks in practice. Thus, Bernanke, Laubach, Mishkin, and Posen [1999] drew up a case study based on the countries that adopted inflation-targeting. In the same train of ideas, Blinder, Goodhart, Hildebrand, Lipton, and Wyplosz [2001] make an analysis of the transparency of five important central banks, but without making any reference to their transparency level.

Mahadeva and Sterne [2000] measure the transparency of the central bank based on an analysis of the *information provided by the central banks, meant to help the public understand the policies, the analyses and the forecasts of the central bank*. According to this study, the authors reached the conclusion that the central banks that adopted the inflation-targeting regime are the most transparent.

Fracasso, Genberg, and Wyplosz [2003] analyze the transparency of the central bank for 20 countries that adopted the inflation-targeting regime, based on the *content and the quality of the Reports regarding Inflation*. Thus, they had in view the quantity, the quality and the accessibility of the provided information, the clarity in assuming key macro-

economic variables, the presentation of the decision-making process, etc. They found that the central banks that publish high-quality Reports on Inflation are more predictable.

Some economists tried to provide a more precise dimension of the transparency level of the central bank, by developing new indicators.

Thus, Fry, Julius, Mahadeva, Roger and Sterne [2000] create a measuring index of the “explanation policy”, which consists of three components: *explaining the monetary policy decisions; explaining the forecasts and the long-term analyses; explaining the published analyses and researches*. The index is applied to 94 central banks, highlighting a series of aspects related to the transparency of the central bank, but it does not emphasize the role of information in the decision-making process.

Bini-Smaghi and Gros [2001] also proposed an index of measuring the central bank transparency and responsibility for 6 important central banks, having in view the following elements: *objectives, strategy, publishing of data and forecasts and the communication strategy*. De Haan and Amtenbrink [2004] propose a variation of the index of Bini-Smaghi and Gros. Their index is different due to its scoring method and to the number and the definition of the criteria that stand at the basis of the index’s development.

The most comprehensive index is the one developed by Eijffinger and Geraats [2006]. It takes into account different aspects of the transparency of the central bank: transparency from a *political, economic, procedural and operational* point of view, as well as from the point of view of *announcing monetary policy decisions*. Thus, the conceptual framework of this index follows the different stages of the decision-making process. In order to measure each of the five aspects, three questions are proposed for each of them, with their answers scored with 0 or 1, the maximum total score of the index being 15 (5x3x1).

Dincer and Eichengreen [2006] extend the application of the index of Eijffinger and Geraats to the case of 100 central banks in the world, for 2005, obtaining the values for countries and regions. According to this study, the most transparent central banks are: The Reserve Bank of New Zealand, The Royal Bank of Sweden, The Bank of England, The Czech National Bank, The Bank of Canada, The European Central Bank and The Central Bank of the Philippines. The least transparent central banks proved to be the ones in Aruba, the Bermuda Islands, Ethiopia, Kuwait, Libya, Saudi Arabia and Yemen. The classification by region, based on the transparency level, from the most transparent to the least transparent region looks as follows: Australia-New Zealand, Western Europe, Northern Europe, South-East Asia, South Africa, North America.

Rosa and Verga [2007] analyze the communication made by the ECB President in his introductory statement to the monthly press conference on Governing Council meeting days. They conclude that the ECB is effective in its job of communication to the public, and is able to influence market expectations on the short-term interest rate path using just words. In another paper [Rosa and Verga, 2008] they demonstrate that the *unexpected* component of ECB explanations has a significant and sizable impact on futures assets prices.

A challenge for the central banking can be represented by the existence of an *inherent conflict for the accomplishment of the role it can have for the implementation of monetary policies as well as for the financial stability insurance*. [Căpraru, 2008]. *The transparency of the central bank is mainly studied, both in the literature and in practice, from the perspective of the monetary policies and of reaching price stability, being less preoccupied with the aspects related to the transparency of the central bank from the perspective of financial stability*.

The most obvious preoccupations in this regard are those at the level of the European Union, manifested in the drawing up of directives regarding the transparency of prudential supervision (2006/48/EC, 2006/49/EC) and in the creation of the Committee of European Banking Supervisors – CEBS. The latter developed a standardized web structure of the publishing requirements intended for the supervisory authorities in the Member-States and published the general guidelines necessary for the implementation of this common approach.

Also in this regard, the International Monetary Fund proposed, in July 2000, “The Code of Good Practices on Transparency in Monetary and Financial Policies”, which includes Special Data Dissemination Standards. In September 2000, 47 central banks had agreed to adhere to this document, 33 of them actually applying the principles provided in it.

Geraats [2010] debates that it is important to commit to regular communications relevant for financial stability. Financial stability communications should cover both financial instruments, institutions and interconnections, and highlight risks. Furthermore, the release of financial information may be detrimental *ex post* but beneficial *ex ante*.

De Haan and Oosterloo [2006] consider that because of the multilateral nature of financial stability (with different aspects like prudential supervision, monetary policy, financial markets and payment and settlement systems) the objective of maintaining financial stability is more difficult to measure than is the case for monetary stability. Also, the instruments used by the CB predominantly have an indirect (rather than direct) influence on financial stability. The impact of these instruments is difficult to measure and makes the accountability process even more difficult.

Sotomska-Krzysztofik and Szczepanska [2006] propose an *index of measuring transparency in the field of financial stability*. The index was calculated for the end of 2004, on a sample of 35 central banks (ECB, EU-15, EU-10 and 9 central banks outside of the EU), ranging from 1 to 10 according to the transparency level, the score of 10 indicating the most transparent. They conclude that three factors have been distinguished, which may affect the information policy of central banks and their transparency as regards the financial stability supporting functions: banking crisis experience; involvement in the supervision over the banking sector; experience in the field of transparency related to the adoption of the direct inflation targeting (DIT) strategy.

3. METHODOLOGY AND RESULTS IN APPLYING SOTOMSKA-KRZYSZTOFIK AND SZCZEPANSKA INDEX FOR 35 CENTRAL BANKS FROM EUROPE

In this paper we calculate the Sotomska-Krzysztofik and Szczepanska index for the central banks from the European Union countries and European Central Bank (ECB) – 28 central banks, Norway, Switzerland, Iceland, Russia and 3 candidates to EU: Turkey, Macedonia and Croatia, totally 36 central banks. Sotomska-Krzysztofik and Szczepanska calculated the index for the end of 2004, on a sample of 35 central banks (ECB, EU-15, EU-10 and 9 central banks outside of the EU). We included central banks from Romania, Bulgaria, Turkey, Macedonia, Croatia, Russia, Iceland different from their sample and we excluded the central banks outside of the Europe. We use their results as a benchmark for our analyses, demonstrating how central banks from EU have improved their communication policies concerning achieving financial stability objective.

The criteria taken into account in the index construction are:

- 1) the goal specified in the act on the central bank or another legal document;
- 2) declaration of the goal by the central bank,
- 3) publication of the financial stability report,
- 4) frequency of publication of the financial stability report,
- 5) information about the function of the lender of last resort (LOLR),
- 6) information about the terms and conditions of emergency liquidity assistance,
- 7) information about crisis management,
- 8) press release in situations of risk to the stability of the financial system,
- 9) speeches delivered by the representatives of the bank's authorities concerning the financial stability,
- 10) financial stability as a separate page on the central bank's website.

In the process of determining the value of the index, each central bank receives 1 point for each criterion, so, each bank may earn a minimum of 0 points and a maximum of 10 points. As Sotomska-Krzysztofik and Szczepanska mentioned in their research a score of 10 points should be interpreted as the maximum score on the suggested scale and not as the maximum possible level of transparency of the central bank. Also, they decided equal weights assumed for each of the index criteria, without differences concerning the level of significance of subsequent components, because they found disputable which component of the information policy is more important and thus should have greater weight assigned to it [Sotomska-Krzysztofik and Szczepanska, 2006].

Every criterion is evaluated using sources like websites of central banks, annual reports, financial stability reports, information bulletins. The process of evaluations has been made in June 2010.

For the first criterion we have assessed if formal provisions about goal/function related to financial stability exist in the central banks acts, charters, and organic law and for the second one if there is open declaration of bank in this issue on websites or official publications.

The third and fourth criterion indicates tow situation related to the publication of the financial stability reports: where the central bank publishes the report once a year and where the report is published more frequently than once a year.

The fifth criterion indicates that the central bank only provides information that it acts as a lender of last resort – without any other instructions; the sixth - the central bank provides information about the terms and conditions of granting loans as part of its function as the lender of last resort and the seventh - the central bank publishes information about crisis management, going beyond the role of the lender of last resort and explaining the main principles of involvement in crisis management as well as indicating the role of other safety net institutions (including information about memorandums of understanding)

For the criterion of “press release in situations of risk to the stability of the financial system” we consider as event the fail of Lehman Brother in September 2008 and we have assessed if central banks reacted with press releases to this event. In their paper Sotomska-Krzysztofik and Szczepanska considered the terrorists attack of September 11th, 2001 and the broking out of the war in Iraq.

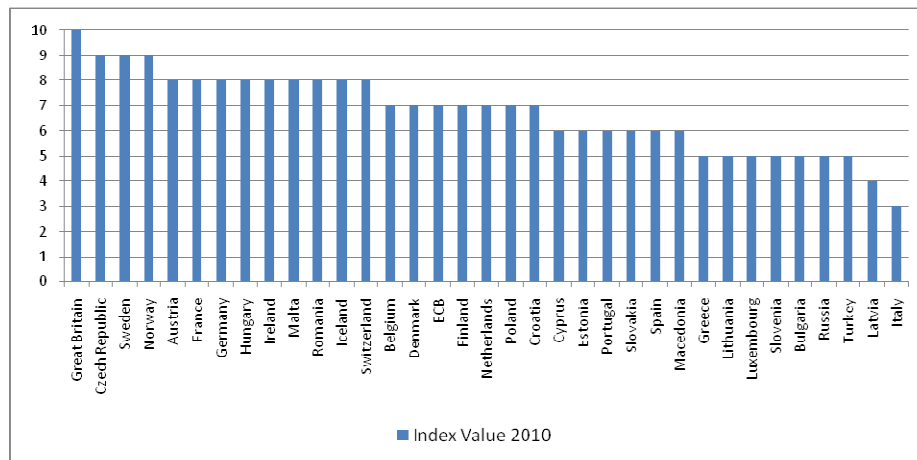
At the ninth criterion we have considered 1 point given if the central bank publishes speeches delivered by the representatives of the bank authorities that discuss financial stability.

At the last criterion we have considered 1 point if there is a website page dedicated solely to financial stability and named “Financial stability”, not only “prudential supervision”, “bank supervision”, “financial supervision” etc.

Results

The results of measuring Sotomska-Krzysztofik and Szczepanska transparency index varies from 3 to 10:

- the maximum score was awarded by a single central bank - the Bank of England (10 p) from EU, but outside euro zone;
- 3 central banks have obtained 9p - The Czech National Bank, Norges Bank, Sveriges Riksbank – among them 2 are from EU, 1 from EU-10 and 1 from euro zone;
- 9 central banks have obtained 8p – central banks from Austria, France, Germany, Hungary, Ireland, Malta, Romania, Switzerland, and Iceland - among them 5 are from euro zone, 7 from EU, 2 from EU-10, 1 from the last entered, 1 candidate to EU;
- 7 central banks have obtained 7p – central banks from Belgium, Denmark, ECB, Finland, Netherlands, Poland, Croatia - among them 4 are from euro zone and ECB, 7 from EU, 2 from EU-10, 1 candidate to EU;
- 6 central banks have obtained 6p – central banks from Cyprus, Estonia, Portugal, Slovakia, Spain, Macedonia - among them 4 are from euro zone, 5 from EU, 3 from EU-10, 1 candidate to EU;
- 7 central banks have obtained 5p – central banks from Greece, Lithuania, Luxembourg, Slovenia, Bulgaria, Russia, Turkey - among them 2 are from euro zone, 5 from EU, 2 from EU-10, 1 from the last entered, 1 candidate to EU;
- 1 central bank has obtained 4p – central bank of Latvia – EU-10 country;
- 1 central bank has obtained 3p – Bank of Italy – EU country and from euro zone.



Source: Own calculations

Figure no. 1 Sotomska-Krzysztofik and Szczepanska transparency Index - 2010

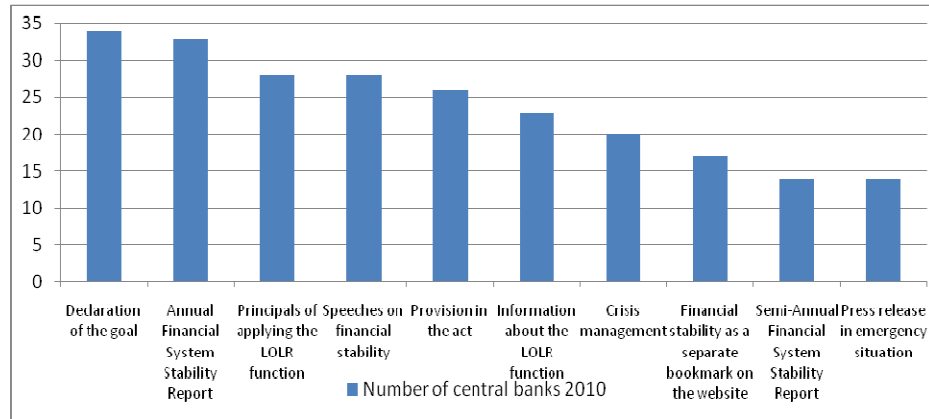
If we consider the countries divided into 3 groups based on index's value, we can have the following situation:

The banks with low index value, between 1 and 3 points;

The banks with medium index value, between 4 and 6 points;

The banks with high index value, between 7 and 10 points;

Most central banks (20) obtained a high score, 14 central banks obtained a medium score and only 1 central bank obtained the low score.



Source: Own calculations

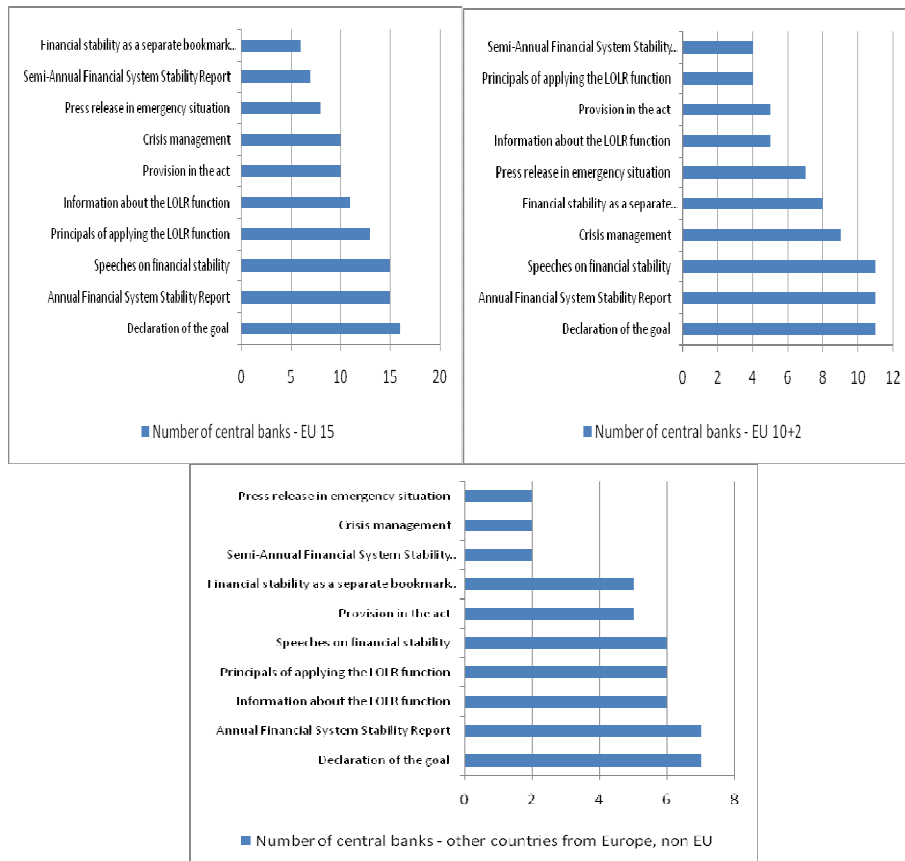
Figure no. 2 Sotomska-Krzysztofik and Szczepanska transparency Index criteria values - 2010

As we can see in the Figure 2, majority of the central banks (34 central banks) assessed have fulfilled the criterion “Declaration of the goal”. On the second place is “Annual Financial System Stability Report”, that suggest that central banks in Europe are more and more involved in presenting evolutions about financial system stability (33 central banks). Also, central banks from Europe are more and more transparent regarding on “Principals of applying the LOLR function”, 28 central banks publishing information about that and also 28 central banks publish “Speeches on financial stability”. Only 14 central banks use to publish “Semi-Annual Financial System Stability Report” and only 14 central banks give “Press release in emergency situation”.

We can consider the countries divided in terms of their location in particular economic zones

- EU – 15 and ECB;
- EU - 10 + 2 (Romania and Bulgaria);
- other central bank from Europe, non EU (including EU candidates).

In the following charts we have the situation of criteria on groups of countries.



Source: Own calculations

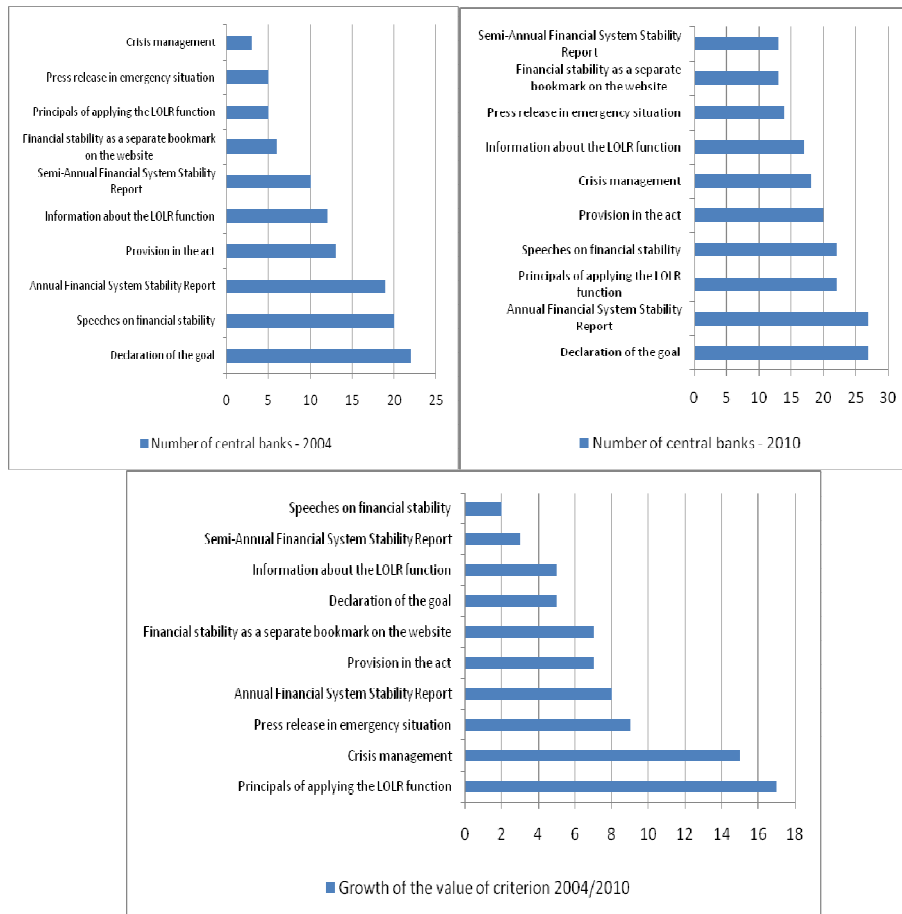
Figure no. 3 Sotomska-Krzysztofik and Szczepanska transparency Index criteria values - 2010 on groups of countries

As we can see, the EU-10+2 countries are more preoccupied in informing about crises management than EU-15 + ECB and non – EU.

Only one central bank of EU-10+2 do not have declared the financial stability as an objective (Latvia) and only one central bank from EU-15 + ECB (Italy), respectively one from EU-10+2 (Bulgaria) do not published annual report.

Also, the EU-10+2 and non-EU are more preoccupied in having financial stability as a separate bookmark on the website than EU-15 + ECB, being on the last position for them. The EU countries pay more attention to publishing speeches on financial stability delivered by representatives of banks authorities.

In the Figure 3. we have the results for a sample of common countries assessed by Sotomska-Krzysztofik and Szczepanska in 2004 and by us (28 central banks).



Source: Own calculations and Sotomska-Krzysztofik, Paulina; Szczepanska, Olga, *Transparency of Central Banks in Supporting Financial Stability, Journal Banks and Bank Systems*, no. 3/2006

Figure no. 4 Sotomska-Krzysztofik and Szczepanska transparency Index criteria values - 2010 comparative with 2004 (for 27 countries)

Using this sample, we can have the following situation:

- the criteria with the greater growth in value were: “Principals of applying the LOLR function” (17 banks), followed by “Crisis management” (15 banks) and “Press release in emergency situation” (9 banks);
- the criteria with the lower growth in value were: “Speeches on financial stability” (2 banks), followed by “Semi-Annual Financial System Stability Report” (3 banks);
- in both periods the banks “Declaration of the goal” has the greatest value;
- more than 8 central banks have decided to have an annual report once a year and only 3 twice a year;

- more 7 central banks have decided to have financial stability as a separate bookmark on the website;
- more 7 central bank have included in their statute or organic law the financial stability as an objective;
- the average value of total score has increase from 4,1p to 6,9p;
- the average value of total score on groups of countries was as following: EU15 – 6,9p; EU10+2 – 6,2p; non EU – 6,9p; EU candidates – 6,5p;
- in 2010 the maximum total score was 10 (Great Britain) and the minimum 3 (Italy), in 2009 the maximum score was 9 (Great Britain, Sweden, Norway) and the minimum 1 (Cyprus, Germany, Greece, Lithuania)
- the maximum total score growth was accounted by Germany (7p) and the minimum by Austria, Sweden and Norway (0p);
- the average total score growth for EU-15 and for E-10 was the same (3p).

4. CONCLUSIONS

The preoccupations of central bank communication policy in the field of financial stability have increased in the last period in Europe. Almost all of central banks assessed have declare as an objective the financial stability and the majority of them have included in their statute or organic law this objective. The main factors that have been influencing these trends were the process of European integration and the actual international financial crises. The perspective of EU accession has determined central banks to be more and more responsible in the perspective of financial stability. Both EU-15 and EU-10 have improved their total score, accounting the same growth (3p). Also, in this period the manifestation of one of the main functions of central banks – the lender of last resort have increased, central banks from Europe being more and more transparent in this issue.

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Appendix

Sotomska-Krzysztofik and Szczepanska transparency Index for 2004 and 2010

Central bank	Financial stability as a goal/function				Financial System Stability Report				Financial stability as a separate bookmark on the website	Function of the lender of last resort (LOLR)								Speeches on financial stability	Total score			
	Provision in the act		Declaration of the goal		Once a year		Twice a year			Information about the LOLR function		Principals of applying the LOLR function		Crisis management		Press release in emergency situation						
	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10
Austria	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0	1	1	8	8
Belgium	1	1	0	1	1	1	0	0	0	0	0	1	0	0	0	1	0	1	1	1	3	7
Bulgaria	n.a.	1	n.a.	1	n.a.	0	n.a.	0	n.a.	0	n.a.	1	n.a.	1	n.a.	0	n.a.	0	n.a.	1	n.a.	5
Cyprus	0	1	1	1	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	1	1	6
Croatia	n.a.	0	n.a.	1	n.a.	1	n.a.	1	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	0	n.a.	1	n.a.	7
Czech Republic	0	1	1	1	0	1	0	0	0	1	1	1	1	1	0	1	0	1	1	1	4	9
Denmark	0	0	1	1	1	1	0	0	0	1	1	1	0	1	0	1	0	0	0	1	3	7
ECB	0	0	1	1	1	1	0	1	0	0	0	1	0	1	0	1	1	0	1	1	4	7
Estonia	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	1	5	6
Finland	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	1	0	1	1	1	4	7
France	0	0	0	1	1	1	1	1	0	0	0	1	0	1	0	1	0	1	1	1	3	8
Germany	0	0	0	1	0	1	0	0	0	1	0	1	0	1	0	1	0	1	1	1	1	8
Great Britain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	9	10
Greece	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	5
Hungary	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0	0	0	6	8
Iceland	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	1	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	1	n.a.	8
Ireland	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	1	0	0	4	8
Italy	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	3
Latvia	0	0	0	0	1	1	1	0	0	0	0	1	0	1	0	0	0	0	1	1	3	4
Lithuania	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	5

Central bank	Financial stability as a goal/function				Financial System Stability Report				Financial stability as a separate bookmark on the website	Function of the lender of last resort (LOLR)								Speeches on financial stability	Total score			
	Provision in the act		Declaration of the goal		Once a year		Twice a year			Information about the LOLR function		Principals of applying the LOLR function		Crisis management		Press release in emergency situation						
	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10	04	10
Luxembourg	0	1	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	5
Macedonia	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	1	n.a.	0	n.a.	1	n.a.	0	n.a.	0	n.a.	1	n.a.	6
Malta	1	1	1	1	0	1	0	0	0	1	1	1	0	1	0	1	0	0	1	1	4	8
Netherlands	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0	0	1	1	1	1	4	7
Norway	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	9
Poland	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0	1	0	0	0	0	3	7
Portugal	1	1	1	1	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1	4	6
Romania	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	1	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	1	n.a.	8
Russia	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	0	n.a.	1	n.a.	1	n.a.	0	n.a.	0	n.a.	0	n.a.	5
Slovakia	0	1	1	1	1	1	0	1	0	0	1	0	1	1	0	1	0	0	0	0	4	6
Slovenia	1	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	4	5
Spain	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	1	1	5	6
Sweden	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	9
Switzerland	1	1	1	1	1	1	0	0	0	1	1	1	0	1	0	0	0	1	1	1	5	8
Turkey	n.a.	1	n.a.	1	n.a.	1	n.a.	0	n.a.	0	n.a.	1	n.a.	0	n.a.	0	n.a.	0	n.a.	1	n.a.	5

Source: Sotomska-Krzysztofik, Paulina; Szczepanska, Olga, *Transparency of Central Banks in Supporting Financial Stability*, *Journal Banks and Bank Systems*, no. 3/2006, pp. 20-31 and own calculations and estimations