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# **Central Bank or Single Financial Supervision Authority: The Romanian Case**

**Claudiu Tiberiu Albuлесcu**

## **Abstract**

The process of regulation and supervision of the financial system represents a pillar for the financial stability. A recent trend in the institutional framework for financial supervision is the creation of a Single Supervision Authority for the supervision of the banking sector, the insurances and the capital markets. In the financial supervision literature, a lot of arguments highlight the fact that such institutions are necessary, but there are also other valid arguments which show that the banking supervision must be made by central banks. Taking into account these arguments we show that the institutional regulation and supervision framework reflects the structure of the Romanian financial system and the specialized supervision architecture in place in Romania is compatible with the European supervision framework. The National Bank of Romania has a solid experience in banking sector supervision and the activity of financial conglomerates is not yet a menace for the Romanian financial system stability. That is why the implementation of a unified supervision framework does not represent an optimal solution at the moment.

Key words: supervision framework, single supervision authority, central banks, financial conglomerates.

JEL classification: E58, F55, G28

## **Introduction**

The process of regulation and supervision of the financial system represents a pillar for the financial stability. Many specialists consider that the establishment of a Single Supervision Authority (SSA) is necessary in order to preserve the financial system stability. Such authorities are independent from central banks and their role is the regulation and supervision of all financial sectors, including the banks. The aim of the SSA implementation is the demarcation between the two goals of central banks, price stability and financial stability, and the elimination of the trade-off between these objectives. It is considered that a SSA is also specialized in financial conglomerates supervision, a new challenge for the financial stability.

The construction of a unique supervision authority does not represent an optimal solution in all the cases. These authorities do not have the necessary means of intervention to guarantee the financial stability and they can be subject to political pressure because they act as governmental agencies or agencies subordinated to the Parliament. It seems that the central banks are better placed to regulate and survey the banking sector, enjoying the required independence and credibility.

During the last period, intense debates were conducted regarding the possibility to reorganise the regulation and supervision framework, both at European and national level. *A priori* we can not say that a certain supervision framework is performing better,

even if there is an obvious trend among European countries to unify the regulation and the supervision of different financial sectors. The decision for a SSA implementation must take into consideration the characteristics of each national financial system.

In this study we intend to show that the Romanian supervision architecture in place is compatible with the financial system structure and that the National Bank of Romania (NBR) can not successfully accomplish its financial stability objective without performing the regulation and supervision of the banking sector. Moreover, the actual supervision framework enables an efficient cooperation with the corresponding authorities in place at European level.

The structure of the study is the following: in the first section we analyse the characteristics required for a regulation and supervision authority to be efficient. In the next sections we present the arguments supporting the preservation of a fundamental role for central banks in banking supervision and we continue with the arguments in favour of a SSA in the third section. In the fourth section we analyse the European regulation and supervision framework. In the last section of this article we will present the status of unified supervision in several European countries and we will demonstrate that financial supervision architecture in Romania is compatible with the structure of the financial system and with the European arrangements. The implementation of a Mixed Supervision Committee by the members of the NBR and the members of the others supervision authorities, under the NBR coordination, represents at present a better solution than setting up a SSA in the Romanian case. Finally we conclude.

## **1. Requirements for the regulation and supervision authorities**

Even if we do not implicitly embrace from the very beginning the assumption that the best solution is to keep the supervision of the banking sector within the central bank, we must say that this function should be complementary to other financial stability related functions, named “the safety nets” (Cerna et al., 2008: p.68): deposit insurance, lender of last resort and payment systems administration.

The supervision authorities must analyse objectively the financial conditions of each financial institution and of the financial system as a whole. Their impartiality can not be achieved without a high level of political and institutional independence. A supervision authority must also be credible because its regulations and decisions must be respected. The credibility and transparency of its actions ensure the independence, and, on the other hand, an independent supervision authority becomes more credible. The supervision authorities must be accountable for their actions and should not be exposed to moral hazard. The accountability must not interfere with their independence. The transparency, the accountability, the independence and the credibility characterise successful central banks in their effort to reduce inflation and, at the same time, represent the attributes of an efficient supervision authority.

Most of the literature focuses on analysing the transparency, the credibility and the independence of central banks in relation with the prices stability goal. We consider that these elements must also characterise the regulation and supervision authorities. An independent supervision authority can ensure the financial stability by offering adequate guarantees to the financial sector, especially under extreme conditions.

### ***1.1. The transparency***

In the economic literature, several forms of transparency necessary for a supervision authority are mentioned: political transparency (established objectives), economic transparency (data and models), procedural transparency (decisions and votes), operational transparency and transparency related to the results of applied policies.

The transparency is a condition necessary for the central banks' independence and also for the supervision authority's independence (Ribeiro, 2002: p.5). The authority engaged in financial regulation and supervision must continuously inform the government and the public, at least in the same manner the central banks provide information about the monetary policy programme.

Nevertheless, it is important to make a distinction between monetary policy transparency and financial supervision transparency. In the first case, a total transparency is not recommended (Eichengreen and Dincer, 2006: p.26)<sup>1</sup>. The central banks are not always transparent in their monetary policy decisions. Cerna (2002: p.26) speaks about central banks' secrecy, concept theorized for the first time by Goodfriend. By adopting this practice, the central bank reduces the transparency and obtains a decrease in the interest rate variability, making the economic agents less sensitive to changes in the monetary policy. Unlike monetary policy transparency, the transparency of supervision authorities' activity must be substantial.

The debates about transparency are meant to increase the efficiency of supervision authorities in achieving their objectives. The increase in transparency level is partially associated with the efforts undertaken to enhance the accountability. The transparency of established strategies and decisions can make the economic agents understand the present situation of the monetary policy and of the supervision framework. The transparency represents a pre-condition for the accountability (Schich and Seitz, 1999: p.9).

### ***1.2. The accountability***

Another requirement for a supervision authority to accomplish its objectives is the accountability of its actions. The accountability means the obligation to explain and justify the actions and decisions, in terms of certain criteria, and the obligation to assume the responsibility for making decisions. The supervision authority accountability contributes to the elimination of potential conflicts between this institution and the government.

Quintyn and Taylor (2004: pp.15-16) consider that "*the accountability of independent regulators and supervisors is the key for their effective independence*". These specialists enumerate several criteria to be taken into consideration in order to achieve a real accountability:

- a clear legal basis;
- a clear and public statement of the objectives, as for example, preserving the stability of the financial system and the soundness of individual banks;
- the relationships with the executive, legislative and judicial bodies must be clearly defined;
- the appointment, replacement and dismissal of senior officials must respect a transparent procedure.

### ***1.3. The independence***

The independence of the supervision agencies represents a feature which is intensely analysed in the economic literature. The successful results obtained by the central banks in their battle against inflation stimulated the interest for the supervision authority's independence.

The independence is essential to counteract the natural predilection of politicians to expansionist economic policies. The politicians make promises in the short-

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<sup>1</sup> Eichengreen said, when he was asked about the optimal level of central banks transparency concerning the monetary policy in a Centre Cournot Conference in Paris, 2006: „*somewhere fewer than 50 percent*".

run for obtaining electoral benefits and at the same time they exacerbate the long term financial situation. Thereby, the politicians can make pressure on the control authority to avoid the declaration of a bankruptcy. The independence of the supervision authorities represents for the financial stability what the independence of central bank means for the monetary stability, and the independence of these institutions allows them to strengthen each other. Both organisms provide a safety net – the financial stability. The independence of the supervision authority does not represent a target by itself, but it has an important contribution to achieving the statutory objectives.

In the economic literature several types of independence are approached. Schich and Seitz (1999: p.6) identify the institutional independence, the staff and the functional independence. Lybek (2004: pp.3-4) prefers the term “autonomy” to the frequently used term “independence” of central banks. He makes a distinction between several types of autonomy: *goal autonomy* (the central bank authority may determine its primary objective among several objectives included in the central bank law); *target autonomy* (there is one clearly defined primary objective stipulated in the law); *instrument autonomy* (implies the fact that the government decides the monetary policy target, in agreement with the central bank) and *limited or no autonomy* (means that the central bank is almost a government agency).

A supervision agency decisions must not be influenced by the intervention of the ministers or of the Parliament. The agency must also have the necessary power and authority to act in its relation with the supervised firms (Abraham and Taylor, 2000: p.6). These prerogatives refer at least to: the possibility to ask for pertinent information from the regulated institutions, the capacity to assess the competences of superior management and shareholders, the possibility to apply penalties in case of infringement of the rules or even the possibility to intervene in the activity of the regulated institutions, if the case may be.

An important weight is given to the financial independence of the supervision authority. The fulfilment of the financial stability goal can lead to a financial loss if this authority acts as a lender of last resort (LOLR). If the authority does not dispose of the necessary financial resources, it can become the target of political pressure.

Quintyn and Taylor (2004: pp.8-9) identify four levels of independence of the regulation and supervision authority:

1) The financial sector *regulation independence* means that the agencies accountable must have sufficient autonomy to design the prudential and regulation rules, characteristics for the financial intermediation activity.

2) The *control independence* is crucial in the financial system and it is very difficult to ensure it. The control authorities work in close relation with the financial firms both for the inspection and control of the last ones, and for setting the penalty.

3) The *institutional independence* refers to the supervision authority statute, outside the executive and legislative power and entails three critic elements. In the first place, the staff should benefit from the work place stability – the employment and especially the revocation must be done based on clear rules, with the implication of two different organisms. In the second place, the structure of the control authority management must include several specialist teams. In the third place, the decision must be taken in a transparent way, but keeping in the same time the commercial confidentiality.

4) The *budgetary independence* depends on the role of legislative and executive power in the construction of the authority’s budget. The political pressures through budget must be avoided. Some control authorities finance their activity with the fees paid

by the controlled institutions. This practice limits the political immixture but increases the financial dependence towards controlled institutions.

#### ***1.4. The credibility***

The credibility has the same importance for the supervision agency and for the monetary authority. A credible supervision authority has a better resistance towards political pressures and its regulations are better implemented by the private sector. In case a financial crisis occurs, the LOLR function can be accomplished only by a credible central bank, if the intended result is to limit the moral hazard.

Waller and De Haan (2004: pp.10-11) present the result of an opinion survey made among several private sector economists, in relation with the central banks credibility and transparency. They reach the conclusion that a credible central bank: may reduce the inflation at a lower social cost and can easier maintain it at the desired level; can act as a LOLR without being threatened in case of unaccomplished goals; can find public support to ensure its independence. In the same way, the credibility of a supervision authority inhibits the decisions vulnerability. The financial institutions respect a trusty authority and wish to collaborate with it. The results obtained by the authors are influenced by the reputation of the analysed central banks.

In conclusion, the regulation and supervision authority's objectives must be clear and this authority must establish its own strategies and intervention instruments. The goals need to be extremely clear in order to avoid the trade-off between its objectives. An independent authority may enjoy of the necessary credibility.

The transparency, the accountability, the independence and the credibility are necessary but they do not represent the only attributes which must characterise a supervision authority. Other features must be taken into consideration, such as: the capacity to rapidly adapt to a changing environment, the agency efficiency and capability to avoid the regulation arbitration (in case the authority surveys more than one financial sector). In this case, the debate focuses on the arguments in favour of the integration of the regulation and supervision function within the central banks and on the arguments which concur to the implementation of a SSA.

## **2. Arguments for the integration of the supervision function within central banks**

Central Banks objectives related to price stability and to financial stability are correlated in our opinion, although a compromise between these two objectives may appear on short term.

According to some authors, the periods of banking fragility are not generally periods in which the inflationist pressures are important, fact that diminishes the importance of the argument stating that there is a synergy between the two objectives of central banks (Mishkin, 2001: p.63). There are also authors sustaining the need to maintain the banking system supervision function within the central bank, an opinion which we also agree. Bieri (2004: p.3), quoting Tinbergen, asserts that if the central bank has only one instrument available, namely the monetary policy, it can achieve only one purpose – the objective related to price stability. Therefore, if the objective related to financial stability stays with the central bank's responsibilities, the latter has to supervise the banking system. Any banking sector supervision regime has to make a connection between the supervision activity and the central bank, due to the liaisons between price stability and financial stability (Masciandaro, 2004: p.5).

The banking regulation was practically implemented by the central bank to ensure the financial sector stability (Quintyn and Taylor, 2004: p.2). For the non-banking

financial sector (capital market, insurances, pensions funds), the regulation is usually ensured either by a ministry or by a specialized organism within the central administration. As we can observe, the achievement of both price and financial stability stands for a traditional duty of central banks and of other supervision agencies, but the fulfilment of these twin objectives is not possible without a close cooperation between these regulation and supervision bodies. Consequently, if one institution exercises both functions, the cooperation problem no longer exists. If the task related to financial stability maintenance was delegated to the central bank, the objectives of the stability function must be clearly stated and defined, stipulated in laws or other regulations (Oosterloo and De Haan, 2004: pp.260-261).

A combined monetary policy and banking control regime has specific advantages in terms of systemic stability: the information gathered by central banks from their supervision missions related to payment systems and monetary markets favours the detection of banks' treasury difficulties, while the availability of prudential information enables a quicker intervention and a better management of the moral hazard related to liquidity injections, in the framework of LOLR actions.

In our opinion there is an obvious synergy between the supervision function and the monetary policy function, because the information collected during the banks supervision process helps and leads to the increase of macroeconomic forecasts. The accuracy of the forecasts related to macroeconomic variables is essential for the monetary policy, as it is a prospective policy. Sinclair (2000: p.388) underlines the synergy between the central bank objectives, namely prices stability and financial stability. The author states that the transition to a more reliable financial control regime will involve a lower level of the equilibrium prices, no matter the trajectory of the monetary aggregates.

The ECB (2001: pp.4-6) study shows that in terms of prudential surveillance, the central bank analyzes, apart from the soundness of individual institutions, the implications on systemic risk, while a SSA mainly carries out actions to protect the depositors and the investors. Comparisons are performed, in the same study, between the arguments in favour or against the integration of the banking supervision function within the central bank. The arguments in favour of this integration are:

a) *The synergy of the information between the supervision function and the central bank's fundamental missions.* This argument underlines the importance the confidential information gathered during the prudential control can have for the payment systems and for the good conduct of the monetary policy. Equally, the prudential information related to institutions susceptible to foster the systemic risk is crucial for macroprudential surveillance. Moreover, if a crisis appears in the banking system and the central bank has to intervene, it can react based on prudential information being familiar with the particular status of a bank that needs liquidities. Getting this information indirectly, through a SSA, may lead to misinterpretations.

b) *The particular emphasis on systemic risk.* There is a close connection between the prudential control on each intermediary and the assessment of the systemic risk. Even in case a SSA exists, the central bank has a significant role in terms of systemic financial stability. The central bank can better assess not only the probability of potential incidents related to macroeconomic shocks, or the turbulences on the markets, but also other factors that affect financial stability, as for example, groups of intermediaries.

c) *The independence and technical expertise.* This argument underlines the quality of the contribution the central banks can bring to financial system stability. The independence of the supervision authority in relation with political interference is important for ensuring the efficiency of the surveillance activity.

The arguments in favour of keeping the banking sector supervision function within the central bank are often stated as arguments against the set up of a SSA. Taylor and Abraham (2000: pp.16-18) enumerate some arguments in this respect and speak about a so-called “Pandora’s box”<sup>2</sup>. The author’s explanations are rather related to the risks involved by the set up of a SSA and to the fact that the reasons underlying such decisions are not well-founded.

a) *The objectives may be unclear.* One of the strongest arguments advanced against the unification of supervision functions within a SSA is the difficulty to find the equilibrium between the different objectives of the regulation. Due to their diversity – from the protection against systemic risk to investors’ protection – it is possible that a unique regulation authority can not clearly focus on rational objectives and can not make the difference when it comes for the regulation of different types of institutions.

b) *Diseconomies of scale.* Economies of scale represent an important argument in favour of a Single Supervision Agency, but we have to admit that diseconomies can also occur. A source of inefficiency can appear due to the fact that a single agency is in a monopole position, and the new structure can be more rigid and more bureaucratic. Another source for scale diseconomies is the “*Christmas tree effect*”. This happens because politicians can be tempted to assign them tasks connected to the main functions. For example, in Scandinavian countries, the agencies have been assigned tasks related to the supervision of the brokers on real estate markets.

c) *Limited synergies.* Some critics of the unification indicate a reduced gain caused by the unification, namely the economies of scope are probably less significant than the economies of scale. For example, the banks’ risk source lies with the assets side of the balance sheet, while most of the insurance companies’ risks are related to the balance sheet liabilities side. In addition, the supervision procedures for two financial sectors are different.

d) *Moral hazard.* Maybe the most alarming argument against the unification is the moral hazard. It is based on the assumption that the public will suppose that all the creditors of the supervised institutions will receive equal protection.

An element which is not put forward in the cost-benefit analyses in the economic literature is the fact that most of central banks are charged with financial stability. Financial stability has both a macroeconomic and a microeconomic dimension, closely correlated. In case the central bank will no longer ensure the microeconomic stability (stability achieved by means of the regulation and supervision functions) it is very difficult to manage the systemic stability.

Moreover, if the central bank will have price stability as its unique objective, this does not mean that its fulfilment will be easy to attain. Central bank’s actions would

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<sup>2</sup> Within “Pandora’s Box”, four types of risks involved by the eventual set up of a SSA are presented. One of the risks comes from the political sector, some politicians considering this unification process as an opportunity to increase their influence. The second risk is a legislative one. The establishment of a single supervision agency will imply the need to change the legislation, but this situation can make possible the capture of the process by certain interest groups. Another disadvantage of the unification is the eventuality not to solve the discrepancies in the regulation. A third risk caused by the change is the possible reduction of the regulation capacity due to the loss of key personnel. Part of the employees will consider the unification process difficult and they prefer to avoid it. In this way, some of them, even if they are good experts, can feel threaten and look for other jobs or choose to retire. A fourth risk is the change of the management, which could slow down the regulation process. The unification of the surveillance supposes a need of human resources – management staff – exactly in environments where there is a lack of such personnel.



depend far too much on the fiscal policy as well as on the existence of an efficient supervision framework. That is why the cooperation with the political authorities and the central bank's involvement in the systemic financial stability will represent the key for achieving the purposes of this institution.

However, the integration of the banking sector supervision within the central bank does not represent always an optimal solution. There are also arguments according to which it is recommended that the supervision of the entire financial system should be performed by a SSA. Thus, in systems characterized by the existence of complex capital markets, where it is difficult to delimit the sectoral activities, the informational benefits gained by a central bank can be reduced. In addition, the presence of financial conglomerates together with the lack of central bank's experience in the supervision activity recommends the set up of a SSA.

### 3. Arguments for setting up a Single Supervision Agency

Apparently, the best way to ensure the independence of the regulation and banking control authority is to integrate this function within an independent central bank. As the independence of the central bank is widely accepted nowadays, the single control authority could enjoy, in its turn, of this independence. Therefore, an alternative to the integration within the central banks of the function related to the regulation and supervision of the banking sector is to set up a distinct single supervision authority, responsible for the supervision of banking, securities and insurance sectors. There is an increasing trend in respect of the creation of unique supervision bodies, fact that obliges the decision making and legislative bodies to review the institutional provisions, in order to guarantee their independence.

Masciandaro (2004: pp.2-3) performs a cost-benefit analysis related to the constitution of a SSA and he reaches the conclusion that there is no superior supervision framework, even if a trend to concentrate the financial supervision regimes has been lately observed: Norway (1986), Island, Austria, Denmark (1988), Sweden (1991), England and Korea (1997), Latvia (1998), Estonia (1999), Hungary (2000), Japan (2001), Malta (2002), Germany (2002) and Belgium (2004). This cost-benefit analysis is described in Table 1:

Table 1: The traditional cost-benefit analysis applied to the constitution of a SSA

	Expected benefits	Expected costs
Authority – Regulated firms relationships	Supervision costs and supervision arbitrage – decrease	Capture risks and innovation disincentives – increase
Authority – political system relationships	Independence gains – increase	Capture risks – increase
Authority – internal organization	Economies of scale – increase	Diseconomies of scale – increase
	Goal conflicts and internalization benefits – increase	Goal conflicts and internalization benefits – increase
Financial services customers	Confidence benefits – increase	Overconfidence costs – increase

Source: Masciandaro (2004: p.5)

Goodhart (2004: pp.5-6), promoting the supervision structure in England, shows that each institution (Central Bank, FSA<sup>3</sup> and Treasury) has clear established tasks in relation with the financial stability. The FSA is a supervision authority responsible for the supervision of individual financial institutions, while the central bank has the responsibility to ensure a good functioning of the payments system and, by extension, the responsibility for the supervision of the structure and soundness of the settlement and clearing system of the main financial markets: bonds market, foreign exchange market and, maybe to a smaller extent, the stock market. The author considers this function separation process a more complicated but maybe more “democratic” process.

The arguments in favour of the set up of a SSA are as numerous as those militating for the integration of the supervision function within the central banks. These arguments comprise a potential conflict between monetary policy objectives and financial stability objectives and the arguments in favour of the maintenance of a formal role for the central bank (the case of Bundesbank for example) refer to the synergy and circulation of information, in particular the maintenance of the appropriate functioning of the payment system.

Gulde and Wolf (2004: p.60) sustain only a formal involvement of the central bank in the supervision activity. The authors consider that a number of factors argue for a gradualist approach initially focusing only on the small subset of banks that can be described as multinationalal:

- the case for a multi-lateral supervisor depends on the importance of cross-border activity, spillovers and externalities;
- the potential problems identified in theory refer however to the current system of national supervision, determined by the commercial bank headquarter location and to the extensive need of coordination in respect of additional information flow;
- in the near future European banking and insurance concerns will experience substantial change in the wake of Basel II, Solvency II, and revisions of International Accounting Standards (IAS).

ECB (2001: pp.6-8) also elaborated a list of arguments in favour of the segregation of the price stability function from the supervision function and they identified three main elements in this respect:

a) *The conflict of interests between supervision and monetary policy.* A prudential concern related to the fragility of the banking system can determine the central bank to adopt a more lax monetary policy and not to pay attention to the achievement of the inflation objective, in particular in case a crisis occurs. The fundamental argument in this respect is that through the maintenance of price stability, financial stability is *de facto* ensured. Consequently, financial instability is taken into account only if and to the extent that it affects the inflation objectives.

b) *The emergence of financial conglomerates.* This argument has often been analysed during recent debates. During the last years, the close connections between banks, insurances and capital market make hard to distinguish between the individual activities of each financial conglomerate. A sectoral control can prove less efficient in this situation due to arbitrage problems<sup>4</sup>.

c) *The concentration of power within the central bank.* The assignment of the regulation and supervision tasks to an independent central bank can be considered

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<sup>3</sup> Financial Services Authority – represents the SSA for the United Kingdom.

<sup>4</sup> This refers to the possibility a company has to concentrate its activity in certain branches of the conglomerate with the purpose to get in or out of the supervision area of a certain regulation and supervision authority. The creation of a SSA would eliminate this possibility.

prejudicial due to possible abuses. The central bank can become an excessively bureaucratic institution.

Most of the studies pleading for the set up of a SSA are carried out by researchers from countries where a SSA already exists. The study performed by HFSA (2000: pp.1-17) joins the same direction. The strongest argument for the constitution of HFSA in 2000 was the improvement of the efficiency of consolidated supervision, and the improved management of the integrated agency was defined as an important task of the reforming reorganisation process. The management of HFSA contributed to the increase of financial actors' reliability and the merger of the regulation agencies highlighted the fact that certain provisions of the legislation specific for each supervised institution contradicted one another or they included unjustified discrepancies. The set up of a SSA remedied this situation.

Another argument in favour of the separation between the supervision and monetary function is the passage to universal banks which makes difficult for the central bank to separate or to make the distinction between the financial institutions which can or cannot benefit from the *safety nets* offered by the central bank.

Briault (2002: pp.6-7) advances a series of elements in favour of the unification: economies of scale, emergency of financial conglomerates, but also:

- *Neutralization of the arbitrage*. There are cases in which financial institutions supplying similar services or products are supervised by different authorities. This situation can involve the location of a certain financial service or product in that area of the financial conglomerate that supposes lower supervision costs or where the supervision is less restrictive.

- *Flexibility of regulation*. A potential advantage of the unified supervision theory resides in a more flexible supervision system. Specialized (sectoral) authorities could be hindered from acting effectively in case the judicial status gives rise to doubts or they could encounter problems when they have to face particular situations, e.g. when a new type of product or institution, which is not covered by the legislation in force, appears.

- *Creation of a specialist team*. An essential requirement for an efficient regulation and supervision is that a regulation agency has to be capable to attract, maintain and develop a group of qualified specialists. The unification can bring its contribution to this process, a unified agency can be better situated within the definition of a human resources policy, including carrier planning and staff related strategies.

- *Improvement of accountability*. The final argument in favour of the unification is that it improves the supervision related accountability. In a system with multiple supervision agencies, it may be more difficult to monitor if the regulation and supervision authorities are accountable for their performances, for the costs they determine, etc.

Mayes (2006: p.61) also puts forward the idea of a SSA, which must take the responsibility of conducting the regulation and supervision activity and also make prompt decisions regarding the problems related to capital adequacy.

Another argument for the constitution of a SSA and which is not usually described in the economic literature is the creation of the framework required to facilitate the signature of the Memoranda of Understanding (MoU) between the supervision authorities. This argument is mainly related to the need of particular financial conglomerates supervision. It is often required to involve institutions from different countries, and the conclusion of a MoU between two SSA from different countries is more practical than the signature of three or more different MoU, between the sectoral supervision authorities in the two countries.

A key factor in order for a regulation structure to be efficient is to reflect, up to a certain point, the structure of the regulated industry. For example, when the universal banks are predominant in the financial system, having significant activities on the capital markets, a combined regulation and supervision of banks and securities is preferable. Another reason for combining the activities related to banking and capital markets regulation is the fact that the risk appears in the assets side of the balance sheet. The situation is different for the insurance companies because the main risks are related to the liabilities side. However, the synergy between the banking activity and the insurance activity (“*bancassurance*” phenomenon) determined the supervision of these two sectors by a joint supervision authority in certain countries – France for example.

The set up of a SSA has to be realized taking into account the characteristics of the financial system and the international context. The development of financial conglomerates is in our opinion the main argument that highlights the importance of the flexibility of a SSA<sup>5</sup>. The increase of the number of conglomerates, in which different categories of financial institutions, both national and international, are operating, determined the regulation authorities to look for efficient methods to supervise them. Fragmented supervision can cause problems in respect of risks assessment on a consolidated basis. The experience showed that the effective supervision of various financial conglomerates imposes certain requirements related to the supervision bodies, which are not usually presented in a simple organizational structure. As we will see further on, there are solutions both for financial conglomerates supervision at national level by means of setting up mixed supervision committees, as well as for the transnational conglomerates supervision through the conclusion of MoU.

The trade-off between banking supervision and monetary policy objectives and the excessive power concentration into central banks do not stand for solid arguments for setting up a SSA. The importance of the moral hazard is overestimated because the central banks can always find the way and the instruments to impose penalties upon the managers and the shareholders of an insolvent institution. The excessive power concentration can also appear in case of a SSA constitution.

#### **4. The European regulation and supervision framework**

There are some issues related to the European regulation and supervision framework which must be clarified. The first question that arises is related to the opportunity to have a single regulation and supervision authority at European level. Secondly, we have to analyse the possibility for the ECB to play this role. Finally, we have to establish what supervision framework we should have in place in order to ensure a better coordination between national and European supervision authorities.

The economic literature provides arguments for and against a centralized supervision function. One of the objectives of the Lisbon Strategy is the establishment of a common European financial system (Goodhart, 2004: pp.12-13). This author proposes the transfer of fiscal competences in the management of bank crisis and the transfer of banks’ supervision function at central level. In his opinion, these two functions must not be separated.

At present, at European level, there are different committees monitoring the identification of systemic risk in each financial sector. These authorities have only a

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<sup>5</sup> Financial conglomerates are traditionally defined as groups of institutions which carry out activities at least in two out of the following sectors: banking, insurance, securities. They “*combine banking, insurance and investment services in a single corporation*” (Morrison, 2002: p.11).

coordination role and they do not dispose of adequate intervention instruments. They constituted together a Joint Forum for the financial conglomerates supervision which recommended the creation of a Mixed Technical Group (MTG), where supervised financial sectors should be represented.

The European supervision framework is shortly described by Gulde and Wolf (2004: pp.56-57). At European level, the regulation and supervision intervene at three levels: at the first level we have the Ecofin Council, at the second level the regulation committees vote the European Commission's (EC) proposals related to the technical measures for implementation and finally, at the third level, the committees advise the EC about the measures adopted at the second level and promote the implementation of the European Directives and of the convergence in the supervision practices. While the institutional structure includes a second level concerning the financial conglomerates (and, optionally, a third level), the strategy in place focuses on the individual supervision of each sector (Table 2).

Table 2: The framework for Formalized European Co-operation in Banking and Insurance Supervision

	Banking	Insurance	Securities	Conglomerates
Level 2 Regulatory Committees	EBC European Banking Committee	EIC European Insurance Committee (includes Pension Funds)	ESC European Securities Committee	FCC Financial Conglomerates Committee
Level 3: Supervisory Committees	CEBS Committee of European Banking Supervisors	CEIOPS Committee of European Insurance and Occupational Pensions Supervisors	CESR Committee of European Securities Regulators	

*Source: Gulde and Wolf (2004: p.56)*

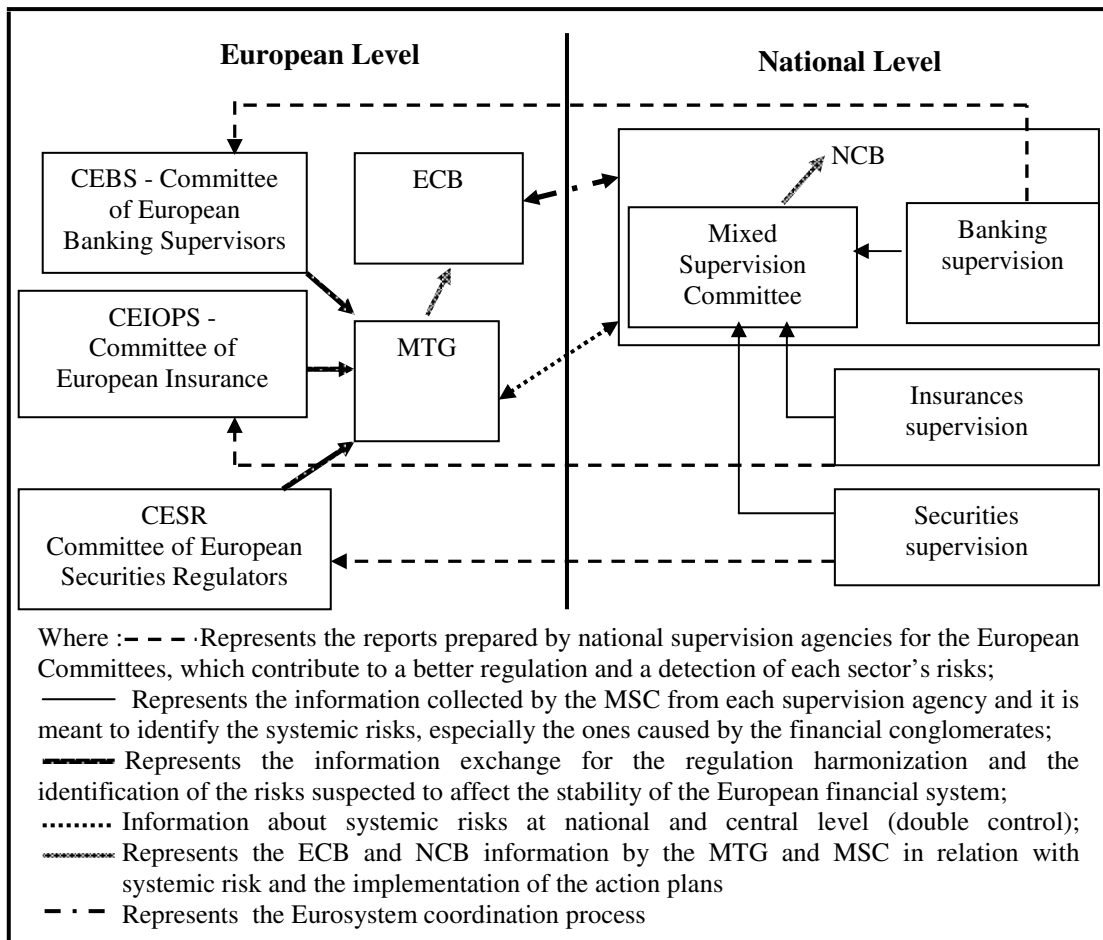
Another issue intensely discussed is the ECB role in the financial system regulation and supervision. The ECB does not have a statutory responsibility in this field and the supervision institutions act at national level. The ECB's main objective is the implementation of the monetary policy and its involvement in the supervision activity could have several implications regarding the independence, transparency and responsibilities of this institution. The loss of the ECB's reputation involves more severe consequences as compared to the loss of a national central bank's reputation.

We wonder if the ECB should not get more involved in the supervision activities. We consider that the administration of the TARGET is not sufficient to guarantee the stability of the European financial system and we are also aware that the ECB can not accomplish a centralized LOLR function. A stronger relation between the ECB and the MTG is necessary and, consequently, a much deeper involvement of the ECB in the supervision activity. The ECB must represent the link between the MTG and the national central banks (NCB) – the only institutions capable to ensure the LOLR function.

A possible supervision framework at European level which show the compatibility between the national sectorial supervision framework and the centralised supervision structure is presented in Figure 1. The difference between the centralized and national supervision framework is the location of the Mixed Supervision Committee inside the NCB. This is necessary because the NCB are the only institutions which dispose of the appropriate tools for preventing financial instability. The NCB must coordinate the Committee's actions and must take the appropriate decision as soon as

possible. At European (central) level, there is only an informative relation between ECB and MTG because the intervention instruments belong to the NCB.

Figure 1: A proposal for the European financial supervision framework



In our opinion, if, at national level, a SSA replaces the Mixed Supervision Committee and operates outside the NCB, the resulting supervision framework will slow down the decision making process in case of financial stability. At the same time, the role of the European System of Central Banks (ESCB) will be considerable reduced. In order to have a good coordination and cooperation, the national and central supervision framework must have the same structure.

Another debate in the literature regards the implementation of a European Financial Service Authority (EFSA), and this subject gained again the attention in the context of the recent financial crisis. Eijffinger (2001: p.1) considers that this preoccupation is based on banking and capital market integration trend, this institution being able to increase the overall transparency of the banking supervision, but this will also suppose the modification of the Treaty.

We raise the question if this new supervision framework will be more efficient. Without performing a cost-benefit analysis, we can reach the conclusion that a good collaboration between European and national supervision structures can occur when the two frameworks are similar. This means that each member state must implement a SSA and we showed that this is not always recommended. The Mixed Supervision Committees

can accomplish an important part of the SSA activity, especially in case of consolidated supervision.

Consequently, in countries where the banking sector prevails and where the central banks have an important supervision experience, a decentralized supervision framework is more appropriate. The NCB must act as an “umbrella” in the supervision activity (the Mixed Committees can be a distinct department within the central banks or the Financial Stability Department). Removing central banks from the bank supervision activity means a rupture between the monetary policy and stability policy at national and European level. The relationship between the ECB and NCB is not a formal one, based only on an information exchange like the EFSA – SSA relation. The SEBC implication in supervision means coordination and actions based on real intervention tools meant to ensure financial systemic stability. Even the specialists which sustain the SSA implementation agree that the supervision practices are more important than the change of the institutional framework and propose a progressive approach in the supervision framework of financial conglomerates.

### **5. The supervision’s unification trend in Europe and the Romanian case**

We described above the centralized supervision framework and a possible cooperation framework with the national authorities. We will present below the particular cases of the SSA implementation in different European countries and we will demonstrate that, at present, the unified supervision framework is not appropriate for the Romanian financial system.

In respect of the financial supervision of European Union member states, this widely differs from one country to another (Annex 1). No less than 10 countries, out of a total of 27, have implemented a SSA before 2004. These countries are: Austria, Belgium, Denmark, Estonia, Germany, Latvia, Malta, United Kingdom, Sweden and Hungary. Countries such as: Bulgaria<sup>6</sup>, Cyprus, Czech Republic, Greece, Lithuania, Romania and Slovenia dispose of a specialized supervision for each financial sector. The remaining countries have hybrid supervision institutions.

The first European countries where a SSA was implemented were the Northern Countries. The unification of the supervision was necessary after the banking crisis in the '80, when central banks failed in applying prudential supervision. Another feature of these countries is the high concentration of the financial system and the presence of financial conglomerates. The fact that the financial industry in Baltic Countries imitates the pattern of Northern Countries, constituted a sufficient reason for the implementation of a SSA in these countries too. Many banking groups from Sweden and Finland activate in Estonia and Latvia. However, a reorganization of the supervision activity was not needed here because the Baltic Countries were confident from the very beginning in the efficiency of unified supervision.

The situation was different in the United Kingdom. The FSA was created in 1997 in particular due to the inefficiency of the nine supervision agencies which performed their activity in this field. By the set up of the FSA, a tripartite cooperation agreement was signed between the Bank of England, the FSA and the Treasury. The model was also adopted by Ireland. Nevertheless, this supervision framework did not

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<sup>6</sup> Bulgaria modified the financial supervision framework by the unification of the supervision agencies for capital market and insurance sector (*Securities Commission, State Insurance Supervision Agency and Insurance Supervision Agency*). In this way, the *Financial Supervision Commission* was established, having as main purposes to protect the investors’ interests and to increase the transparency of financial markets.

prove its efficiency in 2007 when, after the *subprime* crisis in the United States, the Northern Rock from England was affected. The FSA failed in prudential supervision and the central bank had to intervene in its quality of LOLR (Butter, 2007: p.11).

The HFSA from Hungary was set up in 2000. The main reasons put forward for the reorganization of the supervision framework were the interconnection of activities in the banking sector, insurances and financial investments. At the same time, the idea of a better supervision on consolidated basis was sustained. However, another reason was the lack in legislation which resulted in supervision arbitrage.

In 2002, the BaFin was created in Germany as an SSA subordinated to the Ministry of Finance, its activity being financed by the supervised institutions. Bundesbank still has a formal involvement in supervision.

In Malta, a SSA was also set up in 2002 (*Malta Financial Services Authority – MFSA*). In this case the supervision authority is completely autonomous and it reports directly to the Parliament. The decision for setting up the MFSA was the result of the reform in the financial system legislation, like in Hungary.

In Belgium, the Banking, Finance and Insurance Commission (CBFA) was created in 2004 having as main objective to protect the deponents and the insureds. CBFA is also responsible for prudential control.

The most recent unified supervision framework was established in Poland, on the 1<sup>st</sup> of January 2008, by the set up of the *Polish Financial Supervision Authority (PFSA)*. In this case also, the main argument was the presence of financial conglomerates and their importance. Until 2008, the banking supervision was performed by the Banking Supervision Commission. It was finally proved that the supervision unification was a political decision and it does not represent the best option, the central bank remaining *de facto* responsible for the banking sector supervision in Poland.

We can see that there is a trend related to unified supervision in Europe. But not all of these SSA fulfil the independence and credibility criteria, neither do they have clearly defined objectives for ensuring financial stability. For example, in Germany, the activity of BaFin is financed by the supervised entities, situation that may lead to pressures from these institutions. In Hungary, the legislative framework gave room to interpretations and to the arbitrage phenomenon. In Poland, the supervision activity of the Banking Commission was insufficient.

Numerous studies focused on the econometric identification of those elements which determined the modification of the regulation and supervision framework. Their results show that the set up of a SSA mainly occurred in countries where the capital market has an important place, the market capitalization reaches a high level, the presence of conglomerates is significant and good governance policies are in place, policies characterized by high quality services and limited political interference in choosing and appointing the governors (Masciandaro, 2004: pp.21-22; Feyler, 2008: pp.13-15). In addition, an important factor influencing the creation of a SSA is the central banks' poor experience and involvement in the supervision activity. The independence, authority and credibility of the central bank are also important. If a weak involvement of the Central Bank represents a *status quo*, the authorities do not wish an increased involvement in order to avoid moral hazard and bureaucratic effects (Masciandaro, 2007: p.3). This is called "central bank fragmentation effect".

As Abrams and Taylor (2000: p.29) argued, the supervision unification must take into consideration at least the following key elements: prerequisites for effective supervision (independence, credibility, accountability, clear objectives); regulatory framework (presence of financial conglomerates, regulatory arbitrage problems,



coordination problems); structure of financial system (dominant banking system; presence of universal banks).

None of the above mentioned elements indicates the need to implement a SSA in Romania. The banking sector is the major component of the financial system and the NBR enjoys the independence and credibility necessary to enforce an efficient supervision. The supervision activity objectives are clearly defined and there are no arbitrage cases. The legislative framework does not leave room for different interpretations<sup>7</sup>. The problem related to financial conglomerates exists, but it can be managed by a mixed supervision committee. The Romanian supervision framework is compatible with the centralized framework and it can thus ensure a corresponding information flow.

One of the Romanian financial system features is a reduced intermediation degree and the activity of the insurance companies and financial investment companies is limited. The banking sector still remains the most important sector within the financial system. NBR presents all characteristics necessary for a supervision authority.

The financial conglomerates in Romania act mainly in the banking sector: Allianz, ING Group, Société Générale, Unicredito, San Paolo, Raiffeisen, National Bank of Greece or Alpha Bank. Most of these financial conglomerates are shareholders within Romanian banks and insurance companies. Their activity is therefore supervised by Romanian supervision authorities, being considered highly important. The national legislation (in accordance with the 2002/87/CE Directive related to the additional supervision of financial conglomerates), gives the possibility for an additional supervision to be made at the level of each group which has the characteristics of a financial conglomerate.

The NBR undertook some safety precautions to prevent the systemic risk caused by the financial conglomerates. By adopting the European legislation, the NBR has the possibility to appeal to an information exchange with the partner countries supervision authorities. Mutual information refers to foreign subsidiaries. Thereby, the NBR has concluded MoU with the regulation and supervision authorities from: Cyprus, Greece, Italy, Germany, Netherlands, France and Hungary (the origin countries of financial conglomerates active in Romania which are considered partner countries in prudential supervision).

The information exchange between national supervision authorities is also very important. In our opinion, the cooperation between the NBR and the other supervision authorities is not transparent enough, even if a collaboration agreement has been signed. This agreement stipulates: a clear tasks delimitation, professionalism and transparency, cooperation in regulation, efficiency, confidentiality and an ongoing exchange of information.

This national Agreement (Protocol) was signed on the 10 of March 2006 between NBR, NSC and ISC. The PPSSC joined the agreement in 2007. The MoU foresees quarterly Committees meetings between the decision-making bodies of the four authorities: NBR governor, the NSC president, the ISC president and the PPSSC president (or between the members assigned to represent these authorities). Five distinct Committees are stipulated in the protocol: the Financial Stability Committee; the Supervision and Control Committee; the Regulation Committee; the Payment System

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<sup>7</sup> NBR is responsible for the regulation and supervision of the banking sector while the insurance and securities regulation and supervision are ensured by the Insurance Supervisory Commission (ISC) respectively by the National Securities Commission (NSC). In 2007, the private pension funds began their activity in Romania and the Private Pension System Supervisory Commission (PPSSC) is in charge with the supervision of their activities.

Committee and the Financial Statistics Committee. Members of all the parties in the Protocol are included in the structure of these technical committees and the presidency is ensured based on a rotation procedure.

As we can see, the collaboration process has a functional disposal. In the event of a financial instability period, the information exchange can be slowed down due to this spread over structure. These separate Committees do not perform their activity within the NBR and their quarterly meetings are not frequent enough. In this case, the information exchange can prove inefficient. There is no stipulation related to the organization of an extraordinary meeting or to the conditions which can lead to such a meeting. We sustain the idea that NBR must be the leading authority in this Protocol because it is the only institution which disposes of the necessary tools to prevent a financial crisis.

At ECOFIN Council recommendations, an additional agreement was concluded in 2007 between the Ministry of Finance, National Bank of Romania, National Securities Commission Insurance Supervisory Commission and the Private Pension System Supervisory Commission for cooperation in the field of financial stability and crisis management and for facilitating the information exchange. Based on this agreement, the National Committee for Financial Stability was set up.

### **Conclusions**

The arguments for and against the maintenance of the regulation and supervision function of the banking sector within the central banks mutually equilibrate themselves, none of the two thesis eliminates the other. However, in case of an economy whose development is ongoing, including the former planned economies experiencing transition nowadays, more factors incline the balance in favour of the integration. Many central banks in these countries have been reformed and they enjoy solid guarantees related to independence (sometimes guaranteed by the constitution). Their governors' positions are very strong and the central banks have their own financing sources. As Schinasi (2003: p.15) noted, "*the central banks have a natural role in terms of financial stability*".

We have to mention that the effective supervision can not be guaranteed through the modification of the regulation structure and the recent trend to set up a SSA at European level does not always stand for the best solution. Buitter (2007: pp.13-16) considers that after the failure to prevent the financial turbulences at the end of 2007, the supervision structure in the United Kingdom proved its limitations, the FSA being inefficient. It is necessary for the central banks to remain involved in this process as they are the bodies which have available the instruments necessary to correct the imbalances.

Through their participation to the ESCB and due to the information access, the NCB can gain an advantage in terms of prudential control and systemic risk management. The NCB are both a component of the EU structures and national institutions, fact which can represent an advantage in solving international issues or issues related to the efficient functioning of the European financial system supervision. Unlike these institutions, the national supervision authorities which are distinct from the central banks have an exclusive national mandate and have only formal or sometimes informal connections with the Ministry of Finance in the respective country. In case a problem occurs, these agencies show too little interest in systemic aspects.

Nevertheless, the choice of a certain supervision regime has an endogenous nature depending on the economy and on the institutions' structure, on the context but also on the definition given to the financial stability safety nets. Moreover, it is necessary to take into account an average or a longer time horizon.

The regulation and supervision framework in Romania is a sectoral one. It reflects the structure of a financial system where the banking sector has a significant share. By the set up of mixed supervision committees between the national authorities, the compatibility with the supervision framework, under construction at EU level, is ensured and, at the same time, the decision making process gains an increased efficiency. However, the functional structure of these mixed committees should be revised to have an adequate systemic overview. In addition, taking into consideration the fact that only the NBR possesses the instruments required to correct the imbalances, the mixed committee should function under the tutelage of this institution.

We do not exclude the possibility to rethink the Romanian financial supervision in the future. One of the most important elements is the remodelling of the European supervision framework by the creation of a European Authority of Financial Services (a solution strongly rejected by the Romanian authorities at the European summit held in October 2008 with the purpose of improving the supervision activities in Europe). Another reason is the failure to cooperate in the supervision of financial conglomerates. The elimination of the NBR from the banking supervision activity does not represent a solution for the present situation and it will not improve the financial supervision framework.

### **Bibliography**

1. Abrams, R.K. and Taylor, M.W. - *Issues in the Unification of Financial Sector Supervision* - IMF WP, 213/2000
2. Bieri D.S. - *The Basel Process and Financial Stability* - Virginia Polytechnic Institute & State University, 2004
3. Briault, C., - *Revisiting the Rationale for a Single National Financial Services Regulator* - in "Financial Services Authority OP", No.16, 2002
4. Buiter, W.H., - *Lessons from the 2007 Financial Crisis* – in "CEPR Policy Insight", No. 18, 2007
5. Cerna, S. - *The Central Bank: Credibility and Independence*, Sedona Edition, Timișoara, 2002
6. Cerna, S., Donath, L., Șeulean, V., Herbei, M., Bărglăzan, D., Albușescu, C. and Boldea, B. - *Financial Stability* - West University Edition, Timișoara, 2008
7. ECB - *Le rôle des Banques Centrales en matière de contrôle prudentiel* - 2001, [www.ecb.eu/pub/pdf/other/prudentialsupcbrole\\_fr.pdf](http://www.ecb.eu/pub/pdf/other/prudentialsupcbrole_fr.pdf)
8. Eichengreen, B. and Dincer, E., - *Central Bank Transparency: Where, Why, and to What Effect?* - Conference "Central Banks as Economic Institutions", Cournot Centre, Paris, 2006
9. Eijffinger, S.C.W. - *Should the European Central Bank Be Entrusted with Banking Supervision in Europe?* - Tilburg University, 2001
10. Feyler, S. - *Conglomération financière et architecture de surveillance* – "Cinquième doctoriales de MACROFI", Aix-en-Provence University, 2008
11. Goodhart C.A.E. - *Some New Directions for Financial Stability?* - BIS  $\alpha$  Per Jacobsson Foundation, 2004
12. Gulde, A-M. and Wolf, H.C. - *Financial Stability Arrangements in Europe: A Review* - OeNB Workshops no. 4, "Constitutional Treaty for an Enlarged Europe: Institutional and Economic Implications for Economic and Monetary Union", 2004
13. Hungarian Financial Supervisory Authority - *Actions Planned and Carried Out by HFSA to improve the Efficiency of Consolidated Supervision* - 2002

14. Lybek, T. - *Central Bank Autonomy, Accountability, and Governance: Conceptual Framework* - IMF, 2004
15. Masciandaro, D. - *Central Banks or Single Financial Authorities? A political economy approach* - Bocconi University, Milan, 2004
16. Masciandaro, D. - *Divide et Impera: Financial Supervision Unification and Central Bank Fragmentation Effect* - in "European Journal of Political Economy", Vol. 23, Issue 2, 2007, pp. 285-315
17. Mayes, D.G. - *Cross-border financial supervision in Europe: Goals and transition paths* – Finland National Bank, "Valutapolitik", No. 2, 2006
18. Mishkin, F.S. - *The transmission mechanism and the role of asset prices in monetary policy* - NBER, WP 8617/2001
19. Morrison, A.D. - *The economics of capital regulation in financial conglomerates* - in "Oxford OFRC WP Series", No.8, 2002
20. Oosterloo, S. and De Haan, J. - *Central banks and financial stability: a survey* – in "Journal of Financial Stability", Vol. 1, 2004, pp.257-273
21. Quintyn, M. and Taylor, M.W. - *Should Financial Sector Regulators Be Independent?* - in "IMF Economic issue", Nr. 32/2004
22. Ribeiro, F.A., - *Central Bank: independence, governance and accountability* - Institute of Brazilian Issues, 2002
23. Schich, S. and Seitz, F. - *Changing the institutional design of Central Banks* – 1999, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=173192](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=173192)
24. Sinclair, P. - *Central Banks and Financial Stability* – in "Bank of England Quarterly Bulletin", November 2000
25. Waller, S. and De Haan, J. - *Credibility and transparency of Central Banks: new results on IFO's world economic survey* – in "CESifo WP", 1199/2004

## Annex

## Annex 1: Supervision authorities in EU countries

<i>No. crt</i>	<i>Country</i>	<i>Banks</i>	<i>Securities</i>	<i>Insurance</i>
1	Austria	U, CB	U	U
2	Belgium	U	U	U
3	Bulgaria	CB	S	I
4	Cyprus	CB	S	I
5	Czech Republic	CB	S	I
6	Denmark	U	U	U
7	Estonia	U	U	U
8	Finland	BS	BS	I
9	France	BC, B1, B2, B3	CB, S	I
10	Germany	U, CB	U	U
11	Greece	CB	S	I
12	Ireland	CB	CB	CB
13	Italy	CB, S	CB, S	I
14	Latvia	U	U	U
15	Lithuania	CB	S	I
16	Luxemburg	BS	BS	I
17	Malta	U	U	U
18	Netherlands	CB, S	CB, S	I, S
19	Poland	B	B, S	I1, I2
20	Portugal	CB	CB, S	I
21	Romania	CB	S	I
22	United Kingdom	U	U	U
23	Slovak Republic	CB	SI	SI
24	Slovenia	CB	S	I
25	Spain	CB, Bs(**)	CB, S	I
26	Sweden	U	U	U
27	Hungary	U	U	U

The initials have the following meaning: B = authority specialized in the banking sector; BI = authority specialized in the banking sector and insurance sector; CB = central banks; G = government; I = authority specialized in the insurance sector; S = authority specialized in the securities market; U = single authority for all sectors; BS = authority specialized in the banking sector and securities market; SI = authority specialized in the insurance sector and securities market.  
 (\*) = state or regional agencies

Source: Excerpt from Masciandaro (2004:pp.11-13)