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INSTITUTIONS MATTER: FINANCIAL SUPERVISION ARCHITECTURE, CENTRAL BANK AND PATH-DEPENDENCE. GENERAL TRENDS AND THE SOUTH EASTERN EUROPEAN COUNTRIES

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Abstract

We propose a path-dependence approach to analyzing the evolution of the financial supervisory architecture, focusing on the institutional role of the central bank, and then apply our framework to describing the institutional settings in a selected sample of countries. The policymaker who decides to maintain or reform the supervisory architecture is influenced by the existing institutional setting in a systematic way: the more the central bank is actually involved in supervision, the less likely a more concentrated supervisory regime will emerge, and vice versa (path-dependence effect). We test the path-dependence effect describing and evaluating the evolution and the present state of the architecture of six national supervisory regimes in South Eastern Europe (SEE): Albania, Bulgaria, Greece, Romania, Serbia, and Turkey. The study of the SEE countries confirms the postulated role of the central bank in the institutional setting. In five cases the high involvement of the central bank in supervision is correlated with a multi-authority regime, while in one case a high degree of financial supervision unification is related with low central bank involvement.

JEL Classification: G18, G28, E 58.

Key words. Financial Supervision, Central Banks, Path-Dependence, Political Economy, South Eastern Europe

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1. Introduction

Over the last few years the financial supervision landscape has been radically transformed. Many countries have made deep reforms of the architecture of financial supervision, and more are contemplating changes. In the last twenty years (1986-2006) 94% of the countries included in a large and heterogeneous sample of 102 nations chose to reform their financial supervisory setting (Figure 1).

The restructuring wave is making the supervisory regimes less uniform than in the past (Masciandaro and Quintyn 2009). In several cases the architecture still reflects the classic structure, with separate agencies for banking, securities and insurance supervision. However, an increasing number of countries show a trend towards a certain degree of consolidation of the supervisory responsibilities, which in several cases has resulted in the establishment of unified regulators, that are different from the national central banks.¹

Various studies (Barth, Nolle, Phumiwasana and Yago 2002, Arnone and Gambini 2007, Čihák and Podpiera 2007) claim that the key issues for supervision are (i)) whether there should be one or multiple supervisory authorities and (ii) whether and how the central bank should be involved in supervision. More importantly, these two crucial features of a supervisory regime seem to be related. The literature has tried to go in depth into the analysis of the supervisory reforms measuring these key institutional variables (Masciandaro 2004, 2006, 2007 and 2008), i.e. the degree of consolidation in the actual supervisory regimes, as well as the central bank involvement in supervision itself.

The descriptive analysis (Masciandaro 2004) signalled an intriguing result: the national choices on how many agencies should be involved in supervision seems to be strictly correlated with the existing institutional position of the central bank. The degree of supervisory unification seems to be inversely related with the central bank's involvement in supervision. The trade-off – and the related, so called central bank fragmentation effect – was confirmed first using a cross-country analysis of the reforms in the supervisory regimes (Masciandaro 2006) and then by going more deeply into the economics of the central bank fragmentation effect (Masciandaro 2007 and 2008, Masciandaro and Quintyn 2008, Dalla Pellegrina and Masciandaro 2008).

From a political economy point of view, the central bank fragmentation effect can be explained as a peculiar case of path-dependence effect (PDE): the incumbent policymaker, in choosing the level of financial supervision consolidation, is influenced by the characteristics that already exist in terms of the central bank position. The

^{1.} For a survey see e.g. De Luna Martinez 2003, Masciandaro 2005, and Cihak and Podpiera 2007b. The legal issues are described in Mwenda 2006.

policymaker's choices are viewed as a sequential process in which the institutional position of the central bank matters.

Notwithstanding the evidence, different questions still remain unanswered. Among others: Is the PDE able to explain the features of the financial supervisory regimes in a narrow and well defined set of countries? Can the same methodology be a useful instrument to shed light on specific case studies?

The aim of this paper is to test the PDE in describing the current features of the supervisory regime in six countries of South Eastern Europe (SEE). The paper is organised as follows. Section two presents the theoretical setup. In section three we review the institutional and empirical background. Section four describes the supervisory architectures in the six countries of South Eastern Europe. Section five applies the architecture indicators to test the robustness of the PDE in the SEE sample, providing also a comparison between their actual regimes and the supervisory setting implemented in the other European countries. Section six will put forward some conclusions as well as possible directions for future research.

2. Theoretical Background: Explaining the Path-Dependence Effect

Our theoretical framework is based on three hypotheses. First of all, gains and losses of a supervisory regime are variables computed by the incumbent policymaker, who maintains or reforms the supervisory regime, following his preferences. Secondly, the policymakers are politicians: politicians are held accountable at the elections for how they have pleased the voters. All politicians are career oriented agents, motivated by the goal of pleasing the voters in order to win elections. The main difference among the various types of politicians concerns which voters they wish to please in the first place. Thirdly, the policymakers are influenced by the institutional setting in which they operate.

The relationship among the political choices on the future of the supervisory architecture and the actual institutional position of the central bank can be highlighted using a simple model (Masciandaro 2008), which applied a general framework of political choices (Alesina and Tabellini 2003). Consider a society that wishes to assign to an elected policymaker the task of designing the optimal shape of the financial supervisory architecture, focusing on the level of consolidation of the institutional regime that guarantees the effectiveness of the financial supervision policy (thereafter the effective level of unification). The effective level y of unification is determined by the policymaker's effort a and by his ability:

$$y = a + \Omega \tag{1}$$

Ability is a random variable; for the sake of simplicity, let us suppose that Ω can assume two values only. The policymaker can be outstanding or not. Therefore the parameter can be Ω_I or Ω_H with $\Omega_I < \Omega_H$ and

$$\Omega_L$$
 with probability p

$$\Omega_H$$
 with probability $(1-p)$

$$\Omega = i.\{\}$$

Our aim is to show that taking into account the social preferences is not sufficient to explain the shape of the supervisory regime if the incumbent policymaker is career concerned. Therefore let us assume that the citizens care about the effectiveness of the supervisory regime according to a classic well-behaved concave function $\mathbf{u} = \mathbf{U}$ (y): the social welfare increases with the level of unification. Linear preferences are used:

$$U(y) = y \tag{2}$$

The policymaker will take the decision whether or not to reform the supervisory setting, taking into consideration his own personal objective function. The policymaker's effort is costly, and the convex and increasing cost function is defined as C = c (a). The reward for the policymaker is labelled R (a). The two functions are traditionally well-behaved. The policymaker's utility function is defined as:

$$R(a) - c(a) \tag{3}$$

Now we can introduce the role of the institutional position of the central bank. Let us assume that the costs of implementing a higher level of financial supervision concentration can depend on the existing institutional position of the central bank. If a high level of central bank involvement in supervision is the *status quo*, under specific conditions unified supervision is more difficult to implement, and this means that the politician's task is, *ceteris paribus*, more costly.

In order to identify these conditions, let us consider that a policymaker aiming to consolidate supervision faces two alternative paths: to create a central bank, monopolist in supervision; or to establish a single financial authority, different from the central bank.

The creation of a monopolist central bank can produce **information gains**, but can be costly for different reasons. First of all, the policymaker may dislike the implementation of a monopolistic central bank if the consequent extension of the classic moral hazard risks – which can occur when monetary policy and supervision policy are delegated to the central bank – are high (Goodhart and Schoenmaker 1995, Llewellyn 2005) (**moral hazard risk**).

Secondly, implementing a monopolistic central bank regime can also be costly when the policymaker also delegates the conduct of business controls to the central bank, an area in which central banks have traditionally sought not to be involved. Instead they prefer to focus more on stability issues (Goodhart 2007 and Bini Smaghi 2007) (**conflict of interests risk**). Thirdly, the policymaker has to take into account

the risks of increasing the bureaucratic powers of the central bank (**bureaucracy risk**). Table 1 documents possible country cases where the political wish to avoid excessive concentration of bureaucratic power can explain the recent evolution of the supervisory setting. In the perception of the HH policymaker the overall evaluation of the bureaucracy risk can take into account different factors. For example, the risk that the central bank, given its bureaucratic power, will please the banking and financial industry (captured central bank), or the possibility that the central bank abuses its degree of institutional independence.

But also the alternative solution – establishing a unified supervisor outside the central bank – can face difficulties caused by the central bank position. In fact, the policymaker may face costs in establishing a single financial authority – and thus reducing the central bank's involvement in supervision – if the central bank's reputation is high (**reputation risk**). At the same time, however, if the reputation of the central bank is low, or decreasing, the establishment of a single financial authority is more likely to occur. The role of reputation can work in both directions. Historical cases are described in Table 1.

Therefore, we identified four different potential reasons to explain what we called the PDE: the more the central banker is involved in supervision, the less likely a unified supervisor will be established. Whatever the effort of the policymaker, the central bank involvement in supervision can increase the costs of implementing a financial supervision unification. But under which conditions does the PDE become relevant in explaining the policymaker's decisions on the shape of the supervisory architecture?

The sequence of events is as follows. Society chooses to delegate to the policy-maker the task of designing the level of supervisory unification. Next, the policy-maker decides to maintain or to reform the supervisory regime, choosing effort a, before knowing his ability Ω in implementing this particular policy task. Finally, nature chooses Ω , outcomes are observed and the reward is paid.

The incumbent policymaker wishes to be re-elected. Now we can take into account the possibility that two different types of policymakers exist (Masciandaro and Quintyn 2008). On the one hand, one can adopt a *helping hand* (HH) *view* (Pigou 1938) of the policymaker: he is motivated to improve general welfare. The HH policymaker chooses to maintain or reform his country's supervisory structure in an attempt to improve the efficiency of overall resource allocation. From the policymaker's point of view implementing this task is convenient if his re-election is more likely to occur if the citizens' utility exceeds a threshold W. Denoting by β the value of office and by α_1 the effort, the reward function – given (1) and (2) – for the HH policymaker is:

$$R(\alpha_1) = \beta \Pr(U \ge W)$$

$$R(\alpha_1) = \beta \Pr(\alpha_1 + \Omega \ge W) = \beta \Pr(\Omega \ge W - \alpha_1)$$

$$0 \le R(\alpha_1) \le \beta$$

Given the citizens' threshold, we consider here the more general case², when every policymaker – outstanding or not – can be potentially able to extract benefits fulfilling the mandate of reforming supervision:

$$\Omega_L \ge W - \alpha_1$$
; then $\Omega_H > \Omega_L \ge W - \alpha_1$ and therefore $\Pr(\Omega \ge W - \alpha_1) = 1$ and $\Re(\alpha_1) = \beta$

Voters are rational. They realise that the alternative to re-electing the incumbent is to get another politician with average ability. It follows that:

$$W = \alpha^e + \Omega_{AV}$$
 with $\Omega_{AV} = \frac{\Omega_L + \Omega_H}{2}$

Where α^e are the voters' expectations. The HH policymaker chooses effort before observing his talent in implementing the supervisory regime reform, taking the expectations as given. The utility function of the politician is:

$$R(a_1) - c(a_1) = \beta \Pr \left(\Omega \ge \frac{\Omega_L + \Omega_H}{2} + a^e - a_1\right) - c(a_1)$$

The function can assume the following value:

$$R(a_1) - c(a_1) = \begin{cases} \beta - c(a_1) & \text{if} \qquad \Omega_L + a_1 \ge \frac{\Omega_L + \Omega_H}{2} + a^e \end{cases}$$

where $\Omega_L + \alpha_1 = \Omega(\alpha)$ — given the expectations α^e and the skills of the policymaker Ω_L and Ω_H — can be considered the re-election condition (Figure 1, second graph). The re-election condition depends on the policymaker's effort only. Which is the optimal effort? Given the re-election condition, and the value of the office β , the policymaker will decide if and how to implement the supervisory reform — i.e. the optimal effort level α_1 — taking into account the marginal cost of implementation (Figure 1, first graph).

It is evident (Figure 1) that the interest of the HH policymaker in implementing a greater level of supervisory consolidation will depend, *ceteris paribus*, on the cost level. In particular, if the PDE holds, for any level of effort, the more the central bank is involved in supervision, the greater the shift up of the costs level will be, and consequently the smaller the likelihood of a supervision consolidation (the optimal level of effort becomes progressively smaller). If the welfare costs become greater than the value of the office, for the HH policymaker it is not convenient at all to use the supervisory reform to increase his probability of re-election ($\alpha^*_1 = 0$). The citizens will

^{2.} See Masciandaro 2008 for a general discussion.

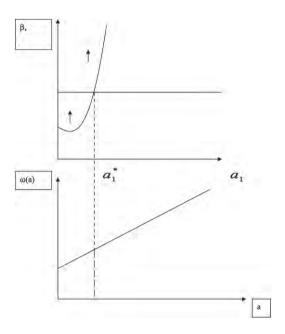


Figure 1: The HH Policymaker decision on the optimal level of effort in implementing the supervisory reform

not appreciate a supervisory reform whose social losses are greater than the social benefits. The *status quo* – low consolidation in supervision with high involvement of the central bank – will be confirmed. Obviously, if the HH policymaker evaluated that the increasing involvement of the central bank in the supervision does not imply greater costs – i.e. the risks of moral hazard, bureaucratic excessive power, conflict of interests, reputational losses are negligible, while the information gains in having the central bank deeply involved in supervision are potentially high – the reform will be more likely to occur, producing an "inverse" PDE: the high involvement of the central bank in the supervision will be consistent with high level of supervisory consolidation.

Returning to the features of the policymaker, we can use alternatively a *grabbing hand* (GH) *view* of the political process (Shleifer and Vishny 1988). According to the GH approach, the policymakers are motivated by the aim to please the interest of specific, well-defined voters. In our case, the financial industry may be considered a highly organised and powerful interest group. The GH policymaker, in defining the supervisory setting, depends on the market view of supervision, if this univocally determines his re-election.

The preferences of the financial constituency can be written as:

$$V = (1 + \delta)y_2 - f$$

The parameter δ represents the importance of the supervisory consolidation goal for the financial constituency. Using δ we can study explicitly the possibility that the central bank should be a captured institution. In fact if we consider the existence of a financial lobby, we have to take into account the possibility that also the central bank should please the financial constituency. If the central is a captured agency, δ is equivalent to the degree of central bank involvement in supervision: the more the central bank is involved in supervision, the greater the financial constituency's interest in implementing a more consolidated supervision ($\delta \geq 0$). Alternatively, if the central bank is an independent agency, the more the central banker is involved in supervision, the smaller the financial industry's preference toward more consolidation in supervision ($\delta \leq 0$), in order to avoid the risk of giving more power to a noncaptured central bank.

The parameter f represents the campaign contributions; their purpose is to determine the incumbent's chances of winning the elections. Let us assume that the policymaker's effort devoted to implementing the supervisory regime is observable by the financial constituency; the financial professionals can be considered insider agents with respect to the other citizens. Therefore the campaign contributions can be contingent upon the policymaker's effort: $f(a_2)$; for simplicity $f = ka_2$. The GH policymaker chooses effort, taking into account the lobby goal function, as well as the usual social potential costs of implementing the reform, linked to the central bank's involvement in supervision. The utility function of the GH policymaker is:

$$R(y_2) = \beta V = \beta \left[(1+\delta)y_2 - f \right] = \beta \left[(1+\delta)(a_2+\Omega) - ka_2 \right]$$

$$R(y_2) - C(a_2) = \beta \left[(1+\delta)(a_2+\Omega) - ka_2 \right] - c(a_2)$$

$$R(y_2) - C(a_2) > 0$$

$$\beta \left[(1+\delta)(a_2+\Omega) \right] > (\beta k + c)(a_2)$$

Other things being equal, the level of revenues $R(y_2)$ and the level of costs $C(\alpha_2)$ of the GH policymaker depend both on the effort α_2 in implementing the supervisory reform (Figure 2). In equilibrium the optimal effort α_2^* will equate marginally costs and benefits (provided that $|\beta(1+\delta)| < (\beta k + c)|$).

The interest of the GH policymaker in implementing a greater level of supervisory consolidation will depend, *ceteris paribus*, on how captured the central bank is — i.e. effect on \circ of the central bank involvement in supervision — and notwithstanding the costs in increasing the consolidation — i.e. effect on c of the central bank involvement in supervision. If the central banker is captured (\circ > 0), it

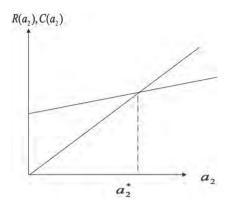


Figure 2: The GH Policymaker decision on the optimal level of effort in implementing the supervisory reform

is more likely that the financial constituency likes the supervisory consolidation and the reform will be implemented: the costs level will determine the optimal level of effort α_2^* of the GH policymaker. Under these conditions a central bank unification effect is more likely to occur: we will have the "inverse" PDE: the more the central banker is involved in supervision, the more likely a unified supervisor will be. Otherwise, the more the central bank is independent from the financial constituency (d < 0) the smaller the policymaker's effort in implementing the supervisory reform and a supervisor different from the central bank is more likely to be established. If the central bank is a strong, independent one (d < -1), the GH policymaker ($\alpha_2^* = 0$) will prefer the status quo — low consolidation in supervision with high involvement of the central bank — and we will have again our PDE.

Let us summarise the main findings. If the policymaker acts as an HH type the central bank involvement in supervision can be viewed as an obstacle in the supervision consolidation if at least one of four reasons — moral hazard, conflict of interest, bureaucracy power and reputational losses — is present. The PDE is likely to occur. If the policymaker chooses to please the financial community acting as a GH type, the PDE is less likely to occur, provided that the financial community likes a more consolidated supervision, and the central bank is a captured one. If and only if these assumptions hold we can disentangle the effect of different types of policymakers on the relationship between financial supervision unification and central bank involvement. Otherwise a signal extraction problem occurs. For example, other things being equal, if the central bank is not a captured one and the policymaker acts as a GH type, the PDE is more likely to occur again.

3. Institutional and Empirical Background: Measuring and Testing the Path-Dependence Effect

Our theoretical framework predicts the possibility of different degrees of unification in the design of the supervisory structure, depending on the type of policymaker involved, and on the features of the parameters of the model; in particular our attention has been focused on the institutional role of the central bank in supervision, in order to shed light on the PDE.

In the real world, the type of policymaker — as well as all the structural and institutional channels which influence his behaviour — is a hidden variable. At each point in time, we can only observe the politicians' decision to maintain or reform the supervisory structure, in particular its level of unification. Therefore the next step is to measure the degree of unification in the actual supervisory regimes, as well as the central bank involvement, which represents our key explanatory variable.

How can the degree of unification of financial supervision be measured? This is where the financial supervision unification index (FSU Index) proposed in Masciandaro 2004 and used in Masciandaro 2007 and 2008 comes in (description in Table 2). This index was created through an analysis of which and how many authorities in the 102 countries examined are empowered to supervise the three traditional sectors of financial activity: banking, securities markets and insurance³. The country sample depends on the availability of institutional data⁴.

To transform the qualitative information into quantitative indicators, a numerical value has been assigned to each type of regime, in order to highlight the number of the agencies involved. The rationale by which the values have been assigned simply considers the concept of unification of supervisory powers: the greater the unification, the higher the index value⁵.

Figure 2 shows the distribution of the FSU Index. On the one hand there are 42 countries (41 percent of the sample) with a low consolidation of supervision (the Index is equal to 0 or 1). On the other, there are 31 countries (30 percent) that established a unified supervisor or that adopted the peaks model, with a high level of supervisory consolidation (the index takes the value 6 or 7).

^{3.} Sources: for all countries, official documents and websites of the central banks and the other financial authorities. The information is updated to 2006. See Table 2.

^{4.} In the empirical analysis we do not include the very small countries and territories (Bahrain, Bermuda, Cayman Islands, Gibraltar, Hong Kong Maldives, Netherlands Antilles, Singapore and United Arab Emirates) with a single financial authority so as to avoid an evident bias in the empirical analysis.

^{5.} For more information see Masciandaro 2004 and 2008.

Now we will consider what role the central bank plays in the various national supervisory regimes. We use the index of the central bank's involvement in financial supervision: the Central Bank as Financial Authority Index (CBFA) (description in Table 2). Figure 7 shows the distribution of the CBFA Index. In the majority of countries in our sample (45) the central bank is the main bank supervisor (the Index is equal to 2), while in few countries (10) the central bank is involved in the overall financial supervision (the Index is equal to 4).

It is interesting to note that, in general, the present degree of central bank involvement has been established in previous years, and then confirmed in subsequent reforms; this observation is consistent with our path-dependence approach. In fact, for each country we compare the year in which the present degree of central bank involvement in supervision was established (i.e. definition of the CBFA Index, blue line), with the year of the most recent reform of the supervisory architecture (i.e. definition of the FSU Index, red line) (Figure 4). Given the data of 88 national reforms of the supervisory architecture, the central bank involvement was confirmed in 67 cases (76%), decreased in 16 cases (18%), increased in 5 cases (6%).

The natural next step in our analysis of the supervisory regimes is to bring both indexes together. The result is shown in Figure 8 where we see that the two most frequent regimes are polarised: on the one hand, the Unified Supervisor regime (18 cases, red ball); on the other, the Central Bank Dominated Multiple Supervisors regime (31 cases, yellow ball). The figure seems to depict a trade off between supervisory unification (or consolidation) and central bank involvement, notwithstanding eight outliers (green balls).

Now, considering both indexes for the countries in our sample (Figure 5), the analysis shows that the two most frequently appearing regimes are the extremes: on the one hand, Unified Supervisory regime (13 cases, red ball); on the other, Central Bank Dominated Multiple Supervisors regime (27 cases, white ball). The Figure seems to depict a trade off between supervision unification and central bank involvement, with two outliers (green ball).

Is the PDE valid in our expanded sample? Looking at Figure 5 the answer to this question seems to be "yes", although it needs to be a cautious one. In fact, while it seems to be true that the more common supervisory regimes are the two polarized ones, we also need to recognize that the number of outliers — i.e. regimes where both the consolidation and the central bank involvement increase — is greater compared with the previous studies on the issue.

To perform a closer inspection of the data, we compare the features of the supervisory regimes across time, maintaining the country sample constant. We consider that the existence of the PDE has been confirmed using a sample of 88 countries, with information updated during 2006 (Masciandaro 2008). Using the same country sample, from that time to today other reforms were implemented, producing changes both in

the supervision consolidation and in the central bank involvement, and consequently in the overall shape of the regimes. We calculated the average levels of the FSU index and of the CBFA index in 2006 and in 2009: the level of consolidation is greater — from 2.88 to 3.34 — but the same is true for the degree of central bank involvement in supervision — from 1.76 to 1.84.

Then we analysed how many countries adopted each supervisory regime in 2006 and in 2009, comparing the two situations. The number of countries which adopted the unified regime outside the central bank increased — from 13 to 18 — while the number of countries with central bank dominated regimes went down — from 27 to 25 — but also the number of outliers — unified regimes inside the central bank — is larger — it went from 2 to 4. These figures seem to indicate that only the consolidation process continued for sure, irrespective of the location of the unified powers. In any case we have to devote more attention to the future evolution of the PDE.

Finally, it is possible to empirically investigate the robustness of the PDE (Masciandaro 2007 and 2008, Masciandaro and Quintyn 2008, Dalla Pellegrina and Masciandaro 2008). Following our theoretical setup, each policymaker — either the HH type or the GH type — maximises his objective function and determines his optimal level of supervision unification, given the features of the structural variables. The result that emerges is a significant inverse relationship between supervision unification and central bank involvement. So far the PDE matters.

4. Supervisory Architectures and Central Bank Role in SEE countries

The preceding sections pointed out that the existing institutional role of the central bank — i.e. the status quo — can explain the future evolution of the supervisory architecture. Both the theoretical model and the econometric analysis claim the robustness of the PDE. Now we wonder if the path-dependence approach can be useful in exploring the features of the supervisory architectures in a selected sample of countries. It might be interesting to ask if the PDE is evident in the six SEE countries. Finding a response would help us not only to interpret what has happened in the past but also to project scenarios of change for the future, with a particular focus on prospects within the European Union framework.

In order to analyse the supervisory architecture, we first describe the six supervisory regimes.

4.1 Albania

During the last fifteen years, Albanian financial services have undergone major changes in the process of transition from a centralized economy, starting at the beginning of the 1990s. Albania inherited a underdeveloped financial sector from the communist regime. The weakness of financial institutions was the major factor responsible for the development of pyramid schemes. The collapse of these schemes dragged

the Albanian financial system into a crisis in 1997. The Government tried to resolve the crisis by issuing new sets of rules and regulations. As part of the IMF-supported emergency program, a new banking law was approved in July 1998 establishing a two-tier banking system in which the Bank of Albania (BoA) was given the role of supervisor of the banking system. Amendments to the banking law further strengthened the role of the BoA and the financial system. Besides the BoA, there is also the Albania Securities Commission and the Insurance Supervisory Authority (table 6).

Bank of Albania

First established in 1913, the central bank did not survive during the First World War. The period between 1925 and 1944 was characterized by attempts to establish a National Bank of Albania and then, during the period 1944-1992, by the establishment of the State Bank of Albania with both the function of a central bank and a commercial one. Finally with Law No. 7559 'On the Bank of Albania' of 1998 a two-tier system was created with the Bank of Albania performing the function of a central bank. Moreover, the law gives the BoAa the function of supervisor of the banking system. According to the above mentioned law, the Banking and Supervision Department was created to perform supervisory functions and prepare the regulatory framework of the Bank of Albania. New regulations were, in fact, drafted during the succeeding years by the Supervision Department, also to integrate into Albanian banking legislation the provisions of the Basel Committee Principles. The year 1998 can be considered as the year when further steps in the area of financial supervision were taken, starting from the amendment to the regulation "On the Bank of Albania" (law no. 8269/1997) and regulation on "On banks in the Republic of Albania" (law no. 8365/1998) which stipulates that the Bank of Albania is the sole authority to issue licenses and to regulate and supervise all the banks in the Republic of Albania. These amendments were made urgent by the fact that the banking system in Albania was gradually changing, and by the crisis in 1997.

Following the provisions contained in the 'On the Bank of Albania' law as amended in 1997, the BoA is an entirely independent institution, accountable to the Albanian Parliament (People's Assembly) and responsible for the implementation of monetary policy and supervision of the banking system. As stated in art. 41 of the statutes of the BoA, the management of the Bank is represented by the Supervisory Council, consisting of a Governor and of two Deputy governors. The Supervision Department reports to the First Deputy Governor.

The President of the Republic of Albania appoints the Governor of the Bank, at the Prime Minister's recommendation. The Minister of Finance has the right to attend meetings of the Supervisory Council of the BoA, even though he is not entitled to vote.

Banking legislation received a recent contribution in the form of the Law 'On Banks of the Republic of Albania', No. 9662/2006 which contains in its Chapter VI detailed provisions about the process of issuing and revoking licenses by the Bank of Albania.

If the Commission — see below — is the supervisory authority for issuing licenses into the securities market, the Bank of Albania has the authority to establish a securities market. Moreover, the Bank established also a Supervisory Board for the Stock Market in order to supervise the activity of the stock exchange and to change its regulations. The BoA may, in fact, issue directives and also demand amendments to the regulations of the securities market.

Albanian Securities Commission

It was initially established by Law 8080/1996 as an independent authority and its main aim is to regulate and supervise the securities market. It is composed of five members that are proposed by the President and appointed for five years. The main function of the Commission is to issue licenses for securities' traders and supervise the management and the operation of all the licensed companies. According to the recent IMF FSAP report (2005), the securities market is at a very early stage of development, with little market activity. Fees for licensing, approvals and all other activities should be the main funding sources allowing it to operate financially independently. The Commission is in fact still dependent on funding from the Government, because of the low level of activity in the market.

Insurance Supervisory Authority

The legal framework regulating the supervision of the insurance sector is contained in Law 7506/1991 and Law 8081/1996. The ISC mainly concentrates on the supervision of the financial status of insurance companies. Operating in the insurance sector is subject to approval from the ISC, which also issues decision and regulations relevant to the operation of insurance companies.

4.2 Bulgaria

In Bulgaria two financial supervisory authorities can be identified (Table 7): the Bulgarian National Bank (BNB) and the Financial Supervision Commission (FSC).

Bulgarian National Bank

The BNB was established in 1879 even though it acquired the status of central bank only with the Law on the Establishment of the Bank in 1985. Since then, the legal framework has further defined and extended the competencies of the BNB. In 1926, after a period of crisis during which the Bank operated under the direction of the

Ministry of Finance, the BNB, according to a new BNB Law, gained the status of a real central bank. It was also the first time that the regulatory power of the Bank over the banking system was strengthened together with its independence, especially with respect to decision of government lending. The period between 1947 and 1989 was the time when a state monopoly of banking was established by the Communist Party and the BNB lost most of its independence. After 1980 a two-tier banking system was created with the BNB playing the role of a central bank issuing institution. At the beginning of the 1990s, BNB regained part of its lost independence: in 1992 a new Law on Banks and Lending restored the existence of central banking and commercial banking. The year 1997 represents an important year for the general reorganization of the functions and status of the BNB. The new BNB Law reorganised the monetary system creating a Currency Board Arrangement and three new departments: the Issuing, the Banking and the Banking Supervision Department. Successive amendments to the Law of the BNB, for example in 2005 and 2006, strengthened the financial and institutional independence of the BNB and its duties in the design of monetary policy and the stability of the financial sector. Specific supervisory provisions of the BNB on the banking system are contained in the Law on Credit Institutions, recently approved by the Bulgarian Parliament (July 2006 and amended in 2007). As stated in art.1 ch.I, this law contains terms and procedures for granting licenses and conducting activities and supervising credit institutions in Bulgaria. The BNB is the only financial authority that can grant and revoke licenses to banks.6

In operating its supervisory role, the BNB is independent (art. 44, ch.7 of the Law on the BNB) and accountable to the National Assembly to which it has to present an annual report. The managing board is constituted by a Governing Council, a Governor and three Deputy Governors. The Governors are elected by the National Assembly, which elects also the Deputy Governors. The other three members of the Governing Council are appointed by the President of the Republic.

Financial Supervision Commission

The FSC was created in 2003 through the merger of the former Insurance Supervisory Agency, the State Insurance Supervision Agency and the National Securities Agency, which became Departments of the new FSC (FSC Act, promulgated in January 2003, art.10). The FSC is now the only financial supervisory authority for the security and insurance sector. It is an independent authority accountable to Parliament and it is composed of seven members, the Chairman, the Deputy Chairmen and the other Commissioners, all elected by the National Assembly.

^{6.} However, Article 14 of the law also stipulates that the BNB shall first consider the written statement of the Financial Supervision Commission before licensing a bank.

4.3 Greece

The legal framework regulating the financial sector in Greece is fragmented in different codes, laws and regulations because there has not been a systematic codification of all the laws. In particular, the Ministry of Economy and Finance has issued Ministerial Decisions to regulate specific issues related to the financial sector while the Ministry of Development has regulated the private insurance sector. The three authorities of financial supervision are the Bank of Greece (BoG) for the banking sector, the Hellenic Capital Market Commission (HCMC) for the capital market and the Financial Supervisory Committee for Private Insurance (Table 8).

Bank of Greece

As stated in Art. 2 of its statutes, it is the supervisory body for all the banks and credit institutions operating in Greece. It was founded in 1927 and started its operation in 1928. The legal framework for the operation of the BoG is represented by its statutes, first ratified by Law 3424/1927 and amended several times. The statute does not state explicitly that the BoG is an independent institution but only that the BoG should not take instruction form the government or any organization and that the government or any other political authority should not try to influence the operations of the BoG. The General Meetings of Shareholders were given a wide range of powers, ranging from the approval of the annual report to the election or removal of members of the General Council, and the proposal to amend the Statutes (these proposals should be submitted to the Parliament through the Government). The Minister of Finance may nominate a Government Commissioner with the right to attend the General Meeting of the Shareholders without having the right to vote. The General Council is entitled to make all the other decisions and powers not specifically reserved to the General Meeting. It is composed of the Governor and two Deputy Governors, two members of the Monetary Policy Council and six Councillors. The Governor and the Deputy Governors are appointed for a 6-year term at the proposal of the Council of Ministers. The General Council should approve an annual report to be then submitted to the Annual General Meeting. Moreover the Annual General Meeting shall elect 3 Auditors to examine the balance sheet of the bank. The statutes also clearly indicate the circumstances in which the Governor and other members of the General Council may be relieved of their office. The dispositions about prudential supervision of the BoG are contained in Art. 55A of the Statutes. The BoG has regulatory and supervisory power over all credit institutions, including the right to impose sanctions and penalties.

The main changes to the legal framework were introduced during the last decade, mainly due to the adoption of EU directives. In fact, the pursuit of business by credit institutions is mainly governed by Law 2076/1992 which incorporated into Greek banking legislation the 2nd Banking Directive (89/646/EEC, as codified by Directive

2000/12/EC). This law contains dispositions about the procedures for granting and withdrawing licenses.

The two most important amendments were intended to modernize the operation of the BoG, in line with the provisions of the Treaty of the EU. The new Statutes explicitly state that the Bank's primary objective is to ensure price stability; they safeguard the Bank's independence and establish its accountability to Parliament, create a new body at the Bank of Greece, the Monetary Policy Council, and recognize the Bank's legal integration into the Euro system.

Hellenic Capital Market Commission

The HCMC was initially created by Law 148/1967 as a special Committee of the Ministry of Economy and Finance without legal personality. It obtained legal personality in 1991. In fact, as stated in Law 1969/1991, the HCMC is a self-governing institution operating under the jurisdiction of the Ministry of National Economy with the aim of supporting the stability of the capital market and supervising the operation of market participants, ensuring the protection of investors and the sound operation of the stock market. The amendments contained in Law 2324/95 introduce a legal framework that establishes the HCMC as an independent authority. In accordance with Law 1969/91 and following amendments, in particular those contained in Law 2396/96, the CMC can issue regulatory provisions, grant and revoke licenses, impose sanctions, enforce the applicable legislation and draft the annual budget. It is composed of a seven-member Board of Directors and a three-member Executive Committee. The Minister of the National Economy appoints the Chairman and the two Vice-Chairmen of the Board for a five-year period. The remaining four board members are selected by the Minister for the National Economy among the candidates proposed by the BoG, the Board of Directors of the Athens Stock Exchange, the Union of Institutional Investors and the Federation of Greek Industries. The CMC is financed by fees and contributions paid by the supervised entities and it also receives funding from the government. The Law also establishes accountability arrangements for the HCMC.

Financial Supervisory Committee for Private Insurance

Until recently, the Directorate of Insurance Enterprises and Actuaries of the Ministry of Development (that was previously under the Minister of Commerce) was the competent supervisory authority for the supervision of the insurance sector. It was responsible for granting authorization for the establishment and operation of insurance companies as well as for exercising administrative and financial supervision of these companies. The Ministry exercised prudential supervision over the solvency and accounting of insurance companies, as well as conduct-of business regulation. Moreover, the Ministry of Development was responsible for imposing monetary sanctions

in cases of non-compliance with the legal framework. The supervision of insurance is currently in transition. Law 3229/2004 establishes the Financial Supervisory Committee for Private Insurance as the authority responsible for the regulation and supervision of the insurance sector under the supervision of the Ministry of Finance. The new authority will be administered by a nine-member Board of Directors composed as follows: the Deputy Chairman, who will be the President of the Association of Greek Insurance Companies and representatives of the Consumer Protection Directorate, the Hellenic Actuarial Society, a representative of the Insurance Brokers Association, as well as representatives of the Ministry of Finance and the Ministry of Development, two assessors and a representative of the Guarantee Fund. The Authority will be funded by contributions from supervised insurance companies and the State budget.

Together with this new supervisory authority, a Coordination Board will be created consisting of the Director of the Bank of Greece and the Chairmen of the Capital Markets Committee and the Insurance Committee The aim of this Board is to promote cooperation between the three existing supervisory authorities and to formulate proposals for the introduction of supervisory regulations for financial institutions and to promote the unification of the three supervisory bodies.

4.4 Romania

Romanian financial services have undergone a general process of reshaping and redefinition in order to meet the EU criteria for accession. This has been accompanied by a progressive strengthening of the legal framework for financial operations. Romania has three financial supervisory authorities (Table 9): the National Bank of Romania (NBR), the National Securities Commission (NSC) and the Insurance Supervision Commission (ISC).

National Bank of Romania

The NBR, established in 1880, is — through its Supervisory Committee — the only supervisory authority for the banking system. Between the late 1940s and the end of the 1980s, the NBR lost its identity as a central bank because it was reduced to a mere financial instrument in the hands of the Government. By the end of the Communist era, in 1991, with Law 34/1991 it regained the status and functions of a central bank. But we have to wait until 1998 with Law 101/1998 (the Banks Act) to have a ruling status for the NBR which represents the legal framework of the Bank, establishing that the NBR has legal identity as central bank, and extends its functioning in the directions of monetary policy and prudential supervision. This law has been recently replaced by the NBR Act contained in Law 312/28 of June 2004 which clarifies primary objectives and tasks of the central bank, from the implementation of monetary policy to the authorisation, regulation and prudential supervision of credit

institutions. In particular, art. 25 of chapter V of the Law recalls also the provision contained in Law 58/1998 (the Banking Act), which established that the NBR must ensure the sound functioning of credit institutions, may issue licenses and regulations, norms, orders and circulars, take measures and apply sanctions to those institutions that do not respect the criteria promulgated by the central bank. In operating its statutory functions, the NBR is managed by a Board of Directors composed of nine members appointed by the Parliament for a period of five years. The NBR is accountable to the Parliament, to which it is obliged to present an annual report.

National Securities Commission

The NSC succeeded the Securities Agency established by a government ordinance 18/1993 as a general department of the Ministry of Public Finance. It was established by Law 52/1994 as the autonomous authority responsible for securities and the stock exchange, with legal personality. Its functions in terms of regulation and supervision have been strengthened by Law 129/2000 and successively by a new law approved in 2002 (the Statute of the NSC, Law 514/2002). The NSC is composed of seven members appointed by the Parliament, who can be dismissed according to the legal provisions. It is accountable to the Parliament, to which it has the obligation to submit an annual report. Its members may be dismissed by the Parliament only according to the conditions expressed by the Statute of the NSC. The NSC's revenues come from fees charged to the regulated entities for the supervisory services carried out. The Commission is the only legal authority with powers of licensing, authorizing and issuing norms and regulations regarding supervision in the security market.

Insurance Supervisory Commission

Like the NSC, the ISC was created to replace the former authority responsible for the insurance market, the Supervisory Office of Insurance and Reinsurance Activity of the Ministry of Public Finance. It is an administratively and financially autonomous authority set up through Law 32/2000 (the Insurance Regulatory Act). It is managed by a Council composed of five members, all appointed by Parliament. Its organization has been constantly improved and changed: the current organization includes specialized directorates The ISC now represents the only authority responsible for the authorization, supervision and regulation of the insurance sector.

4.5 Serbia

In Serbia two financial supervisory authorities can be identified (Table 10): the National Bank of Serbia (NBS) and the Securities and Exchange Commission (SEC). The process of reorganization and development of financial supervision in Serbia started in the beginning of the 1990s with a general transition toward a market econ-

omy. During the early stages, the financial sector was affected by political difficulties in the Balkan area and the economic downturn caused by the war. The end of the war and the ensuing further growth increased the necessity to provide a legal framework for the changes in the financial system. The recent developments demonstrate that the country is indeed constructing a legislative framework that a growing financial sector requires. New Laws were passed in order to organize some sectors, like the securities market, that were still not well established. From the point of view of financial supervision and regulation, the country is also further developing and refining its framework in response to emerging needs.

National Bank of Serbia

The NBS was established in 1884 under the name Privileged National Bank of the Kingdom of Serbia. Right after WWII, the Bank was nationalized under the name National Bank of Yugoslavia. In 2003, following the break-up of Yugoslavia after the war, the central bank was named the National Bank of Serbia, as an autonomous and independent institution of the Republic of Serbia. Functions, objectives and the organization of the NBS are governed by the Law on the National Bank of Serbia No. 72 of July 2003. It is the institution responsible for the conduct of monetary policy and for the supervision and the licensing of credit institutions. The main bodies of the NBS are the Monetary Board, the Governor and the Council. Management of the operations of the bank is in the hands of the Governor who is appointed by the Parliament for a five-year term. The five members of the Council are also appointed by the Parliament. The NBS' powers concerning the supervision and the regulations of the financial sector involve the issuing and withdrawal of licenses for bank and credit institutions, the adoptions of rules governing prudential standards for banking operations, the supervision of banks' adherence to prudential standards and the provision of regulations governing the licensing process. The Law on the NBS further stipulates that in carrying out its responsibilities the central bank acts as an autonomous and independent institution. The recent Supplement to the Law on the NBS No. 55/2004 extends the supervisory role of the NBS to the insurance sector (issuing of insurance, reinsurance, brokerage licenses) which was previously one of the roles of the Ministry of Finance.

Securities and Exchange Commission

The SEC is a separate independent legal agency established in 1990 for regulating and supervising the securities market in Serbia and protecting investors. It consists of a chairman and four other members appointed by the Government. Its function is to ensure financial discipline in security trading, to issue licenses for financial exchange and supervise the operation of various actors in the financial market. The Commission also has regulatory powers. In order to carry out its functions the Commission

is financed through fees from the supervised entities. When fees do not cover the operating costs, the state budget will cover the difference.

4.6 Turkey

Two financial supervisory authorities operate in Turkey (Table 11): the Banking Regulation and Supervisory Agency (BRSA) and the Insurance Supervisory Office (ISO). Turkey started to modernize and liberalize its financial sector in the late 1980s. During the past two decades, in fact, the Turkish financial system has undergone a transformation toward liberalization in term of corporate governance of the participants and in terms of legislative provisions governing the financial services. The Turkish economy has been hit by three different crises during the last 15 years (1994, 2000 and 2001). The last one has driven the banking and financial sector into a severe downturn. The Turkish authorities, recognizing the structural problems of the economy, made important changes in order to put it on the right path toward development. The most significant program adopted by the Government to restructure the economy was the one for the 'Transition to a Strong Economy' in 2001 designed to help especially the weak banking sector. New regulations were adopted regarding internal control, corporate governance and risk management. Some of the objectives of the recovering program decided by the government are slowly putting the Turkish banking and financial system on the right path to development.

Banking Regulation and Supervision Agency

The BRSA was established in 1999 by the Banks Act No. 4389 art.3 and started its operations in 2000 as a legal entity with financial and administrative autonomy. Prior to the Bank Act, the Treasury Under-Secretariat and the Central Bank had been the two main regulatory and supervisory bodies in the banking sector. Starting in a period when the banking sector, under the threat of a new crisis and in general, in a period when the banking system was very vulnerable, the Agency had to face the difficult task of restructuring the entire banking system. Among the BRSA's duties are: the implementation of banking legislation; monitoring and supervising the banking system and creating a proper environment for banking and financial actors to operate in. With the creation of the BRSA, the Savings and Deposits Insurance Fund (SDIF) whose task is among others to administrate and supervise banks whose license was withdrawn by the BRSA (a Fund that was previously under the authority of the Central Bank), started to operate under the administration of the BRSA. Under amending Act No. 5020/2003, the management was separated from the BRSA. The decisionmaking and managing body of the Agency is the Banking Regulation and Supervision Board (BRSB), which is appointed by the Council of Ministers (Cabinet) and has seven members, all appointed by the Council of Ministers. They are appointed for a six-year period and cannot be dismissed. The BRSA is accountable to the Prime

Minister, who requires annual accounts of the BRSA to be audited by a committee formed by an auditor from the Supreme Court of Public Accounts, an inspector from the Prime Minister's office and one from the Minister for Finance's office. The supervisory system has recently been further strengthened to bring it closer to international standards of prudent regulation.⁷

In order to make the Turkish financial market more competitive, a new Banking Act (No.5411) was passed at the end of 2005. It contains new provisions in terms of supervision by the BRSA relating to new companies whose operations go under the supervision of the BRSA (such as financial holding companies, leasing, factoring and consumer finance companies); activities that banks may engage in are listed clearly and in compatibility with the directives of the EU; it establishes an audit committee with all members chosen from non-executive members of the board of directors, to assist board of directors for on-side and off-side supervision activities.

Insurance Supervisory Office

The ISO was first established as an auditing board for the supervision of insurance companies by the law on the Auditing of Insurance Companies of 1959. It was then placed by Law 7397/1963 under the organization of the Ministry of Commerce. In 1994 it was moved to the Under-Secretariat of the Treasury. Its main objectives and responsibilities are to supervise, audit and investigate the activities of the insurance companies. Supervisors of the Office are authorized periodically to check all books, records, statements and accounting documents at the premises of insurance and reinsurance companies. The supervisory framework is life and non life (general) insurance.

5. Evaluating the Supervisory Architectures and Central Bank Role in SEE countries: a Comparative Analysis

To evaluate the supervisory regimes in the SEE countries we can perform a comparative analysis using our institutional indicators on a sample of 30 countries (the sum of the SEE countries and the EU countries). Let us consider first the degree of unification of financial supervision (Figure 6). Five SEE countries out of six (except Turkey) reach the minimum level of the FSU index, while the average level of this index is 4.1. The standard deviation of the SEE countries is 1.51, while the overall sample shows a standard deviation equal to 2.71. Therefore the SEE countries show a lower and more homogeneous level of concentration.

^{7.} They cover aspects such as capital adequacy, control and risk management, consolidated and cross-border supervision of banks, etc

Focusing on the degree of central bank involvement in supervision (Figure 7), five SEE countries out of six (except Turkey) present a level of CBFA greater than 1.75, which is the average level. The standard deviation of the SEE countries is 0.75, while the overall sample shows a standard deviation of 0.94. Thus, the SEE countries show a higher and more homogeneous level of central bank involvement in supervision.

Finally each SEE institutional structure can be identified using the two indices (Figure 8). Considering the overall sample, the analysis confirms that the two most frequent regimes are polarised: on the one hand, Unified Supervisor regime (8 cases, red ball); on the other, Central Bank Dominated Multiple Supervisors regime (6 cases, white ball). The Figure depicts again the trade-off between supervision unification and central bank involvement, with one outlier (green ball). The SEE countries (yellow stars) are all characterized by Central Bank Dominated Multiple Supervisors regimes, with the exception of Turkey.

The central bank role seems to matter. In the descriptive analysis we can also adopt alternative indicators of the central bank role. We use two different proxies of central bank importance: central bank independence and central bank age, assuming that an old central bank is more influential. Considering central bank independence (Figure 9), four SEE countries have a degree of central bank independence clearly greater than the average level (0.73), while for two countries – Serbia and Turkey – the independence is quite close to the average. At the same time, the central banks of three SEE countries are relatively old (Figure 10).

Finally, just to add more information, let us remember that in the econometric analysis the multi-authority regime is more likely to occur when the political governance index is low and when, other things being equal, the country's population is relatively big. All the five SEE countries with multi-authority regimes show low political governance performances (Figure 11), but also Turkey's ranking is in the same category. Considering the population, only one SEE country with a multi-authority regime (Romania) has a population bigger than the average level.

In conclusion, the study of the SEE countries seems to confirm the possible role of the institutional position of the central bank in influencing the policymaker's choices in reshaping the financial supervision architecture. Given that the type of policymaker is unknown, the story of the PDE goes as follows. Each policymaker, in determining the future level of unified supervision, could be influenced by the actual involvement of the central bank, but under different conditions.

If the policymaker is of an HH type, it should care about the effectiveness of supervision, in order to please the citizens. If the policymaker sees supervision consolidation as a welfare improvement, then the central bank involvement could be viewed as an obstacle, but only if at least one of the four reasons described above — i.e. moral hazard, conflict of interest, bureaucracy and reputation — holds, and the risks of welfare costs overcome the potential benefits in terms of informational gains.

If the policymaker is of a GH type, it wishes to please the financial constituency. In this case the PDE effect holds if, and only if, the financial constituency dislikes the unified supervision and this condition is more likely to occur if the central bank is an independent agency.

What are the policy implications of our analysis? At the national level our path-dependency approach can explain both the emerging trend towards the single financial authorities, and the (so far few) cases of supervisory consolidation in favour of the central banks. Let us consider for example the three European cases in which the reforms of the supervision architecture increased (Ireland and the Netherlands) or could increase (Italy) the power of the national central bank. Ireland, the Netherlands and Italy are members of the Economic and Monetary Union, and their central banks no longer have full responsibility for national monetary policies. Therefore we can interpret these reforms as cases in which HH policymakers can increase the central bank role in supervision, given that the risks of moral hazard, conflict of interest risks, excessive bureaucratic power are likely to be low, while the information and reputational gains are likely to be high. Alternatively, we can study each of these reforms as possible cases of GH policymakers that implement the supervision regime favoured by the financial industry. In general, disentangling the two interpretations in specific country cases can be a welcome extension of the research agenda.

At the European level our model says that the establishment of a single financial authority is less likely to occur with the presence of a European central bank deeply involved in supervision. Conversely, the less the European Central Bank is involved in the financial supervision architecture, the more likely the establishment of a European Single Financial Authority will be.

6. Conclusions: Research Agenda

The current worldwide wave of reforms in supervisory architectures leaves the interested bystander with a large number of questions regarding the true determinants of, and motivations behind, these changes. These questions are all the more justified because the emerging institutional structures are certainly not homogeneous across countries.

An answer to these questions requires a political economy approach. Indeed, financial supervisory reform is a political process which involves many stakeholders: the political class, the central bank, the supervised entities, as well as the customers of the financial services. So the all-encompassing question is: which considerations and views prevail in the end in the decision making process, and to what extent are the decision-makers taking into account the views of these different classes of stakeholders when deciding on a reform of the supervisory structures.

This paper tries to offer more analysis on these questions by looking specifically at the impact of the central bank factor in a selected sample of countries. Considering

the six SEE countries, the high involvement of the central bank in supervision seems to be correlated with a multi-authorities regime in five cases, while in one case the same relationship holds in the opposite direction: a high level of supervisory consolidation is related to a low level of central bank involvement.

However, proper historical research is warranted. More specifically, in order to shed light on the determinants of the evolution of the supervisory structures it would be necessary to find out to what extent the different political explanations of the central bank fragmentation effect were in action in the past, country by country. The multi-authority model dominated by a central bank can be the final result of a political environment which fears a monopolist central bank as a potential source of inefficiency — moral hazard, conflict of interest, bureaucratic power — and at the same time can face difficulties in changing the central bank involvement in supervision, given its reputation endowment. At the same time this supervisory model can be the final result of a political class that wishes to please the banking and financial community, when the financial community dislikes the unified supervision and the central bank is a non-captured one.

Tables and Figures



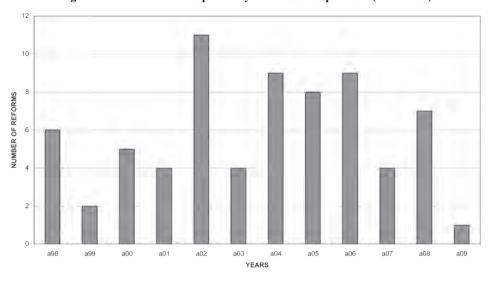


Figure 2: The Financial Supervision Unification Index

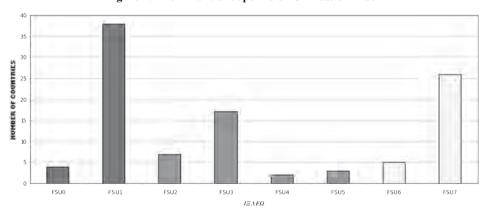


Figure 3: The Central Bank as Financial Supervisor Index FIGURE 3 THE CENTRAL BANK AS FINANCIAL SUPERVISOR INDEX

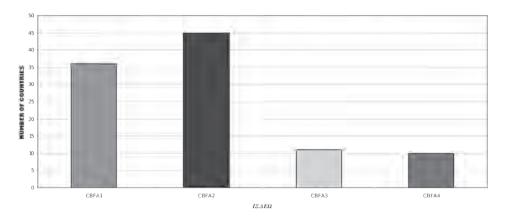
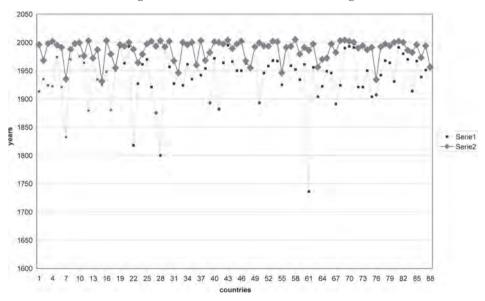


Figure 4: FSU and CBFA Indexes: Time Lags



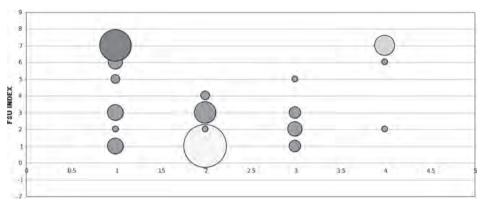
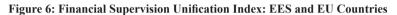


Figure 5: FSU and CBFA Indexes: The Trade Off (Financial Supervision Regimes)



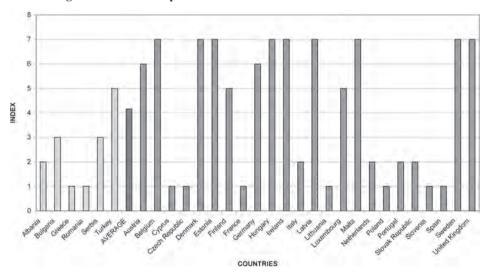
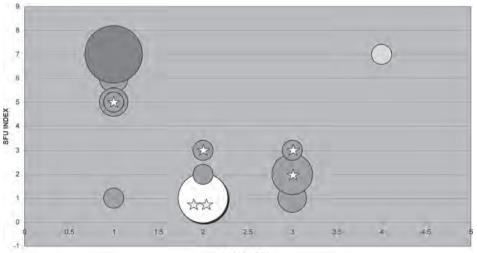


Figure 7: Central Bank as Financial Authority Index: EES and EU Countries

Figure 8: Architectures of Financial Supervision: EES and EU Countries



CBFA INDEX

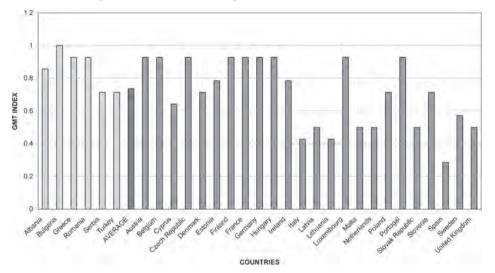
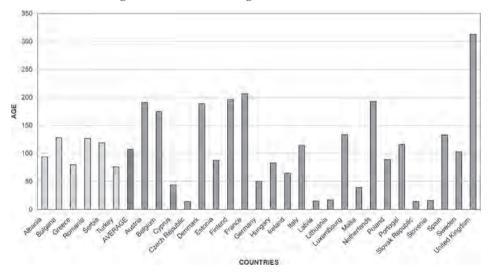


Figure 9: Central Bank Independence: EES and EU Countries





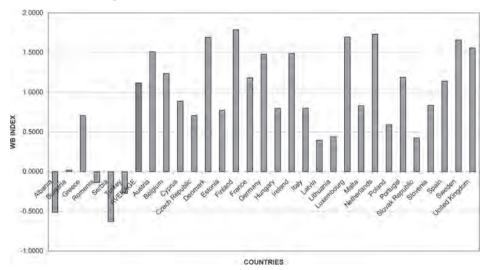
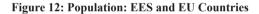


Figure 11: Political Governance: EES and EU Countries



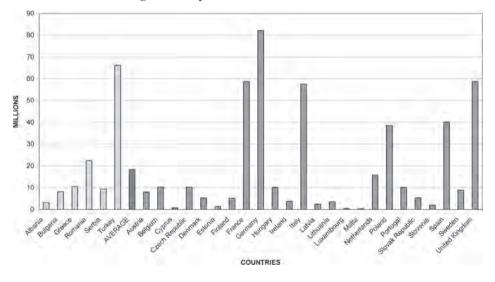


Table 1. Politicians and Supervisory Reforms: When the Central Bank Role Matters

EFFECTS EPISODES

BUREAUCRACY EFFECT

In the **UK case**, Goodhart 2004 and Westrup 2006 stressed that, among all the arguments that led the Government in 1997 to establish the Financial Services Authority (FSA), removing supervision from the Bank of England could have been a *quid pro quo* for giving it monetary independence, on the grounds that a central bank with too many functions could be too much of a power centre within the democratic system. In **Norway**, due to the banking crisis in the early 1990s, the possibility of merging the BISC with the central bank was considered by a committee appointed by the Ministry of Finance. But the Parliament, in order to avoid an excessive concentration of power, ruled that the BISC continue as a separate and independent agency (Skogstad Aamo 2005).

REPUTATION EFFECT

The difficulties in implementing reforms that reduce the central bank involvement in supervision **when its reputation is high** are documented in several case studies.

In France a reform was recently implemented, merging into one regulatory authority — Autorité des Marchés Financiers (AMF) — different financial supervision responsibilities, but the Banque de France prerogatives remained unchanged. In 2004, after the Parmalat scandal, the Italian Government proposed a draft text of a bill, concerning a general reform of the supervisory architectures, based on the establishment of a single financial authority. The proposed reform encountered strong opposition from a bi-partisan coalition, defending the role of the Bank of Italy in promoting financial stability. The reform was rejected. Finland has opted not to adopt the unified approach in financial supervision, in contrast with the other Scandinavian countries. Taylor and Fleming 1999 claimed that the Bank of Finland involvement in supervision has to be considered in explaining this choice. In **Iceland**, prior to the establishment of the single financial agency, banking supervision was conducted by the central bank. In 1996, a committee was set up by the Minister for Commerce, to look at prospects of moving toward unified supervision. Mwenda and Fleming 2001 reported that only one member on the committee — the central bank official — voted against the introduction of unified financial supervision. However, the central bank obtained the ability to appoint one of the three members of the single financial authority board. Also in **Germany** — as Westrup 2007 reported — the Bundesbank staged a public campaign to lobby against the creation of Ba-

By contrast, **if the reputation of the central bank is low, or decreasing**, the establishment of a single financial authority could be more likely to occur, despite its involvement in supervision.

The supervisory failure of the **UK** central bank is well documented in Westrup 2006. The link between banking instability, central bank reputation failure and single financial authority establishment is also evident in the Baltic unified supervisory architectures and in the case of Korea. **Estonia** experienced a severe banking crisis in 1998 and 1999. In May 2001, the Estonian

Parliament adopted the Financial Supervisory Authority. Before the Act, the supervision was split into the three traditional sets of institutions. The Bank of Estonia was responsible for state supervision of banking (Live 2005). Latvia experienced banking and financial crises in 1995 and in 1998. In July 2001, the Financial and Capital Market Commission was established. as a consolidated institution. In Korea, until 1997, the central bank was responsible for banking supervision; however — as Lee noted — the Ministry of Finance dominated the central bank. Following the 1997 financial crisis, a presidential committee recommended a drastic overhaul of the organization of the central bank and the country's supervisory structure. As a result, the former four financial supervisory authorities were combined into one integrated financial supervisory body, the Financial Supervisory Committee. Also China — Quintyn et al. 2006 — moved supervision out of the central bank in the wake of a period of financial sector distress. It is interesting to note that the reputation failure effect can hold regardless of the nature of the agency involved. In Norway — as we noted above — after the 1990s banking crisis the Ministry of Finance considered the possibility of merging the single financial authority with the central bank.

Table 2. Supervisory Authorities in 102 countries: FSU Index and CBFA Index (year:2008)

Countries	Banking Sector (b)	Securities Sector (s)	Insurance Sector (i)	Rating	Weight	FSU INDEX	CBFA INDEX
Albania	CB	SI	SI	3	1	4	2
Algeria	CB,B1,B2	S	-	1	-1	0	2
Argentina	CB	S	I	1	0	1	2
Australia	BI,S	BI,S	BI,S	7	-1	6	1
Austria	U, CB	U	U	7	-1	6	1
Bahamas	CB	S	I	1	0	1	2
Bahrain	CB	CB	CB	7	0	7	4
Belarus	CB	S	I	1	0	1	2
Belgium	U	U	U	7	0	7	1
Bolivia	В	SI	SI	3	0	3	1
Bosnia	CB,B1,B2	S	I	1	-1	0	2
Botswana	СВ	S	I	1	0	1	2
Brazil	СВ	S	CB,I	1	1	2	3
Bulgaria	СВ	S	I	1	0	1	2
Cameroon	В	S	I	1	0	1	1
Canada	BI	Ss(**)	BI	3	0	3	1
Chile	CB,B	CB,S	I	1	-1	0	3
China	В	S	I	1	0	1	1
Colombia	BI	CB,S	BI	3	-1+1	3	1
Costa Rica	В	S	I	1	0	1	1
Croatia	CB	SI	SI	3	1	4	2
Cyprus	CB	S	I	1	0	1	2
Czech Republic	CB	CB	CB	7	0	7	4
Denmark	U	U	U	7	0	7	1
Ecuador	BI	S	BI	3	0	3	1
Egypt	CB	S	I	1	0	1	2
El Salvador	BI	S	BI	3	0	3	1
Estonia	U	U	U	7	0	7	1
Finland	BS	BS	I	5	0	5	1
France	CB,B1,B2	CB,S	I	1	-1+1	1	3
Georgia	U	U	U	7	0	7	1
Germany	U,CB	U	U	7	-1	6	1
Ghana	CB	S	I	1	0	1	2
Greece	CB	S	I	1	0	1	2
Guatemala	BI	S	BI	3	0	3	1
Haiti	CB	-	Is (**)	1	0	1	2
Hungary	U	U	U	7	0	7	1
Iceland	U	U	U	7	0	7	1
India	CB,B	S	I	1	-1	0	2
Iran	CB	CB	I	5	0	5	3

T 1 1	CD	CD	CD	7	0	7	4
Ireland	CB	CB	СВ	7	0	7	4
Israel	CB	SI	I	1	1	2	2
Italy	CB,S	CB,S	I	1	1	2	3
Jamaica	СВ	S1,S2	S1,S2	3	-1	2	2
Japan	U,CB	U	U	7	-1	6	1
Jordan	CB	S	I	1	0	1	2
Kazakhstan	U,CB	U	U	7	-1	6	1SICB,S
Kenya	CB	S1, S2	I	1	-1	0	2
Korea	U	U	U	7	0	7	1
Kyrgyzstan	CB	S	I	1	0	1	2
Latvia	U	U	U	7	0	7	1
Lebanon	В,СВ	СВ	I	1	1	2	3
Libya	СВ	SI	SI	3	0	3	2
Lithuania	CB	S	I	1	0	1	2
Luxembourg	BS	BS	I	5	0	5	1
Macedonia	CB	S	I	1	0	1	2
Madagascar	BS	BS	I	5	0	5	1
Malaysia	CB	S	CB	3	0	3	3
Malta	U	U	U	7	0	7	1
Mauritius	CB	SI	SI	3	0	3	2
Mexico	CB,B	CB,S	I	1	1	2	3
Moldova	CB	S	I	1	0	1	2
Montenegro	CB	S	I	1	0	1	2
Morocco	CB,B	S,B	I,B	1	-1+1	1	2
Namibia	СВ	SI	SI	3	0	3	2
Netherlands	CB,S	CB,S	CB,S	7	-1	6	4
New Zealand	СВ	S	I	1	0	1	2
Nicaragua	U	U	U	7	0	7	1
Norway	U	U	U	7	0	7	1
Pakistan	CB	SI,Ss**	SI	3	-1	2	2
Panama	В	S	I	1	0	1	1
Peru	BI	S	BI	3	0	3	1
Philippines	CB	CB,S,Ss**	I	1	1	2	3
Poland	U	U	U	7	0	7	1
Portugal	CB	S	I	1	0	1	2
Romania	CB	S	I	1	0	1	2
Russia	CB	S	I	1	0	1	2
Rwanda	CB	CB	I	5	0	5	3
Saudi Arabia	CB	S	CB	3	0	3	3
Singapore	CB	CB	СВ	0	0	7	4
Slovak Republic	СВ	СВ	СВ	7	0	7	4
Slovenia	СВ	S	Ι	1	0	1	2
South Africa	CB,B	SI	SI	3	-1	2	2
Spain	CB.Bs(**)	CB,S	I	1	1-1	1	3
•							

Sri Lanka	CB	S	I	1	0	1	2
Sweden	U	U	U	7	0	7	1
Switzerland	U	U	U	7	0	7	1
Tajikistan	CB	CB	I	5	0	5	3
Tanzania	CB	S	I	1	0	1	2
Thailand	CB	S	I	1	0	1	2
Trinidad Tobago	CB	S,CB	I,CB	1	2	2	4
Tunisia	CB	S	I	1	0	1	2
Turkey	В	S	I	1	0	1	1
Ukraine	CB	SI	SI	3	0	3	2
UAE	CB	S	I	1	0	1	2
Uganda	CB	S	I	1	0	1	2
UK	U	U	U	7	0	7	1
USA	CB,B	S,Ss**	I,Is(**)	1	-1	0	2
Uruguay	BC,BS	BC,BS	I, BC	5	1	6	4
Venezuela	В	S	I	1	0	1	1
Vietnam	CB	S	I	1	0	1	2
Zimbabwe	CB	S	I	1	0	1	2

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 bank; G = government; I = authority specialized in the insurance sector; S = authority specialized in the securities markets; U = single authority for all sectors; D = authority specialized in the banking sector and securities markets; D = authority specialized in the insurance sector and securities markets.

(*) (b) = banking or central banking law; (s) = security markets law; (i) = insurance law (**) = state or regional agencies, or self-regulated agencies Source: Masciandaro (2004 and 2006) and our calculation

* FSU INDEX

The index was built on the following scale: 7 = Single authority for all three sectors (total number of supervisors=1); 5 = Single authority for the banking sector and securities markets (total number of supervisors=2); 3 = Single authority for the insurance sector and the securities markets, or for the insurance sector and the banking sector (total number of supervisors=2); 1 = Specialized authority for each sector (total number of supervisors=3).

We assigned a value of 5 to the single supervisor for the banking sector and securities markets because of the predominant importance of banking intermediation and securities markets over insurance in every national financial industry. It also interesting to note that, in the group of integrated supervisory agency countries, there seems to be a higher degree of integration between banking and securities supervision than between banking and insurance supervision; therefore, the degree of concentration of powers, *ceteris paribus*, is greater. These observations do not, however, weigh another qualitative characteristic: There are countries in which one sector is supervised by more than one authority. It is likely that the degree of concentration rises when there are two authorities in a given sector, one of which has other powers in a second sector. On the other hand, the degree of concentration falls when there are two authorities in a given sector, neither of which has other powers in a second sector. It would therefore seem advisable to include these aspects in evaluating

the various national supervisory structures by modifying the index as follows: adding 1 if there is at least one sector in the country with two authorities, and one of these authorities is also responsible for at least one other sector; subtracting 1 if there is at least one sector in the country with two authorities assigned to supervision, but neither of these authorities has responsibility for another sector: 0 elsewhere.

** CBFA INDEX

For each country, and given the three traditional financial sectors (banking, securities and insurance), the CBFA index is equal to: 1 if the central bank is not assigned the main responsibility for banking supervision; 2 if the central bank has the main (or sole) responsibility for banking supervision; 3 if the central bank has responsibility in any two sectors; 4 if the central bank has responsibility in all three sectors (Table 1). In evaluating the role of the central bank in banking supervision, we considered the fact that, whatever the supervision regime, the monetary authority has responsibility in pursuing macro-financial stability. Therefore, we chose the relative role of the central bank as a rule of thumb: we assigned a greater value (2 instead of 1) if the central bank is the sole or the main authority responsible for banking supervision.

Table 3. Financial Supervision in Albania

Authorities for Financial Supervision	Bank of Albania	Securities Commission	Insurance Supervisory Committee
Legal Framework	Law 8269/1997 "On the Bank of Albania"	Law 8080/1996	Law 8081/1996
Supervised Institutions	BoA is the regulatory body supervising all the credit institutions	SC is the supervisory body for securities market.	ISC is the competent body for supervision in the insurance market.
1925	Establishment of the National Bank of Albania.		
1990s	 Law 7559/1992: establishment of a two-tier system with the Bank of Albania performing all the functions of a central bank; Financial and banking crisis in 1997 with negative effects especially on state-owned banks. Law 8269/1997 "On the Bank of Albania" and Law 8365/1998 "On banks in the Republic of Albania": Bank of Albania is recognized as the sole authority that issues license and supervises all the banks in the Republic of Albania. Law 8384/1998: adoption of a new banking regulation 	• Law 8080/1996: establishes the SC as the sole independent entity responsible for the regulation of the securities market in Albania.	
2000s	• Law 9992/2006: The new banking law stipulates the core principles in conducting banking activity in the Republic of Albania (license requirements) as well as rules and procedures to ensure a sound banking system, management and administration methods for banks, branches of foreign banks and their decision-making authorities, as well as the bank's legal obligations consistent with the powers granted by the law		

Current
settings

BoA operates as an independent institution accountable to the Parliament. Within its duties, BoA and supervising licenses, supervises and regulates the activities of banks and other financial institutions.

SC is established as the licensing authority for the securities market and the securities traders' activities.

ISC concentrates its activities on monitoring the financial status of the supervised undertakings. It licenses and supervises the insurance and reinsurance sector.

Table 4. Financial Supervision in Bulgaria

Authorities for Financial Supervision	National Bank of Bulgaria	Financial Supervision Commission
Legal Framework	Law on the Establishment of the BNB 1985	FSC Act of 2003
Supervised Institutions	BNB is the regulatory body supervising all the credit institutions	Bulgarian FSC is the supervisory body for securities and the insurance markets
1947-1989	The BNB loses most of its inde- pendence because a monopoly of state banking was created under the direction of the Communist Party	
1990s	1992: a new Law on BNB restored the distinction between commercial banks and the central bank 1997: amendments to the Law on the Bulgarian National Bank creating 3 distinct new departments: the Issuing, the Banking and the Banking Supervision Department:	
2000s	• 2006: a new Law on Credit Institutions contains specific provisions on licensing and re- voking licenses to the supervised institutions	• Financial Supervision Act established the FSC merging the Insurance Supervisory Agency, the State Insurance Supervision Agency and the National Securities Agency
Current settings	The BNB is independent and accountable to the National Assembly. The managing board consists of a Governing Council, a Governor and three Deputy Governors. The Governors are elected by the National Assembly. The other three members are appointed by the President of the Republic. The BNB can issue indications and rules about financial supervision in the banking system and is responsible for the issuing of licenses to operate in the country.	The FSC is supervisory authority for the security and the insurance sector. It is an independent authority accountable to the Parliament. It is organized in three departments (the Insurance Supervisory Agency, the State Insurance Supervision Agency and the National Securities Agency) and it is composed of seven members, the Chairman, the Deputy Chairmen and the other Commissioner, all elected by the National Assembly.

Table 5. Financial Supervision in Greece

Authorities for Financial Supervision	Bank of Greece	Capital Market Commission	Private Insurance Supervisory Committee
Legal Framework	Statute BoG (first ratified in 1927)	Law 1969/91	Law 3229/2004
Supervised Institutions	BoG is the regulatory body supervising all the credit institutions	Hellenic CMC is the super- visory body for financial intermediaries operating in the capital market: invest- ment firms, mutual fund management firms, portfolio investment companies and the securities clearing and settlement systems.	ISC is the supervisory authority for the insurance companies.
1960s		CMC established as a special committee of the Ministry of Economy and Finance	
1990s	 Law 2076/1992: licensing requirements for banking services. It incorporates into the Greek banking legislation the 2nd Banking Directive (89/646/EEC, as codified by Directive 2000/12/EC). Law 2609/1998: bringing the operational framework of the BoG in line with the provision of the EU Treaty and the ESCBs and ratifying Art. 55A on prudent supervision of the Statute of the BoG. 	 Law 1969/1991: establishment of the CMC with legal personality regulating listed companies and other participants in all the markets; Law 2324/1995: legal framework introducing the Hellenic CMC as an independent authority; Law 2396/1996: administrative and enforcement power concerning supervision and regulation of financial institutions and markets. 	• The competent authority for the supervision of insurance market and companies was the Ministry of Development
2000s	• Law 2832/2000: bringing the operational framework of the BoG in line with the provision of the EU Treaty and the ESCBs and ratifying Art. 55B which establishes a framework for administrative sanctions by BoG.	 Decision No. 5/204/2000 enacts corporate governance regulation for listed companies; Law 3158/2003 enhances CMC as the competent authority in relation to the authorization of secondary markets 	• Law 3229/2004 establishes the Private Insurance Supervisory Committee supervised by the Ministry of Finance.

Current settings

Prudent supervision of credit and financial institutions is carried out by the Supervision of Credit and Related Financial Institutions Department (SCRFID).

CMC consists of a 7-member A new authority Board of Directors, whose Chairman and Vice Chairman assume its duties are appointed by the Ministry of Finance for 5 years, and a 3-member Executive Committee. Objectives: promote the establishment of sound conditions for the operation of the capital market. It introduces rules and regulations and supervises compliance with them by financial intermediaries. It is accountable to the Parliament and twice a year the chairman is obliged to appear in front of a special committee of the parliament. The Ministry of Economy and Finance also supervises the CMC.

is expected to in the beginning of 2008.

Table 6. Financial Supervision in Romania

Authorities for Financial Supervision	National Bank of Romania	National Securities Commission	Insurance Supervisory Commission
Legal Framework	Law 101/1998 (NBR's Act) replaced by Law 312/28 of June 2004	Law 52/1994	Law 32/2000
Supervised Institutions	National Bank of Romania is the regulatory body supervis- ing all the credit institutions	NSC is the supervisory commission for securities and stock market	ISC is the super- visory authority for the insurance companies.
1940s to late 1980s	• Loss of legal identity. The NBR became a mere instru- ment of the state.		
1990s	 Law 34/1991: the NBR regains the status and functions of a central bank. Law 101/1998: legal framework of the Bank, establishing the legal identity of the NBR. 	 1993 the NSC established as a special committee of the Ministry of Economy and Finance by government ordinance 18/1993. Law 52/1994: establishment of the NSC as the autonomous authority responsible for securities and stock exchange. 	
2000s	• Law 312/28 of June 2004: contains primary objectives and tasks of the central bank in terms of monetary policy and prudent supervision.	• Law 129/2000 and successive Laws (the Statute of the NSC, Law 514/2002): revision of the legal framework of the Commission clarifying objectives and functions.	• Law 32/2000 (the Insurance Regulatory Act): establishment of the ISC as an autonomous regulatory entity.
Current settings	• NBR may issue licenses and regulations, norms, orders and circulars, take measures and apply sanctions to those institutions that do not respect operating criteria set by the central bank, draw supervisory reports on inspections. The NBR is managed by a Board of Directors composed of nine members appointed by the Parliament to which it is also accountable.	The NSC is composed of seven members appointed by the Parliament to which it is also accountable. It is financed by fees charged to the regulated entities. It has powers of licensing, authorizing and issuing norms and regulations regarding supervision in the security market.	It is managed by a Council composed of five members all appointed by the Parliament. It is the authority responsible for the authorization, supervision and regulation of the insurance sector.

Table 7. Financial Supervision in Serbia

Authorities for Financial Supervision	National Bank of Serbia	National Securities Commission	Ministry of Finance
Legal Framework	Law on the National Bank of Serbia No. 72 of July 2003		Insurance Law of 1996 and Law on the Supplement to the Law on the National Bank of Serbia No. 55/2004
Supervised Institutions	National Bank of Serbia is the supervisory body for all the credit and more recently for all the insurance institutions.	SEC is the supervisory commission for securities and stock exchange.	MoF was the supervisory authority responsible for regulating and monitoring the Insurance sector.
1990s	 Law 34/1991: the NBR regains the status and functions of a central bank. Law 101/1998: legal framework of the Bank, establishing the legal identity of the NBS. 	Established in 1990 for regulating and supervising the securities market in Serbia.	
2000s	 Law on the National Bank of Serbia No. 72 of July 2003: set out the functions, the objectives and the organisation of the NBS. Law on the Supplement to the Law on the National Bank of Serbia No. 55/2004: it contains some extensions of the supervisory power of the NBS to include also supervision of the insurance sector. 		
Current settings	It is the institution responsible for the conduct of monetary policy and for the supervision and the licensing of the credit institutions. The main bodies of the NBS are the Monetary Board, the Governor and the Council. The managing of the operations of the bank is in the hands of the Governor who is appointed by the Parliament.	The NSC is composed of seven members appointed by the Parliament to which it is also accountable. It is financed by fees charged to the regulated entities. It has powers of licensing, authorizing and issuing norms and regulations regarding supervision in the security market.	The Ministry has the power to issue licenses, regulations and to carry out supervisory powers over the insurance companies. All these tasks passed under the competence of the National Bank of Serbia by Law on the Supplement to the Law on the National Bank of Serbia No. 55/2004

Table 8. Financial Supervision in Turkey

Authorities for Financial Supervision	Banking Regulation and Supervision Agency	Insurance Supervisory Office
Legal Framework	Banks Act No. 4389/1999	Insurance Supervision Law 7397/1994
Supervised Institutions	Banking Regulation and Supervision Agency is the authority responsible for the issuing of regulations and supervision of the banking sector.	ISO is the supervisory authority for the insurance sector.
2000s	Established by the Banks Act, it started its operations in 2000 as a legal entity with financial and administrative autonomy.	
	Amendment Act No. 5020/2003 with which the management of the Savings and Insurance Funds has been separated by the BRSA.	
	A new Banking Act (No.5411/2005) containing new provisions in terms of supervision by the BRSA.	
Current settings	The decision-making body of the Agency is the Banking Regulation and Supervision Board (appointed by the Council of Ministers. It has seven members all appointed by the Council of Ministers for a six-year period. The BRSA is accountable to the Prime Minister.	The ISO has one president and a number of insurance supervisory experts and actuaries.

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