## 1. Introduction

Financial supervision regimes vary significantly from country to country. A review of the supervision architectures[1] indicates a trend toward a gradual concentration of powers. In Europe this trend seems to be rather strong in recent years. In addition to Norway, the first country to establish a single supervisor in 1986, and Iceland (1988), six other European Union member states – Austria (2002), Belgium (2004), Denmark (1988), Germany (2002), Sweden (1991) and the United Kingdom (1997) – have assigned the task of supervising the entire financial system to a single authority different from the central bank. In Ireland (2003) the supervisory responsibilities were concentrated in the hands of the central bank. Also four countries involved in the 2004 EU enlargement process – Estonia (1999), Latvia (1998), Malta (2002) and Hungary (2000) – have reformed their structures, concentrating all the powers in a single authority[2], while, outside Europe, a unified agency was established in Kazakhstan (2004), Korea (1997), Japan (2001), Nicaragua (1999) and, among the small countries, in Bahrain, Bermuda, Cayman Islands, Gibraltar, Maldives, Netherlands Antilles, Singapore and United Arab Emirates.

The single supervisor regime seems to be the "natural" and best answer to the challenges posed by financial market integration. If, in the long run, the expected financial structure is a perfectly integrated and single market, the best design for the supervisory architecture would seem to be the single authority. But the answer is apparently not that simple.

The descriptive evidence[3] seems to correct the idea that, given the blurring process in the financial landscape, there are two possible kinds of supervisory approach: 1) unification under the

[1] The review is performed in Section three.
[2] De Luna Martinez and Rose (2003) claimed that at least seven other countries were considering the adoption of a form of integrated supervision: Bulgaria, Indonesia, Poland, Slovakia, Slovenia and Ukraine.
[3] Masciandaro (2004).

roof of the central bank; and 2) unification in a different supervisory body[4]. In reality, the unification of supervision seems evident in the case of single financial authority only. In other words, the descriptive analysis signals an interesting result: the national choices on how many agencies must be involve in supervision is strictly linked to the role of the central bank: the degree of supervision unification seems to be inversely correlated with central bank involvement. The trade-off was confirmed exploring the determinants of recent reforms in supervisory regimes[5].

How do we explain this fragmentation effect given by the involvement of the central bank in supervision? The aim of this paper is to shed light on the economics of the central bank fragmentation effect.

The paper is organized as follows. Section two describes the adopted approach, considering the supervisory structure as a path-dependent variable. The financial authorities concentration index (FAC Index) is used in section three to identify this dependent variable. Then we recognize the importance of asking what role the central bank plays in the various national supervisory settings. The central bank as financial authority index (CBFA Index) is used to gauge the central bank's involvement in financial supervision. Using both the FAC Index and the CBFA Index, we confirm that the degree of supervision unification seems to be inversely correlated with central bank involvement in supervision itself (central bank fragmentation effect).

Section four discusses the central bank fragmentation effect. The adopted approach was to consider the supervisory framework with one or more authorities as a rule – driven path dependent variable determined by the policymaker. We claim that the political choice of supervision concentration level will depend on the role the central bank plays in the supervision. The policymaker's choice can be viewed as a sequential process in which the institutional *status quo* counts: the supervision concentration level is decided based on the position of the central bank. If

[4]Grunbichler and Darlap (2003).
[5]Masciandaro (2005).

the role of the central bank is limited, the supervision concentration level will be high and vice versa. The central bank fragmentation effect is explained through three different channels: the moral hazard effect, the bureaucracy effect, the reputation endowment effect.

If a low central bank involvement is the *status quo*, the policymaker is not likely to increase it, to avoid moral hazard phenomena in the controlled intermediaries (moral hazard effect), or an increase in the bureaucratic powers of the central bank (bureaucracy effect). An increased unification level may be achieved by creating a new single financial authority.

If a high central bank involvement is the *status quo*, the policymaker may not wish to unify the supervision in the hands of the central bank for the same reasons (moral hazard and bureaucracy effects). At the same time, the policymaker may not be in a position to establish a new single financial authority, reducing the central bank involvement in supervision, if the central bank reputation is high (reputation endowment effect).

The overall effect is the inverse relationship between the supervision unification and the central bank involvement.

In order to assess the central bank fragmentation effect, in section five we estimate a model of the probability of different regime decisions as a function of this variable, checking for other structural economic and institutional variables. The empirical analysis - performed with ordered logit and probit functions with a dataset of 89 countries – confirmed that the level of supervision unification inversely depends on the central bank involvement in supervision. Section six advances some conclusions.