1. Introduction

This paper presents an analysis of the relationship between the recent movement towards full consolidation in financial supervision and the institutional role of the central bank. We propose a path dependence approach to study the single-authority versus multi-authority dilemma, considering the level of financial supervision consolidation as the dependent variable. The work can be useful for evaluating the current worldwide situation, using a sample of 48 countries.

The starting point is the increasing integration of the banking, securities and insurance markets, as well as their products and instruments (blurring effect)¹. The blurring effect produced the crisis of the traditional sectoral approach to supervision, denoting that a country's financial system is overseen on a sector – by – sector basis. The financial blurring process seems to call for unification of supervision (single financial authority, SFA).

The success of the SFA model seems to be growing, particularly in the European area. Among the 15 old members of the European Union, Austria (2002), Belgium (2004), Denmark (1988), Germany (2002), Sweden (1991), and the UK (1997) have chosen to delegate the supervision to a single authority, different from the central bank. The single supervisor has been adopted also in four new EU member countries – Estonia (1999), Hungary (2000), Latvia (1998), Malta (2002) – as well as in Norway (1986) and Iceland (1988). Outside Europe a unified agency was established in Kazakhstan (2004), Korea (1997), Japan (2001) and Nicaragua (1999) and, among the small countries, in Bahrain, Bermuda, Cayman Islands, Gibraltar, Maldives, Netherlands Antilles, Singapore and United Arab Emirates. On the other hand, in Ireland (2003) the supervisory responsibilities were concentrated in the hands of the central bank.

See, among others, European Commission (2002), De Luna Martinez and Rose (2003), Zwet (2003).

However, the picture would be incomplete without recognizing the counter-evidence. Masciandaro (2004) showed that the two most frequent supervisory models are polarized: on the one hand, countries with a high unification of powers display a low central bank involvement in supervision (*Single Financial Authority Regime*); on the other hand, countries with a low concentration of powers are characterized by high central bank supervisory responsibilities (*Central Bank Dominated Multiple Supervisors Regime*).

What drives financial supervision reform? Which is the central bank's role in this process? Masciandaro (2005) highlighted empirically the existence of a trade off between supervision unification and central bank involvement, the so-called central bank fragmentation effect, while Masciandaro (2006) discussed this effect using three different potential explanations: moral hazard effect, bureaucracy effect and 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's reputation is high (reputation endowment effect).

In the paper, we go a little further and try to explain the reasons behind the central bank fragmentation effect and the corresponding effects. Parallel to the blurring effect in the financial markets, central banks all over the world have gained an increasing degree of independence from the political process. We identify legal proxies of two different potential causes, namely bureaucracy effect and reputation endowment effect, that could explain the

decision of the policymaker to maintain or reform the supervision responsibility of the monetary authority. We wish to test the hypothesis that, when supervision is assigned to central banks, the central banker enjoys a higher degree of bureaucratic power and/or reputation endowment owing to central bank independence. For this purpose we adopt monetary commitment and central bank independence indexes, using and elaborating the indicators discussed in Freytag (2001).

It is not surprising to discover that monetary legal indicators - and particularly the central bank independence - matter. In industrialised countries the relationship between independence and control over inflation seemed sufficiently robust and convincing; see the recent surveys in Berger et al. (2001) and Hayo and Hefeker (2002). Here we focus on the possible role of monetary legal indicators as institutional determinants of the choice of a financial supervisory structure. The policy implications are also relevant, particularly in the European Union context: Does the current existence of an independent European Central Bank affect the likelihood of the creation of a Single European Financial Supervisor?

The paper is organized as follows. Section two presents a path dependence approach to study the single authority versus multi-authority dilemma, considering the level of financial supervision consolidation as the dependent variable. The financial authorities concentration index (FAC Index) is used in section three to identify this dependent variable. In section three we highlight the importance of the role the central bank plays in the various national supervisory settings, using the fact that the degree of supervision unification seems to be inversely correlated with the central bank's involvement in supervision itself as a starting point. Section four discusses the possible explanation of this trade-off, stressing three potential causes: moral hazard effect, bureaucracy effect and reputation endowment effect. Section five introduces monetary commitment and central bank independence indicators as

consistent proxies of the reputation endowment effect and bureaucracy effect respectively. In section six, an econometric analysis is performed. Section seven puts forward some conclusions as well as perspectives for further research.

2. Explaining the Financial Supervision Regime: A Path Dependence Approach

Goodhart (2004) wondered if the development of financial supervision architecture is designed or accidental. It has been argued regularly and frequently that the design of supervision is essentially reactive, lagging behind innovation and evolving risks, and that the reasons for supervisory reforms are largely political. We claim that the evolution of financial supervision is not accidental. To justify this, we investigate the determinants that should lead a country to reform or to maintain the supervisory regime, with particular attention to the role of the central bank.

Our basis is that in each point of time, gains and losses of a supervisory model are expected variables, calculated by the policymakers that maintain or reform the supervisory regime. But the expectations of policymakers are likely to be influenced by structural economic and institutional variables, which may vary from country to country. Therefore, given the national economic and institutional endowment, these variables can determine, *ceteris paribus*, the policymaker's expected gains or losses of a specific supervisory regime. The supervisory regime can become the dependent variable in a *path dependence* framework. Furthermore, economic agents do not have perfect information on the true preferences of the policymaker: his/her optimal degree of supervision unification is a hidden variable.

The crucial issue is the identification of the policymaker's preferences. In the economic literature, there is lack of theoretical studies that consider the policymaker's objective function for the financial supervisory design. The first approach to identify the policymaker's