

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 (banking, securities and insurance). The Bank of Estonia was responsible for state supervision of banking. 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 replacing the Bank of Latvia as the credit institutions' supervisor, the Securities Market Commission, the Insurance Supervision Inspectorate. In Korea, until 1997, the central bank was responsible for banking supervision. 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.

Therefore, the degree of central bank involvement in supervision may influence the policymaker in his/her decision to alter the supervision concentration effect, according to an inverse relationship: the result may be the central bank fragmentation effect.

## **5. Overall Central Bank Institutional Setting**

However, is it possible to separate the different causes that could explain the importance of the role that the central bank plays in supervision? In general, the three effects explaining the policymaker's path dependent behaviour can depend on the central banker's past behaviour or on the legal features. In other words, the relevance of the central bank involvement in supervision may hide the role of the central banker's past performances or the key aspects of the monetary institutional setting. The behavioural

aspect and the institutional aspect are both potentially important. Furthermore, the two aspects are likely to be complementary.

None of the three effects we distinguish is directly observable. Therefore, we use proxies. While the moral hazard effect can be called a purely economic concept, the other two are political economy by nature. Thus, in this paper we will concentrate on the legal aspect. Following again the rule-driven approach, we can try to identify the institutional rules – different from the central bank involvement – that could capture the explanations of the central bank fragmentation effect.

First of all, the central bank's institutional *status quo* in supervision matters if the monetary authority is characterized by a reputation endowment. The reputation of a central bank depends on the supervisory and monetary performance, on the one side, and on the overall institutional position, on the other side. Focusing on the legal rules, the central bank's overall institutional position depends on the features of the monetary regime. In accordance with the literature as discussed in Freytag (2001), we argue that the quality of a monetary regime is reflected by its degree of commitment to price stability. We distinguish two related concepts of commitment, which we call monetary commitment (MOC) and central bank independence (CBI). The coding and weighting is presented in Table 1A and commented in Appendix 8.2.

The index MOC is constructed using several factors, which can be grouped as follows: internal restrictions as set by central bank legislation, external constraints such as convertibility restriction, exchange rate arrangements and the like. For this purpose we propose the index of monetary commitment (MCO Index) (Table 1A), which modifies the indicator introduced in Freytag (2001), excluding the information on supervision rule. Hence:  $0 \leq \text{MCO} \leq 1$ . If the index approaches zero, the level of commitment is very low.

The highest theoretically possible commitment is expressed by the value one. In other words: the higher MCO, the higher the potential overall reputation endowment of the central bank. The index is the weighted average of all the factors determining legal monetary commitment. These criteria are operationalised by using components with discrete outcomes having numerical coding between zero and one.

The central bank legislation rules are covering only the internal dimension of the degree of monetary commitment, identifying the specific position of the central banker inside the state organization. This is reflected in the measure of central bank independence. The concept of central bank independence can capture the bureaucratic position of the central bank vis a vis the government, as well as the Parliament. Focusing again on the role of the rules, the central bank independence can be used to evaluate the specific bureaucracy effect that determines the policymaker's attention on the role of the central bank in defining the supervision architecture. On this account we build up an index of central bank independence (CBI Index, Table 1A) being consistent with the measures of legal central bank independence, which are most influential on the literature, as the indices proposed in Grilli, Masciandaro and Tabellini (1991) and in Cukierman (1992). If the index approaches zero, the level of independence is very low. The highest theoretically possible independence is expressed by the value one. Hence:  $0 \leq CBI \leq 1$ ; the higher CBI, the higher the specific bureaucratic power of the central bank.

This leads us to the connection of sections five and six. We develop two competing hypotheses which both seem plausible.

- First, the level of monetary commitment can be useful to evaluate the legal dimension of the overall central bank reputation endowment. High reputation encourages

policymakers to give the central bank much authority in supervision. Thus, the higher MOC, the higher central bank involvement, the lower FAC.

- Second, the degree of central bank independence can be utilized to measure its specific legal bureaucratic power. If this power is high, the bank will be circumvented by the policymaker and not given a big role in financial authority. Therefore, the higher CBI, the lower the bank's involvement, the higher FAC.

Furthermore, in order to be rigorous we have to note that monetary commitment could be a proxy of both the reputation endowment effect and the bureaucracy effect; the same is true for the central bank independence (see the correlation index of 0.96 below). For these two reasons, we will use the two variables separately in the econometric analyses.

Summarizing, the institutional position of a central bank can be described using three different indicators: the degree of supervision involvement; the degree of monetary commitment; the degree of central bank independence. We note that on average the degree of supervision involvement is weakly and inversely correlated with the degree of monetary commitment (correlation index = - 0.16) and with the degree of independence (correlation index = - 0.14) while, not surprisingly, the degree of monetary commitment is strongly and directly correlated with the degree of independence (correlation index = 0.96) (Table 6). We have to remember that the concept of central bank independence is part of the broader definition of monetary commitment; in fact the CBI index is the aggregate of seven of the twelve components of the MOC index.

Note that in the econometric part we will use an index of central bank age (CBAGE Index) as alternative proxy of the reputation effect and/or the bureaucratic effect; the degree of central bank involvement is also weakly and inversely correlated with the central bank age (correlation index = -0.12).