

Discussion Paper No. 07-082

**Merger Control as Barrier to  
EU Banking Market Integration**

Matthias Koehler

**ZEW**

Zentrum für Europäische  
Wirtschaftsforschung GmbH

Centre for European  
Economic Research

Discussion Paper No. 07-082

## **Merger Control as Barrier to EU Banking Market Integration**

Matthias Koehler

Download this ZEW Discussion Paper from our ftp server:

**<ftp://ftp.zew.de/pub/zew-docs/dp/dp07082.pdf>**

Die Discussion Papers dienen einer möglichst schnellen Verbreitung von neueren Forschungsarbeiten des ZEW. Die Beiträge liegen in alleiniger Verantwortung der Autoren und stellen nicht notwendigerweise die Meinung des ZEW dar.

---

Discussion Papers are intended to make results of ZEW research promptly available to other economists in order to encourage discussion and suggestions for revisions. The authors are solely responsible for the contents which do not necessarily represent the opinion of the ZEW.

## **Non-Technical Summary**

In 2005, the President of the Bank of Italy blocked the acquisition of Banca Antonveneta (BA) and Banca Nazionale de Lavoro (BNL) by the Dutch ABN Amro and the Spanish Banco Bilbao Vizcaya Argentaria (BBVA) for ‘prudential reasons and formal errors’. This is possible because in the EU the control of bank M&A is subject to both competition and prudential control. Although the acquisition of BA by ABN Amro was finally approved, the intended take-over of the BNL by BBVA failed.

Although there is anecdotal evidence that the prudential control may constitute a barrier to the integration of European retail banking markets, empirical evidence is, however, missing until now. The main problem is the lack of data on the scope for politicians and supervisors to block M&A in the banking sector. The main contribution of this paper is to collect this data and to construct indices on the political independence of bank supervisory authorities and the scope for supervisors to block the merger with or the acquisition of domestic credit institutions. The main source of information to construct these indices is a questionnaire on banking regulation that was sent to the supervisory authorities in the 25 EU member countries between October 2006 and March 2007.

The descriptive analysis of our indices has shown that the degree of transparency and the strength of approval requirements for ownership transfers are different in the EU although the harmonization of banking regulations has already led to some level of convergence. Since the scope for supervisors and politicians to block cross-border M&A during merger control depends on the transparency of the supervisory review process and the strength of approval requirements, countries with transparent merger control and low approval requirements are expected to have lower market entry barriers than countries where M&A control is intransparent and approval requirements are high. Since the countries from Central and Eastern Europe are on average more transparent and have less approval requirements than the countries from Western Europe market entry barriers that arise from merger control are according to our indices smaller in the new EU member countries. If this has facilitated the entry of foreign banks in Central and Eastern Europe and conversely dissuaded foreign credit-institutions from merging with or taking over banks from Western Europe, however, remains an empirical question. It shall be answered in a subsequent paper.

# Merger Control as Barrier to EU Banking Market Integration

Matthias Koehler<sup>1</sup>

*Centre for European Economic Research (ZEW)*

August 2007

## Abstract

In 2005, the President of the Bank of Italy blocked the cross-border acquisition of two Italian banks for ‘prudential reasons and formal errors’. Following these events, the EU Commission brought actions against Italy for infringement of the principle of the free movement of capital. Although there is anecdotal evidence that prudential control may constitute a barrier to cross-border M&A in the banking sector, empirical evidence is missing until now. The main problem is the lack of data on the scope for politicians and supervisors to block M&A in the banking sector. The main contribution of this paper is to measure this scope for interference by constructing indices on the political independence and the transparency and strength of the supervisory review process of bank M&A. The main source of information to construct these indices is a questionnaire on banking regulation that was sent to the supervisory authorities in the 25 EU member countries between October 2006 and March 2007.

P.O. Box 10 34 43  
68034 Mannheim  
Germany

Phone        0621 / 1235 -148  
Fax:         0621 / 1235 - 223  
Email:       koehler@zew.de

---

<sup>1</sup> The author would like to thank all employees from the national central banks and supervisory authorities in the 25 EU member countries that participated in the survey and provided information on national banking laws. They made it possible to collect a unique dataset on banking regulation in the EU 25. Special thanks to Andrea Enria and Alan Houmann from the Committee of European Banking Supervisors (CEBS) for an extensive discussion on this issue. I am grateful to Reint Gropp for valuable comments and discussions. Sabrina Keller, Philipp Haenle, Christian Garve and Julia-Alexa Barde provided excellent research assistance. This research benefited from financial support of the German Research Foundation (DFG). All remaining errors and omissions are the responsibility of the author.

# **1 Introduction**

In 2005, the President of the Bank of Italy blocked the acquisition of Banca Antonveneta (BA) and Banca Nazionale de Lavoro (BNL) by the Dutch ABN Amro and the Spanish Banco Bilbao Vizcaya Argentaria (BBVA) for ‘prudential reasons and formal errors’. This is possible because in the EU the control of bank M&A is subject to both competition and prudential control. Although the acquisition of BA by ABN Amro was finally approved, the intended take-over of the BNL by BBVA failed.

Following these events, the EU Commission brought actions against Italy for infringement of the principle of the free movement of capital. The Commission complained that the supervisory review process of the Bank of Italy lacks procedural transparency and can create legal uncertainty. This, as was argued, could lead to a situation in which the supervisory authority can refuse authorization based on opaque concerns, e.g. regarding the ‘stability of governance’ (European Commission, 2005a). A survey launched by the EU Commission on the barriers to cross-border banking in Europe indicates that protectionism in banking markets might not only be an Italian problem. According to market participants with previous experience in M&A in the banking sector, one of the main barriers to the integration of European banking markets is the ‘misuse’ of supervisory powers and political interference (European Commission, 2005b). Since the scope for protectionism is expected to be smaller if M&A control is more transparent, the EU Commission made a proposal in 2006 to change the articles of the banking directive that regulate the transfer of ownership in the EU banking sector.

Although there is anecdotal evidence that the prudential control may constitute a barrier to the integration of European retail banking markets, empirical evidence is missing until now. The main problem is the lack of data on the scope for politicians and supervisors to block M&A in the banking sector. The main contribution of this paper is to collect this data and to construct indices on the political independence of bank supervisory authorities and the scope for supervisors to block the merger with or the acquisition of domestic credit institutions. The main source of information to construct these indices is a questionnaire on banking regulation that was sent to the supervisory authorities in the 25 EU member countries between October 2006 and March 2007.

## **2 The Integration of EU Retail-Banking Markets**

Banking markets are integrated if domestic and foreign financial institutions face the same set of rules that regulate the financial sector and are treated in a non-discriminatory manner when they operate in the market (Baele et al., 2004 and Hartmann et al., 2003). Regulations that hinder domestic and foreign banks

to the same extent therefore do not constitute an obstacle to integration (Baele et al., 2004). Only those that discriminate between domestic and foreign banks are an integration barrier.<sup>2</sup>

The most accurate and direct way to measure the degree of banking market integration would therefore be to list all frictions and regulations in the banking sector and to check if they apply differently to domestic and foreign credit institutions. This is, however, impossible. Banking market integration can hence only be measured indirectly by using quantity and price-indicators of integration. The latter analyze the development of interest rates of particular banking products like deposits or loans in order to measure the degree of financial market integration. The idea behind these indicators is that according to the law of one price identical products should cost the same price in perfectly integrated markets. If this is not the case, and some financial products have a higher interest rate in one country than in another, banks will move from the low-interest rate country to the high-interest rate country and drive down interest rate differentials in the short to medium term. Persistent price differentials for the same products across countries should therefore indicate incomplete integration of retail-banking markets.<sup>3</sup> An alternative price-indicator for banking market integration is the convergence of bank return-on-assets (ROA) (Gropp and Kashyap, 2007). The idea behind this indicator is that in fully competitive markets with a functioning corporate control mechanism bank ROA should

---

<sup>2</sup> Integration is here defined according to the preconditions. Other definitions of financial integration base on the process or the result of integration. The most common definition of financial integration is based on the result of integration. Markets are integrated according to this definition if the law of one price holds (Adam et al., 2002 and Cabral et al., 2002). This law states that identical products should have the same price in perfectly integrated markets. It holds if financial institutions arbitrage between low-price into high-price countries. This drives down price differentials. Integration can therefore also be described as the process of offering financial services in other countries either cross-border or by local presence or both. Since financial institutions are only able to fully exploit arbitrage opportunities and to offer financial services in other countries, if they face the same set of rules and regulations as domestic credit institutions do, our definition of financial integration is broader than the two previous definitions.

<sup>3</sup> Problematic is that the prices of retail-banking products often consist of different components like the loan or deposit rate as well as a fixed service charge (European Commission, 2005). Moreover, some products can often only be bought as a package. Certain products may therefore be under-priced to attract new clients, while other products are often over-priced (European Commission, 2005). The bundling of services is according to the retail banking inquiry of the Commission particularly widespread in EU retail-banking markets and increases the cost for bank customers (European Commission, 2006). Because data on interest rates is often highly aggregated and not broken down into its components, prices of retail-banking products are not easily comparable across countries (Cabral et al., 2002). It is therefore very difficult to establish the law of one price in retail-banking markets.

converge over time, since inefficient banks with a low ROA are either be driven out of the market or taken over by more efficient credit institutions with a higher ROA.

A comprehensive study on financial integration in Europe has been made by Adam et al. (2002). To measure the degree of banking market integration they analyze both the development of prices and quantities. Price indicator for the level of banking market integration are the degree of convergence of interest rates on loans to enterprises. These indicators have also been used by Baele et al. (2004). While Adam et al. and Baele et al. measure the degree of integration both of banking and capital markets, Cabral et al. (2002) only concentrate on the integration of banking markets. To analyze retail-banking market integration, they look at the development of household and corporate lending rates. Since interest rates are influenced by macro factors (e.g. general interest rate level) as well as by micro factors (e.g. market power), Cabral et al. furthermore calculate the spread between bank lending and deposit rates in order to disentangle the impact of increased competition and integration on the interest rate level. Convergence of these margins over time could then be seen as signalling greater integration, while a decline in the level can be interpreted as a sign of increased competition (Cabral et al., 2002).

To complement their analysis Adam et al. (2002) and Cabral et al. (2002) also use quantity indicators.<sup>4</sup> They use the volume of cross-border bank assets to measure cross-border activities and the number of branches and subsidiaries to measure local activities of foreign banks. Local presence is particularly relevant for retail-banking integration, since foreign retail markets will not be easily conquerable from distance as long as the use of remote banking (e.g. online banking) remains limited (Cabral et al., 2002). Since the most effective way to gain access to local retail-banking markets remains the merger with or the acquisition of domestic banks, Cabral et al. (2002) analyze M&A activity in the EU banking sector as well. Their main result is that the number of cross-border M&A is still limited in the banking sector and that most M&A still take place between credit institutions from the same country. European retail-banking markets therefore still seem to be fragmented along national lines.

---

<sup>4</sup> Quantity indicators are not without problems either. One problem is that a banking market is not necessarily isolated if the number or the market share of foreign banks is small given that the market is contestable and foreign banks are able to enter the local banking market at any time (Gual, 2004). This drives down profit margins of incumbent domestic banks although foreign credit institutions are not present in the market. Furthermore, it is problematic that a change in ownership may not necessarily change the pricing behaviour of financial institutions (Cabral et al., 2002). In this case, price differentials persist even though the number and market share of foreign credit institutions is high in the country.

### **3 Barriers to Cross-Border Consolidation**

Although there are many benefits related to the international expansion of banks, the number of M&A between banks from different countries is still considerably lower than the number of domestic M&A (Cabral et al., 2002). This indicates that there may be frictions in the M&A process which are greater for foreign than for domestic banks. Cross-border consolidation therefore seems to be subject to significant obstacles to integration. These obstacles may be differentiated into market entry and efficiency barriers.

Efficiency barriers refer to factors that make it difficult to own and operate a bank in a foreign country (Berger et al., 2000). Cultural diversity, different languages and corporate cultures are typical efficiency barriers as well as great physical distance between the subsidiary and the parent bank. They make the post-merger integration process more difficult because different cultures and languages make the communication between banks more complicated and delay or even prevent an efficient restructuring and reorganisation of the target institution. This leads to organizational diseconomies and reduces the potential of banks to reap benefits from economies of scale and scope and increased X-efficiency from cross-border M&A (Berger et al., 2000). Problematic is furthermore that consumers might not be indifferent between domestic and foreign banks and therefore be reluctant to switch to foreign credit institutions (Cabral et al., 2002).

Besides these natural barriers there are also artificial barriers to integration. These barriers are artificial because unlike natural barriers they arose by and can be removed through a political process. Differences in the regulation and supervision of banks are one example for these kinds of barriers. They limit cross-border consolidation because foreign banks have to comply with both regulations at home and abroad, while domestic banks only have to comply with regulations in their home country. This gives domestic credit institutions cost advantages because complying with two different sets of regulations imposes additional costs on foreign banks. Efficiency barriers therefore lead to considerably lower efficiency gains and might offset most of any potential efficiency gains from cross-border bank M&A (Berger et al., 2000).

Besides these efficiency barriers to integration there are also market entry barriers. They make it harder or even impossible for foreign banks to take over or merge with domestic credit institutions. Ownership limits for foreign investors are one simple example for these kinds of barriers. Another market entry barrier that has recently gained particular importance arises when domestic and foreign banks are not treated equally during the merger control process. Because there are some examples in the EU where supervisory authorities have used their powers to discriminate between foreign and domestic banks, the next section will take a closer look at these kinds of barriers.

## **4 Merger Regulation in the EU Banking Sector**

### **4.1 Merger and Competition Control**

M&A control is relevant for the integration of retail-banking because foreign banks generally establish subsidiaries by taking over or merging with existing domestic credit institutions. The discriminatory application of M&A control therefore constitutes not only a barrier to cross-border bank M&A, but also an important barrier to the integration of banking markets in the EU.

The main objective of M&A control is to maintain competition in the market. Merger control is therefore part of competition control. In the EU, it is regulated in decree No. 4064/1989. This decree defines that the Commission is responsible for the control of cross-border M&A if the transaction reaches certain turnover thresholds ('Community Dimension'). The decree furthermore defines that all M&A that create or strengthen a dominant position which impedes effective competition shall be declared incompatible with the common market (Art. 2, p. 2). All M&A between foreign and domestic firms whose turnover exceeds the predetermined thresholds and which do not restrict competition in the single market should therefore get approval by the EU Commission. This is however not the case for M&A that involve banks, because Article 21 of decree No. 4064/89 grants member states the right '*to take appropriate measures to protect legitimate interests*' (Article 21, p. 3). Legitimate interests are defined as public security, plurality of the media and prudential rules (Article 21, p. 3, s. 3). Since prudential rules relate, in particular, to financial services (European Commission, 1998), Article 21 grants member states the right to block cross-border bank M&A on prudential grounds if supervisors are not satisfied with the soundness and prudence of the potential investor.

### **4.2 Prudential Control of Bank M&A**

Because M&A in the EU banking sector are subject to both competition and prudential control, the approval of M&A in the banking sector is conditioned on the prudential assessment of the proposed investor. Bank M&A can therefore be blocked if regulators deem the potential investor as not suitable to ensure the sound and prudent management of the credit institution. This is also regulated by the existing EU legal framework. It grants national supervisors the right to veto the acquisition of ownership shares in domestic banks, if they are '*in view of the need to ensure sound and prudent management of the credit institution, [...] not satisfied as to the suitability [of the potential investor]*' (Article 19, p. 1, s. 2 of Directive 2006/48/EEC).

Problematic is that the current framework does not provide specific criteria for assessing the suitability of the acquirer. The relevant authorities therefore have

considerable latitude in accepting, discouraging or rejecting a proposed acquisition. This could lead to undue interference by regulators that frustrates investors and makes cross-border M&A in the banking sector impractical. This has recently been confirmed by an EU Commission survey on the obstacles to cross-border consolidation in the EU banking sector. According to market participants with previous experience in M&A, the ‘misuse’ of supervisory powers and political interference have been identified as one of the main barriers that prevent foreign banks from taking over or merging with domestic credit institutions (European Commission, 2005b).

Besides this survey evidence, there were also cases in the past in which regulators and politicians more or less successfully tried to block cross-border M&A in the banking sector. The first case that became public was the intended acquisition of the Portuguese financial group Champlinaud by the Spanish bank Banco Santander Central Hispanio (BSCH) in 1999. This acquisition was vetoed by the Portuguese Minister of Finance. The grounds for opposing the deal included not only ‘late and incomplete notification’ and the ‘absence of a transparent structure’ in the new group, but also the ‘necessity to protect the national interest’ (European Commission, 1999a). This veto was later overruled by the European Commission because it was not justified on prudential grounds (European Commission, 1999b). A second prominent example was the intended takeover of the Italian Banca Antonveneta (BA) by the Dutch ABN Amro. The deal was announced in March 2005 and came only one day after the Spanish Banco Bilbao Vizcaya Argentaria (BBVA) announced to take over Banca Nazionale de Lavoro (BNL), another bank from Italy. Both credit institutions already had a strategic stake in the BA and BNL, respectively, before the take-over announcement. Because both acquisitions were blocked by the President of the Bank of Italy for ‘prudential reasons and formal errors’, Banca Popolare di Lodi (BPL), and the insurance company Unipol had time to increase their stake in both credit institutions. Later both institutions themselves made an announcement to take-over the remaining BA and BNL shares. Although the acquisition by ABN Amro was yet approved in September 2005, the strategy of the President of the Bank of Italy to block the acquisition considerably delayed the take-over process and increased legal uncertainty and risk for ABN AMRO. The acquisition of the BNL by BBVA however failed after BBVA had withdrawn its take-over offer in response to the take-over announcement by Unipol.

These are only three prominent examples where politicians and regulators have intervened in the M&A process in order to delay the acquisition of domestic banks and to protect them from being taken over by foreign credit institutions. They make clear that the supervisory review process has the potential to significantly restrict cross-border consolidation and the integration of banking markets.

### 4.3 Directive Proposal of the EU Commission

Initiated by these events and a survey on the obstacles to cross-border banking in Europe the EU Commission proposed changes of the relevant article of directive 2006/48/EEC in September 2006 (European Commission, 2006a). The proposals aim is to considerably improve the legal certainty, clarity and transparency of the supervisory review process (European Commission, 2006a). The proposal modifies the existing framework with regard to the criteria and the procedure used by the supervisory authorities to assess the suitability of the proposed investor.

The directive proposal first sets a closed list of criteria when assessing the suitability of potential investors. The criteria proposed are (1) the reputation of the investor, (2) the experience of the future management, (3) the financial soundness of the proposed acquirer, (4) the ongoing compliance with EU directives and (5) no connection to money laundering and terrorism finance (European Commission, 2006b).<sup>5</sup> To control if supervisors fulfil their obligations, they should furthermore provide the Commission with all relevant documents on which they have based their assessment. Moreover, the Commission has proposed that the reasons that led to the denial of an acquisition should be made public.

To increase legal certainty and transparency of the supervisory review process, the new directive should reduce the time period supervisors have to veto an acquisition. Under the current directive, regulators have three months to veto the takeover of shares by investors (Article 19, p. 1, s. 2). According to the proposal, the Commission plans to reduce the assessment period to 30 working days for intra-EU M&A (European Commission, 2006b). If the supervisor requests additional information to assess the potential investor, this period shall be extended once. The extension shall, however, not exceed 10 working days. M&A involving banks from third countries shall be assessed within a period of maximum 50 working days (European Commission, 2006b). If the competent

---

<sup>5</sup> The full wording of the directive proposal for Article 19 of Directive 2006/48/EEC is: '... the competent authorities shall ... assess the suitability of the proposed acquirer and the financial soundness of the proposed acquisition against all of the following criteria: (a) the reputation of the proposed investor; (b) the reputation and experience of any person who will direct the business of the credit institution as a result of the proposed acquisition; (c) the financial soundness of the proposed acquirer, in particular in relation to the type of business pursued and envisaged in the credit institution in which the acquisition is sought; (d) whether the credit institution will be able to meet and continue to meet the obligations under this directive ... and (e) whether there are reasonable grounds to suspect that, in connection with the proposed acquisition, money laundering or terrorist financing ... is being committed or attempted, or that the proposed acquisition could increase the risk of such conduct' (European Commission, 2006b).

authorities do not oppose the proposed acquisition or increase in holding within this period, the proposed transaction shall be deemed to be approved.<sup>6</sup>

## **5 Measuring Market Entry Barriers**

In the EU, the merger with or the acquisition of credit institutions are unlike M&A in the industrial sector subject to both competition and prudential control. The prudential assessment of M&A involving banks aims to ensure continued compliance with supervisory rules and concentrates among others on the suitability of potential shareholders. M&A are therefore blocked by regulators if they deem the potential investor as not suitable to ensure the sound and prudent management of the involved credit institutions. Because the supervisory review process lacks procedural transparency, supervisors and politicians have the scope to block cross-border M&A for other than prudential reasons. M&A control then constitutes a market entry barrier to integration.

Although there is anecdotal evidence that M&A control might constitute a barrier to the integration of banking markets, empirical evidence is missing until now. The main problem is the lack of data on the scope for politicians and supervisors to block cross-border M&A in the banking sector. The main contribution of this paper is to collect this data and to construct indices on the political independence of bank supervisory authorities and the transparency of the supervisory review process in the EU. Our paper therefore fits into the literature that measures and compares banking regulations around the world.

The basic paper in this literature is Barth et al. (2001). They set up a large database and constructed various indices that cover different aspects of banking regulations. Some of these indices also refer to regulations banks face when they enter foreign banking markets. Barth et al., however, concentrate on ownership

---

<sup>6</sup> The proposal has provoked a dispute between the Commission, the Parliament and the national supervisory authorities. To settle this dispute, the Commission has made a second proposal (Börsenzeitung, 2007). Since regulators were afraid that the proposed assessment period is not long enough to assess complex M&A, the new directive proposal provides that the assessment period shall be extended to 60 working days and may be prolonged once for additional 20 working days (Börsenzeitung, 2007). M&A involving banks from third countries shall be assessed within a maximum number of 90 working days (Börsenzeitung, 2007). Unclear is still if the decision and the reasons for blocking a M&A in the banking sector should be made public. The proposal of the EU Commission to get access to all documents on which national supervisors have based their assessment also failed (Börsenzeitung, 2007). National supervisors have until now only agreed on a list of criteria which should be used for assessing the suitability of potential investors (Börsenzeitung, 2007).

restrictions and limitations placed on the entry mode of banks only.<sup>7</sup> Since such restrictions breach the right to establishment and the free flow of capital, they are prohibited according to Art. 67 of the EC Treaty. Because all member countries comply with the Treaty, restrictions on ownership or the mode of entry should not exist in the EU.<sup>8</sup> The Barth et al. indices furthermore concentrate on direct market entry barriers only. This paper, however, is on indirect barriers.<sup>9</sup> The indices constructed by Barth et al. are hence insufficient to analyze indirect market entry barriers to the integration of banking markets.

A paper that measures the extent of indirect market entry barriers to integration is Carletti et al. (2006). They concentrate on the role of supervisors in the M&A control process as well. Their focus is, however, different. Carletti et al. concentrate on the ability of supervisors to block M&A between banks in order to protect incumbent banks from competition and not on the ability of supervisors to block M&A in the banking sector due to a lack of procedural transparency. Although both studies have parallels, their indices do not measure the degree of transparency of the supervisory review process as well and are consequently insufficient to find out if banking market integration varies with the degree of transparency of the supervisory review process and the strength of approval requirements.<sup>10</sup>

---

<sup>7</sup> Barth et al. call these indices Limitations on Foreign Ownership of Domestic Banks Index, Limitations and Foreign Bank Entry Index. The first index concentrates on limitations on ownership in domestic banks by foreign credit institutions. The Foreign Bank Entry Index measures whether there are any restrictions on the ability of foreign banks to enter domestic banking markets.

<sup>8</sup> This is also reflected in the answers we received from the supervisory authorities. We asked them if there were any restrictions on ownership in the banking between 1990 and 2005. The full wording of the questions was: ‘Was there a maximum percentage of bank capital that could be owned by a single domestic/foreign investor (legal entity or natural person) between 1990 and 2005?’ and ‘Was there a maximum percentage of bank capital that could collectively be owned by foreign investors (legal entities or natural persons) between 1990 and 2005?’ According to the answers from the supervisory authorities, no explicit restrictions on ownership were applied either to domestic or foreign investors between 1996 and 2005. The full questionnaire is presented in Table 1 of the Appendix.

<sup>9</sup> These barriers are not explicitly prohibited by Art. 67 of the Treaty because foreign credit institutions are still allowed to participate in domestic banks. But since they prevent that foreign firms can take full control over the acquired firm, they deter foreigners from taking over shares. The result of these indirect barriers is therefore the same as if foreign ownership is prohibited directly. Foreign firms are dissuaded from taking over or merging with domestic companies.

<sup>10</sup> Carletti et al. (2006) construct a Supervisory Focus Index. This index measures what general criteria national supervisors use in merger control. Three index values are possible. The index is attached a value of 1 if only supervisory criteria (e.g. stability) and a value of 0.5 if other criteria are used as well. If there is no supervisory control of

## 6 Indices on M&A Control

To get the data we need to construct our indices, we sent a questionnaire to the banking supervisory authorities of the 25 EU member countries from November 2006 to March 2007. They were asked to provide detailed information on ownership limits, reporting and approval requirements for ownership transfers as well as the criteria which are used to assess the suitability of a potential investor.

The first question we asked in our questionnaire was on the transparency of the supervisory review process of M&A in the banking sector. We asked the national regulators to list *official* criteria which are used to assess the suitability and the qualifications of the proposed investor.<sup>11</sup> If the number of criteria is large, supervisors have less scope for the interpretation of Article 19 of the EU Banking Directive because the supervisory review process is more transparent.

Supervisors are, however, still able to block cross-border M&A even if the criteria to assess the soundness and prudence of a proposed investor are clearly defined. This is the case if the reasons to block M&A's do not have to be published. For that reason, we also asked whether the decision and the reasons for blocking the transfer of ownership have to be made public.<sup>12</sup> The answers to these questions have later been used to construct indices on the transparency of the supervisory review process.

The possibility of politicians and supervisors to block cross-border M&A, however, not only relies on the transparency of the supervisory review process. It also depends on the number of opportunities regulators have to block M&A in the banking sector. If regulators can block ownership transfers only once and at an initial stage, the chance of supervisors to block M&A because of nationalistic

---

mergers in the banking sector, the index has an index value of 1. This index is almost identical to the M&A Criteria Index. Carletti et al., however, do not measure whether there are any official criteria that are used by supervisors to assess whether a merger in the banking sector endangers the stability of the financial system. They therefore do not measure if the supervisory control of mergers is transparent. This is, however, important for our study. For this reason, we constructed a *Transparency of M&A Criteria Index*.

<sup>11</sup> The full wording of this question is: 'Bank supervisory authorities in the EU are allowed to block mergers in the banking sector to ensure sound and prudent management of credit institutions, if they are not satisfied with the "suitability and qualifications of the proposed investor" (Article 19 of 2006/48/EEC). Please note what criteria (e.g. financial solidity, reputation of the investor, potential benefits of a merger for customers in your country) your institution used between 1990 and 2005 to assess the suitability and the qualifications of the proposed investor.'

<sup>12</sup> The full wording of this question is: 'Was the institution in your country legally required to publish the decision and the reasons, if it is not satisfied with the suitability and the qualifications of the proposed investor?'

feelings is smaller than in countries in which regulators have multiple opportunities to block the transfer of ownership. This should be covered by the questions regarding the approval requirements of ownership transfers in the banking sector. To find out how frequently ownership transfers have to be approved by the supervisory authority and whether domestic and foreign banks are subject to the same approval requirements, we asked whether ownership transfers between domestic investors and between domestic and foreign investors face different approval requirements.<sup>13</sup> Information from the answers to these questions has later been used to construct indices on the frequency of approval requirements in the banking sector.

The questionnaire has been filled out by the following ten member countries: the Czech Republic, Italy, Germany, Greece, Latvia, Lithuania, Luxembourg, Malta, Portugal, the Slovak Republic and Sweden. In case that national supervisors had not filled out the questionnaire, we extracted the required information from other sources.<sup>14</sup> We also used these sources of information to cross-check the information obtained from the questionnaire if possible. The largest part of this information comes from national banking laws. These laws are structured almost similarly in every country. They start with a section on who is responsible for banking supervision and what business banks are allowed to make. The next section is on the establishment and authorization of credit institutions. Rules on opening of branches of foreign banks are also laid down in this section. The third section mostly deals with the acquisition of ownership in credit institutions. It regulates how many percent of capital or voting rights has to be acquired or disposed to become subject to approval by the supervisory authority. This section also defines by how many percentage points the initial holding in a credit institution has to increase/decrease to become subject to approval. This is particularly relevant for our indices on the approval requirements for ownership transfers in the banking sector. The same section also regulates the conditions

---

<sup>13</sup> The full wording of this question is: ‘Did the transfer of ownership between domestic investors require approval by the supervisory authority and/or any other institution (e.g. government, competition authority, central bank) in your country between 1990 and 2005?’ and ‘Did the transfer of ownership between domestic and foreign investors require approval by the supervisory authority and/or any other institution (e.g. government, competition authority, central bank) in your country between 1990 and 2005?’

<sup>14</sup> Besides national banking laws, we looked at several reports of the central bank and the supervisory authority as well as various Financial Stability Assessment Reports of the International Monetary Fund (IMF). Since cross-border M&A may not only be blocked by national supervisors but also through political interference, we have also constructed indices on the political independence of the national regulator. The main source of information for these indices is the World Bank Database on Regulation and Supervision in the Banking Sector (Barth et al., 2001) and national central bank laws. Please see Table 2 for a detailed summary of data sources we used for every country.

under which the supervisor is allowed to refuse to grant approval to an acquisition or a disposal of controlling shares in a credit institution. This is relevant for the indices on the transparency of the supervisory review process.

Based on the questionnaire and other sources of information we have constructed indices on M&A control for the following 20 EU member countries: Austria, Finland, Germany, Greece, Portugal, Sweden, Spain, the Netherlands, Luxembourg, France, and Italy (hereafter: Western European countries) as well as Malta, the Czech and Slovak Republic, Slovenia, Estonia, Latvia, Lithuania, Hungary, and Poland (hereafter: Central and Eastern European countries). The time period for which we have complete information for all countries and for all indices is 1996 to 2005.

## 6.1 Political Independence

The first indices we constructed measure the degree of political independence of the supervisory authority. If the supervisory authority is independent, politicians are less able to put pressure on the supervisory authority to block M&A in the banking sector due to nationalistic feelings.

The first index is called *Approval Authority Index* (hereafter: Approval Index). It is constructed as follows: (1) If the Prime Minister, Minister of Finance or Economics or any other member of the cabinet approves the acquisition of ownership in a domestic credit institution, the value that is assigned to the index will be zero. (2) If the Prime Minister, Minister of Finance or Economics or any other member of the cabinet decides in consultation with the supervisory authority on the approval of ownership transfers, the index will be assigned a value of 0.5. (3) If the supervisory authority or any other authority alone decides on approving M&A in the banking sector, the index has a value of 1. A larger value therefore indicates greater political independence of the supervisors.

Figure 1 presents the *Approval Index* for all countries in 1997, 2001 and 2005.<sup>15</sup> Approval is given in most countries by the authority which also supervises the banking sector. Only in France and Malta, the power to approve has been delegated to a special licensing committee. The index value is therefore one for all countries. The only exception was Austria between 1996 and 2001 because the Minister of Finance directly approved ownership transfers in the banking sector during that period. The index value for Austria was consequently assigned a value of zero between 1996 and 2001. This changed, however, in 2002 with the establishment of the ‘Finanzmarktaufsicht’ as single supervisor for banks and capital markets.

---

<sup>15</sup> All figures have been put in the Appendix and can be found on pages 25 to 34.

Since supervisors might not be independent if they are appointed by the government, the second index concentrates on how the head of the authority is appointed that approves ownership transfers in the banking sector. The *Appointment Authority Index* (hereafter: Appointment Index) has been constructed as follows: (1) If the head of the authority that approves the acquisition of ownership transfers in the banking sector is appointed by the Prime Minister or any other member of the cabinet, the index will get a value of zero. (2) If the head is appointed by the parliament on proposal by the cabinet, the index will have a value of 0.5. (3) If the head of the supervisory authority is appointed by the parliament without any proposal of or approval by the government, the index will be assigned a value of 1. As for the *Approval Index*, a higher value of the *Appointment Index* indicates less scope for political interference.<sup>16</sup>

Figure 2 presents the *Appointment Index* for all countries in 1997, 2001 and 2005. In almost all countries, the head of the supervisory authority that approves ownership transfers in the banking sector is nominated by either the government alone or by the parliament on proposal by a member of the government. Countries where the head of the supervisory authority is nominated by the parliament on proposal by the government are exclusively located in Central and Eastern Europe. To combine the information of the *Approval* and *Appointment Index*, we calculated an aggregate *Index of Political Independence*. It is defined as the sum of the two sub-indices. Based on the aggregate index, the countries from Central and Eastern Europe have on average more politically independent supervisory authorities than the countries from Western Europe (see Figure 3).

## 6.2 Scope for Interpretation

Since direct barriers on capital flows like ownership restrictions are prohibited by EU law, one of the main indirect market entry barriers that hinder foreign firms from taking over or merging with domestic banks might be the supervisory review process. This might particularly be the case in countries where M&A control is intransparent. To measure the transparency of the supervisory process, we analyze which criteria regulators *officially* use when they assess potential investors. Criteria are official if they are mentioned in the banking law or any other publicly available document.

The first index measures according to which general criteria (prudence and competition) supervisors assess the suitability of potential investors. It is called *M&A Criteria Index* and is constructed as follows: (1) If there are no general

---

<sup>16</sup> Most of the information necessary for constructing the indices for the countries in our sample comes from the World Bank Database on Regulation and Supervision in the Banking Sector (Barth et al., 2001) and national central bank laws.

and publicly available criteria to assess M&A the index will get a value of zero. (2) If the supervisor decides on approving M&A in the banking sector based on competitive and prudential reasons, the index will be assigned a value of 0.5. This category has been added because politicians and supervisory authorities may block cross-border M&A supposedly for concerns that they may restrict competition in the banking sector.<sup>17</sup> (3) If the decision to approve M&A is based only on the soundness and the prudence of the proposed investor, the index has a value of 1. A larger index value therefore indicates less scope for supervisors to block cross-border M&A.

Figure 4 shows the *M&A Criteria Index* for all countries in 1997, 2001 and 2005. It indicates that most of the countries assess M&A based on the soundness and prudence of the proposed investor only. The median value is one for all countries. The high level of convergence is not surprising since the soundness and prudence of the investor has been introduced by the EU Banking Directive as the only criterion to assess a potential investor. The level of convergence is particularly high in Western Europe. Only Sweden and Finland base the decision to grant approval to an acquisition in the banking sector on competition issues as well. Among the Central and Eastern European countries Estonia, Hungary, and Slovenia take account of the effect of M&A on the level of competition in the market. Poland and the Slovak Republic, in contrast, did not base the decision to approve M&A in the banking sector on any general and publicly available criteria between 1997 and 2001 at all. The scope for interference was therefore particularly large in these two countries. The variation among Central and Eastern European countries is therefore considerably larger than in the group of Western European countries.

As supervisors have more scope to block M&A if the criteria to assess if a proposed investor is sound and prudent are not public, we construct a second index. This index is called *Transparency of M&A Criteria Index*. It measures if the criteria to assess if potential investors are sound and prudent are documented in national banking laws as proposed by the EU Commission. (1) The index gets a value of zero if no criteria are documented. If the supervisory authorities assess the soundness and prudence based on either the reputation, the financial soundness of the proposed investor or the experience/skills of future managers and directors and if these criteria are documented in the banking law, the index

---

<sup>17</sup> The EU Commission has, for example, brought actions against Poland for infringement of the principle of free movement of capital because it inserted a clause in the privatization treaty of bank Pekao that did not allow the acquiring bank Unicredit, to open subsidiaries and/or branches, acquiring control of banks active in the country and making capital investment in any company active in the Polish banking sector for a ten year period (EU Commission, 2006). According to the Polish government this clause was inserted to ensure ‘the protection of competition in the Polish banking sector’ (EU Commission, 2006c).

is assigned a value of 0.33. (2) If the supervisor uses two of these criteria to assess the soundness and the prudence of a potential investor it gets a value of 0.67, and (3) if it uses all three criteria, it gets an index value of 1. As in the case of the *M&A Criteria Index*, a larger index value therefore indicates greater transparency of the supervisory review process and less scope for interpretation.

Figure 5 shows the *Transparency Index* for all countries in 1997, 2001 and 2005. In contrast to the *M&A Criteria Index*, the scope for interference is considerably larger according to this index. The median value is zero for all countries. This is currently also the EU norm. This indicates that most of the countries do not use any official criteria to assess the soundness of a proposed investor. The recent reform proposal of the EU Commission intends to change this. It requires supervisors to base their assessment on official criteria like the financial solidity of the proposed investor. If implemented, all countries should have an index value of 1. Some countries already use part of the proposed criteria. Countries which list official criteria in their banking laws mainly come from Central and Eastern Europe. The only countries from this region which do not list any explicit criteria are the Czech Republic and Poland. The median value for this country group was consequently 0.33 in 2005. This means that 50 percent of all countries list at least one out of three criteria (financial solidity, skills/experience of future management, reputation) in their banking laws. The criterion which is currently most often used by supervisors is the financial solidity of the proposed investor. Since Portugal is the only country from Western Europe that uses an official criterion from our list for the prudential assessment of potential investors in the banking sector, the median for this country group was zero in 2005 and consequently significantly lower than in Central and Eastern Europe. The most legal adjustments are therefore necessary in Western Europe once the directive proposal has been implemented.

However, supervisors are still able to block cross-border M&A on political reasons even if the criteria to assess the soundness and prudence of a proposed investor are clearly defined. This is the case if the reasons to block an acquisition in the banking sector do not have to be published. For that reason, we have constructed a third index which captures whether the reasons to block M&A in the banking sector have to be made public. It is, for this reason, also called *Publication of Reasons Index*. (1) Because the scope for interpretation is larger if the reasons to block a M&A do not have to be publicly disclosed, the index is assigned a value of zero if the supervisor does not have the obligation to make public the reasons for the disapproval of a merger or an acquisition. (2) If the supervisor conversely has to publish the reasons, it gets a value of 1. As is the case for the two other indices a larger index value therefore signals a greater degree of transparency of the supervisory review process. Since all countries in our sample are not legally required according to national banking laws to publish the reasons for disapproving the transfer of ownership in the banking

sector, the index has a value of zero for all countries and is therefore not reported. Because regulators have thus far not agreed on the recent reform proposal of the EU Commission to publish the reasons, an improvement seems to be unlikely in future.

To combine the information of the *M&A Criteria* and *Transparency Index*, we calculated an *Aggregate M&A Criteria Index*. It is defined as the sum of the two sub-indices. Based on the aggregate index, the scope for intervention is on average smaller in Central and Eastern Europe than in Western Europe (see Figure 6).

### **6.3 Scope for Intervention**

The indices so far only cover how transparent the supervisory review process is. Since the scope for regulators to block cross-border M&A in the banking sector also depends on how often ownership transfers have to be approved, the frequency of approval requirements is also relevant.

The first index is called the *Approval Requirements Index*. It measures how large the initial holding (in banking laws mostly defined as ‘qualified holding’) has to be to become subject to approval by national supervisors. The index is constructed as follows: (1) If the initial holding in a bank that requires approval by the supervisory authority is less than or equal to 5 percent, the index is assigned a value of zero. (2) If the initial holding to be approved is equal to or larger than 5 percent, but less than and equal to ten percent, the value that is attached to the index is 0.5. (3) If it is equal to or larger than 10 percent, the index value is 1. This is consistent with the EU norm (Art. 4, p. 11 of Directive 2006/48/EEC). The member countries are, however, allowed to set lower limits, since the 10 percent threshold is only a minimum requirement. Since the scope for political interference decreases as the size of the initial holding that does not require approval increases, a larger index value indicates less scope for blocking cross-border M&A.

It is however not only important how large the initial holding is that requires approval, but also how often the increase of initial holdings has to be approved by the supervisory authority. This is captured by the *Frequency of Approval Requirements Index*. The EU norm is that every ownership transfer that exceeds 20, 33 and 50 percent has to be approved by the supervisory authority (Article 19, p. 1 of Directive 2006/48/EEC). The member countries are however free to set more than three thresholds. The index measures whether the member countries have used this option. (1) If there are more than and equal to six thresholds the index is assigned a value of 0. (2) The index gets a value of 0.25/0.5/0.75 if there are 5/4/3 thresholds, respectively. (3) Only if the number of thresholds is less than three, the index is attached a value of 1. Since the

supervisory authority has less scope to block M&A, if the number of thresholds is small, a larger value of the index indicates fewer opportunities for supervisors to block ownership transfers.

Figure 7 presents the *Approval Requirements Index* for all countries in 1997, 2001 and 2005. The median for all years is 1. This is also the EU norm. This indicates perfect convergence among most EU member countries. Exceptions are Italy, Portugal, Spain, and the Slovak Republic which had a threshold value for the initial holding of 5 percent in all years. These countries are also the ones where the frequency of approval requirements is highest among EU member countries. This is measured by the *Frequency of Approval Requirements Index* (see Figure 8). Spain has the lowest index value, because the number of thresholds exceeds six (10, 15, 20, 25, 33, 40, 50, 66 and 75 percent). Approval requirements are therefore particularly large in Spain. Countries which have low index values in 2005 as well are Italy, Portugal, Hungary, Poland, and the Slovak Republic. All other countries have exactly implemented EU regulations and do not set more than 3 thresholds. The index value for most EU member countries is therefore 0.75. This is the median for both country groups in 2005 as well.

To combine the information of the *Approval Requirements* and *Frequency of Approval Requirements Index*, we calculated an *Aggregate Approval Requirements Index*. It is defined as the sum of the two sub-indices. Based on the aggregate index, the strength of approval requirements does not differ between country groups (see Figure 9). The median for both groups is 1.75 in 2005. Countries which are far below the median are Italy and Spain. In these countries, approval requirements seem to be particularly strong according to our indices.

## 6.4 Multivariate Analysis

The descriptive analysis in the previous section has shown that there is some variation among countries and indices. It has however not shown whether there are some countries where the supervisory review processes is systematically more transparent and approval requirements are low and whether there are other countries where the review process is conversely very intransparent and the frequency of approval requirements high.

The first step to detect such systematic patterns among countries is to analyze the correlation between the indices. Since the index values are ordinal-scaled, Spearman rank-correlation coefficients have been calculated for the period between 1997 and 2005. They are presented in Table 3 for all countries and for both country groups alone. The most interesting point is the correlation between the indices on the transparency of the supervisory review process and the

frequency of approval requirements. According to the correlation coefficients calculated for all countries, there seems to be no correlation between the transparency of the review process and the frequency of approval requirements at all. This, however, does not hold when looking at the correlation for both country groups separately. In particular, in Western Europe the correlation between transparency and reporting requirements is significantly negative. This indicates that the threshold value for the initial holding is systematically higher if the supervisory review process is transparent and *vice versa*. Countries from Central and Eastern Europe conversely do not seem to follow any systematic pattern. Only the correlation coefficient between the *Approval Requirements Index* and the *M&A Criteria Index* is significant and positive. This means that countries in Central and Eastern European which have few approval requirements at the same time have a more transparent supervisory review process and *vice versa*.

A problem of the correlation analysis is that it does not indicate clusters among countries. To identify such groups, we performed a hierarchical cluster analysis. A cluster analysis is a more advanced method to identify patterns or groups among countries than regional grouping. It aims at grouping individuals or objects into clusters so that objects in the same cluster are more similar to one another than they are to objects in other clusters. The general aim of the cluster analysis in this paper is to find out whether there are groups of countries whose degree of transparency and strength of approval requirements is systematically different from each other.

Of central importance in attempting to identify clusters of observations is that we have to measure how far the EU member countries are apart in terms of transparency and strength of approval requirements. Because our indices are ordinal-scaled, distance measures for continuous data cannot be used. One method therefore is to transform the variables into nominal variables and use distance measures for binary data. Countries that have the same index value are then coded 1 and zero otherwise. Doing so, however, leads to a loss of information because the recoding does not take account of how large differences between countries are in terms of transparency and strength of approval requirements. We therefore choose to transform the variables in another way. The first step of this transformation is to rank the countries according to their index value. In order to reduce the number of variables in the cluster analysis, we used the aggregate indices on political independence, the transparency of M&A criteria, and the frequency of approval requirements.<sup>18</sup> The rank numbers for these indices have been standardized hereafter to the range [0, 1]. This transformation makes it possible to calculate a dissimilarity matrix based on

---

<sup>18</sup> The box plots for both indices are presented in Figure 7, 8 and 9 in the Appendix for all countries and for both country groups separately.

distance measures for interval-scaled data. The distances measure for our indices is the squared Euclidian distance:

$$d_{ij} = \left[ \sum_{r=1}^R (z_{ir} - z_{jr})^2 \right]$$

where  $d_{ij}$  is the distance between country  $i$  and  $j$ , and  $z_{ir}$  and  $z_{jr}$  are the standardized rank values of country  $i$  and  $j$ , respectively. Based on  $d_{ij}$  the countries are subsequently linked to each other with the Wards algorithm. This algorithm uses an analysis of variance approach to evaluate the distances between clusters. Since it minimizes the error sum of squares, the Wards linkage leads to very homogeneous clusters. The results of the cluster analysis are finally plotted with the help of a dendrogram. Countries with similar degree of transparency and strength of approval requirements should be joined to clusters at an early stage of the clustering procedure.

Figure 10 presents the dendrogram for the *Index of Political Independence*, the *Aggregate M&A Criteria Index* and the *Aggregate Approval Requirements Index* in 2005. Three different clusters have been identified by the Wards algorithm. The first cluster is formed by the three Baltic countries Estonia, Latvia, Lithuania as well as Slovenia. To the second cluster belong Italy, Spain, Portugal, and the Slovak Republic. The third cluster contains most of the countries in our sample. It consists of Austria, Germany, Greece, Luxembourg, Malta, and the Netherlands. The Czech Republic, Hungary, and Poland also belong to this cluster. Finland and Sweden join the cluster like Poland and Hungary at a later stage. Figure 11 makes clear why the countries have been joined by the cluster algorithm to form these groups of countries. This figure shows the mean values for the three aggregate indices of the respective cluster in 2005 in a three-dimensional diagram. According to Figure 11, all countries with multiple approval requirements belong to the second country cluster. These countries have at the same time a high degree of political independence of the supervisory authority and a relatively transparent supervisory review process. The latter holds for the countries in the first cluster as well. These countries have in contrast to the second cluster, however, at the same time only few approval requirements. The possibility for politicians and supervisors to block cross-border M&A due to nationalistic feelings should therefore according to our indices be particularly small in Estonia, Latvia, and Lithuania as well as in Slovenia. All countries which have a relatively intransparent review process but only few approval requirements have been joined by the cluster algorithm in the third cluster. The most Western European countries belong to this group.

## **7 Conclusions**

Although there is anecdotal evidence that the control of M&A in the EU banking sector may constitute a market entry barrier to the integration of European banking markets, empirical evidence is missing until now. The main problem is the lack of data on the scope for politicians and supervisors to block cross-border M&A in the banking sector. The main contribution of this paper therefore was to collect this data and to construct indices on the political independence of bank supervisory authorities and the transparency of the supervisory review process in the EU.

The descriptive analysis has shown that the degree of transparency and the strength of approval requirements for ownership transfers is different in the EU although the harmonization of banking regulations has already led to some level of convergence. Since the scope for supervisors and politicians to block cross-border M&A during M&A control depends on the transparency of the supervisory review process and the strength of approval requirements, countries with transparent M&A control and low approval requirements are expected to have lower market entry barriers than countries where M&A control is intransparent and approval requirements are high. Since the countries from Central and Eastern Europe are on average more transparent and have less approval requirements than the countries from Western Europe market entry barriers that arise from merger control are according to our indices smaller in the new EU member countries. If this has facilitated the entry of foreign banks in Central and Eastern Europe and conversely dissuaded foreign credit-institutions from merging with or taking over banks from Western Europe, however, remains an empirical question.

## References

- Adam, K., T. Jappelli, A. Menchini, M. Padula and M. Pagano (2002), 'Analyse, Compare, and Apply Alternative Indicators and Monitoring Methodologies to Measure the Evolution of Capital Market Integration in the European Union', in: Economic Studies on the Internal Market, European Commission, Brussels.
- Baele, L., A. Ferrando, P. Hördahl, E. Krylova and C. Monnet (2004), 'Measuring Financial Integration in the Euro Area', in: Occasional Paper Series, No. 14, European Central Bank, Frankfurt.
- Barth, J., G. Caprio and R. Levine (2001), 'The Regulation and Supervision of Banks Around the World - A New Database', in: Policy Research Working Paper, No. 2588, World Bank Group, Washington D.C..
- Berger, A. N., R. DeYoung and G. Udell (2000), 'Efficiency Barriers to the Consolidation of the European Financial Services Industry', in: European Financial Management, Vol. 6, No. 4.
- Berger, A. N. and G. F. Udell (2002), 'Small Business Credit Availability and Relationship Lending: The Importance of Bank Organisational Structure', in: The Economic Journal, Volume 112, No. 477.
- Börsenzeitung (2007), 'EU strafft Vorgaben für Fusionsprüfung', 14.03.2007.
- Cabral, I., F. Dierck and J. Vesala, (2002), 'Banking Integration in the Euro Area', in: Occasional Paper Series, No. 6, European Central Bank, Frankfurt.
- Carletti, E., P. Hartmann and S. Ongena (2006), 'The Economic Impact of Merger Control – What is Special About Banking?.
- Commission of the European Communities (1998), 'Notes on Council Regulation (EEC) 4064/89', in: Merger Control Law in the European Union, European Commission, Brussels-Luxembourg.
- Commission of the European Communities (1999a), 'Financial services: Commission to send reasoned opinion to Portugal over veto against BSCH participation in Champalimaud group', in: Press Release, IP/99/773, Brussels.
- Commission of the European Communities (1999b), 'Commission decides to open infringement procedure against Portugal over veto against BSCH participation in Grupo Mundial Confiança', in: Press Release, IP/99/551, Brussels.

- Commission of the European Communities (2005a), 'Free movement of capital: Commission opens an infringement procedure against Italy on the issue of acquisition of stakes in domestic banks', in: Press Release, IP/05/1595, Brussels.
- Commission of the European Communities (2005b), 'Cross-border Consolidation in the EU Financial Sector', in: Commission Staff Working Document, Brussels.
- Commission of the European Communities (2006a), 'Financial sector: Commission acts to improve supervisory approval process for mergers and acquisitions', in: Press Release, IP/06/1174, Brussels.
- Commission of the European Communities (2006b), 'Proposal for a Directive of the European Parliament and the Council amending Council Directive 92/49/EEC and Directives 2002/83/EC, 2004/39/EC, 2005/68/EC and 2006/48/EC as regards procedural rules and evaluation criteria for the prudential assessment of acquisitions and increase of shareholdings in the financial sector', Brussels.
- Commission of the European Communities (2006c), 'Mergers: Commission launches procedure against Poland for preventing Unicredit/HVB merger', in: Press Release, IP/06/277, Brussels.
- European Central Bank (2007), 'Strengthening the EU Framework for Cross-Border Banks', in: Financial Integration in Europe-March 2007, European Central Bank, Frankfurt.
- Gropp, R. and A. Kashyap (2007), 'Banking Integration in the Euro Area?', University of Chicago and ZEW Manuscript.
- Gual, J. (2004), 'The Integration of EU Banking Markets', in: Discussion Paper Series, No. 4212, Centre for Economic Policy Research.
- Hartmann, P., A. Maddaloni and S. Manganelli (2003), 'The Euro Area Financial System: Structure, Integration and Policy Initiatives', in: Working Paper Series, No. 230, European Central Bank, Frankfurt.

## Appendix

### Country Codes:

AT - Austria

CZ – Czech Republic

DE – Germany

EE – Estonia

ES – Spain

FI – Finland

F – France

GR – Greece

HU – Hungary

IT – Italy

LI - Lithuania

LU – Luxemburg

LV - Latvia

MA – Malta

NL – Netherlands

PL – Poland

PT – Portugal

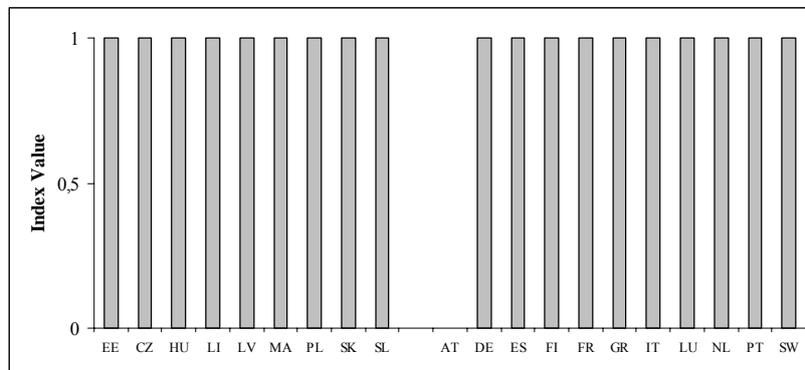
SK – Slovak Republic

SL – Slovenia

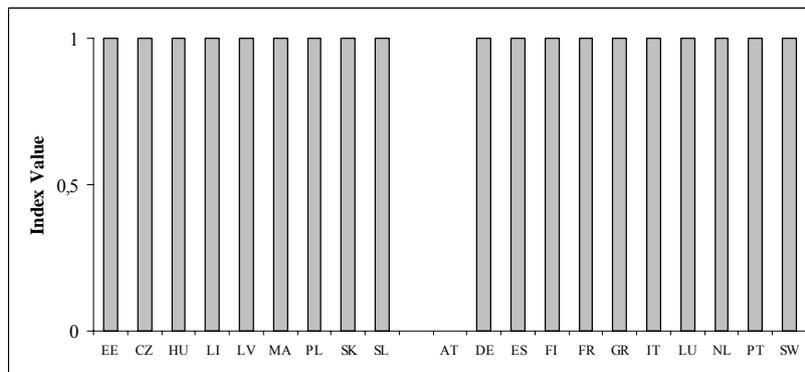
SW – Sweden

**Figure 1: Approval Authority Index**

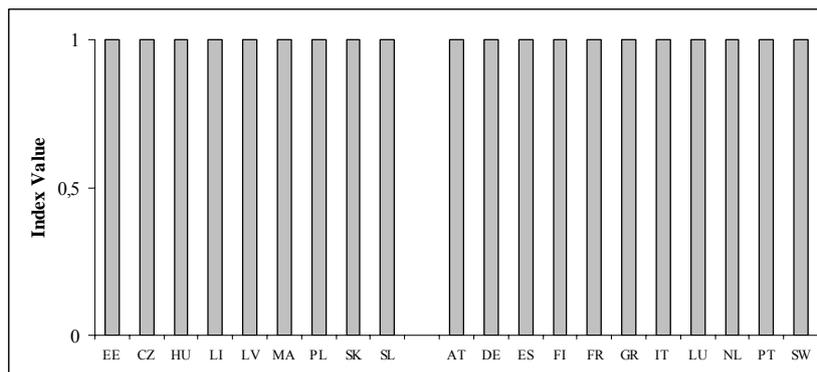
**1997**



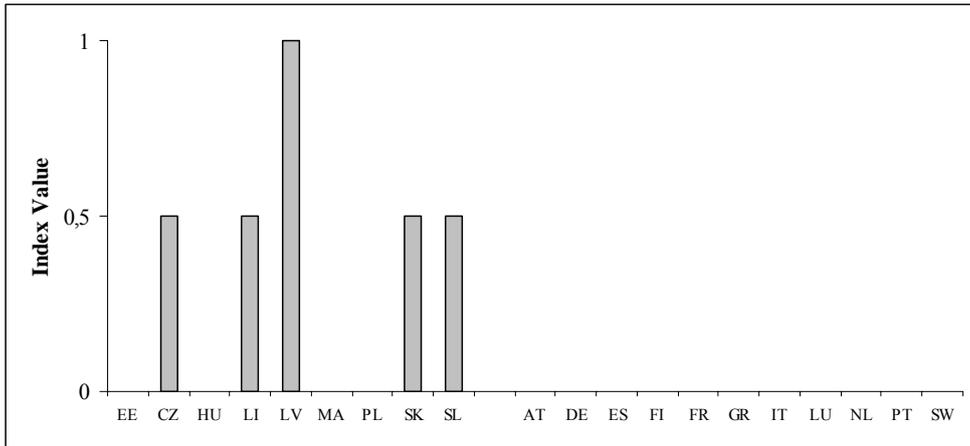
**2001**



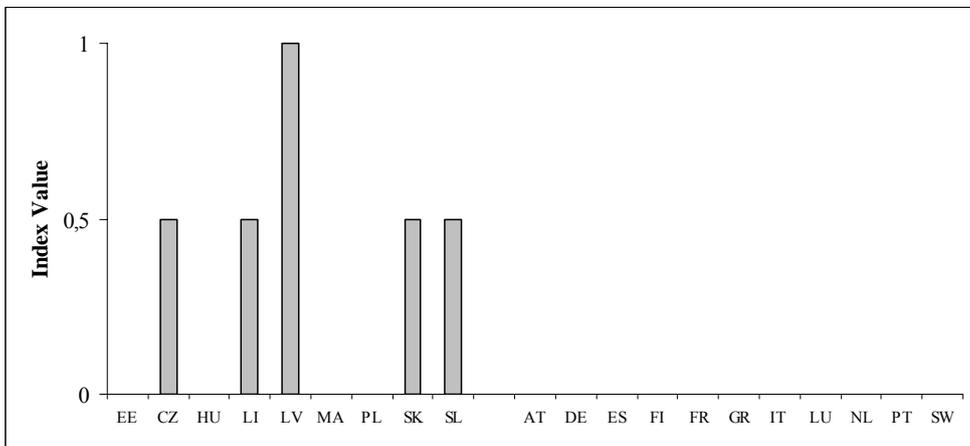
**2005**



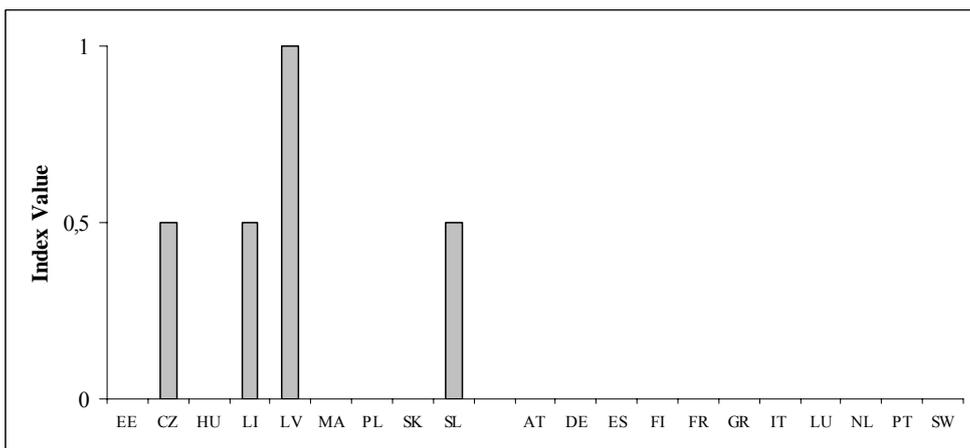
**Figure 2: Appointment Authority Index**  
**1997**



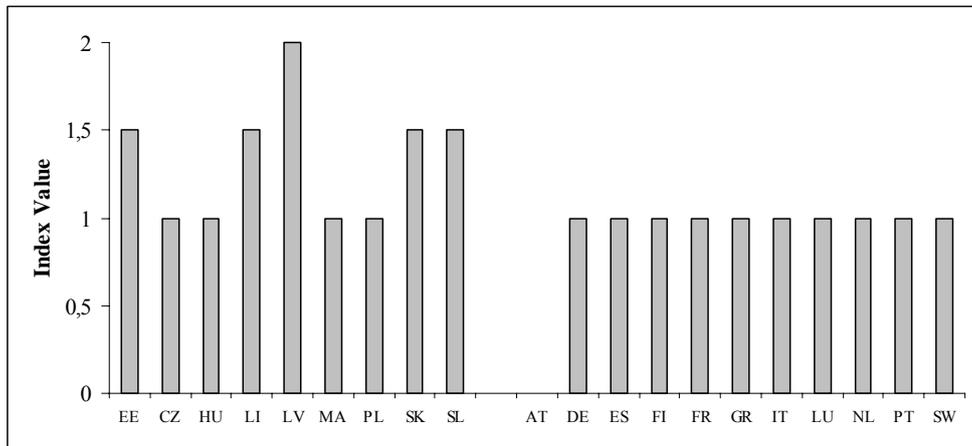
**2001**



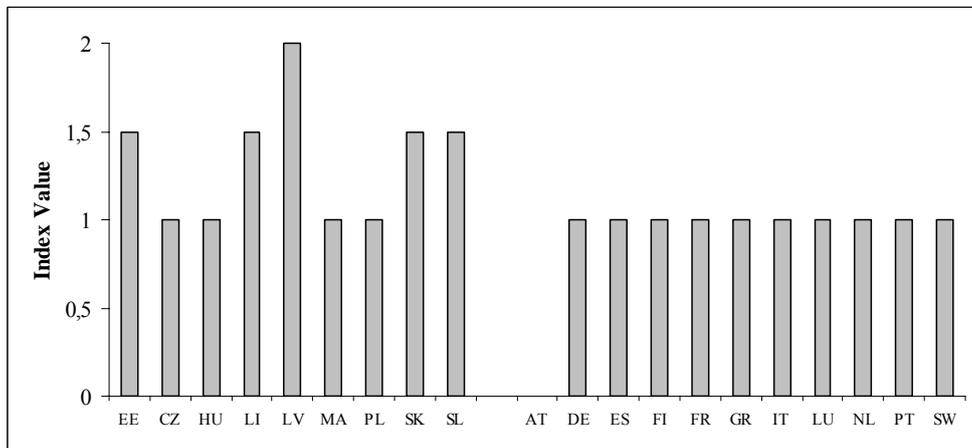
**2005**



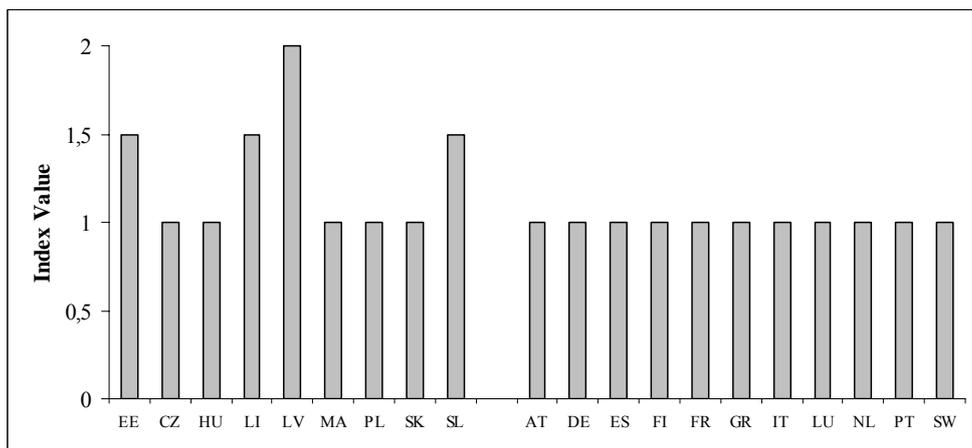
**Figure 3: Index of Political Independence**  
**1997**



**2001**

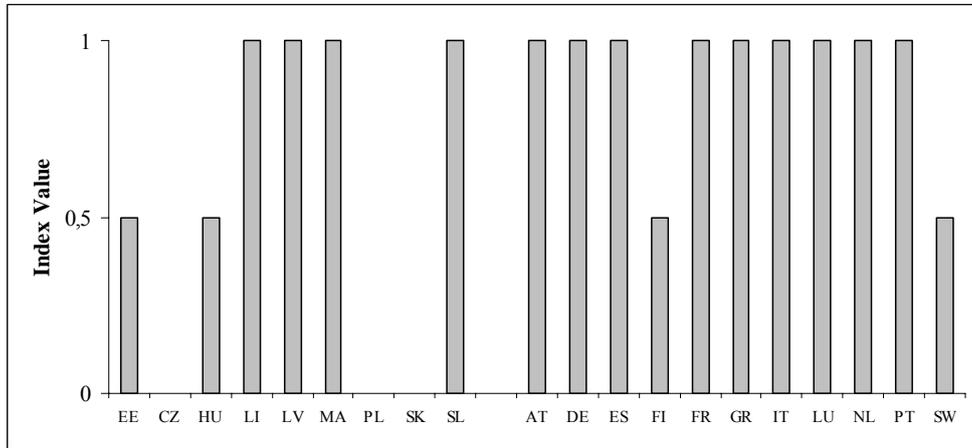


**2005**

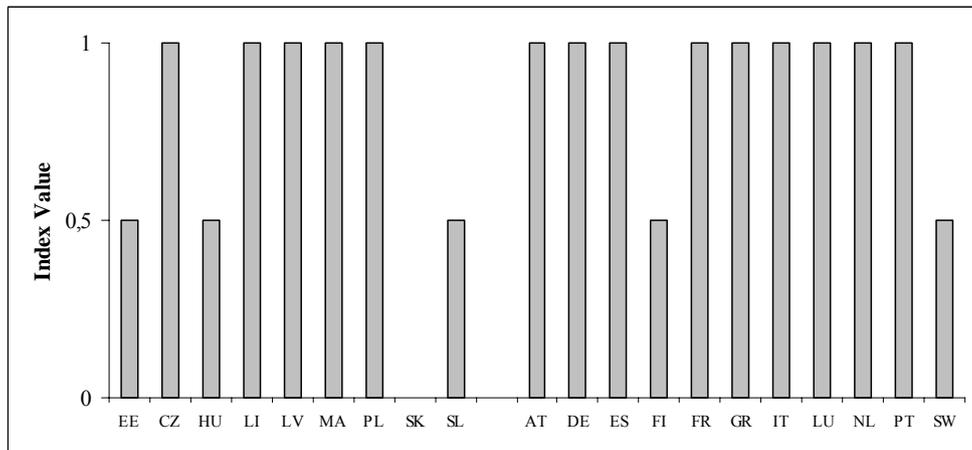


**Figure 4: M&A Criteria Index**

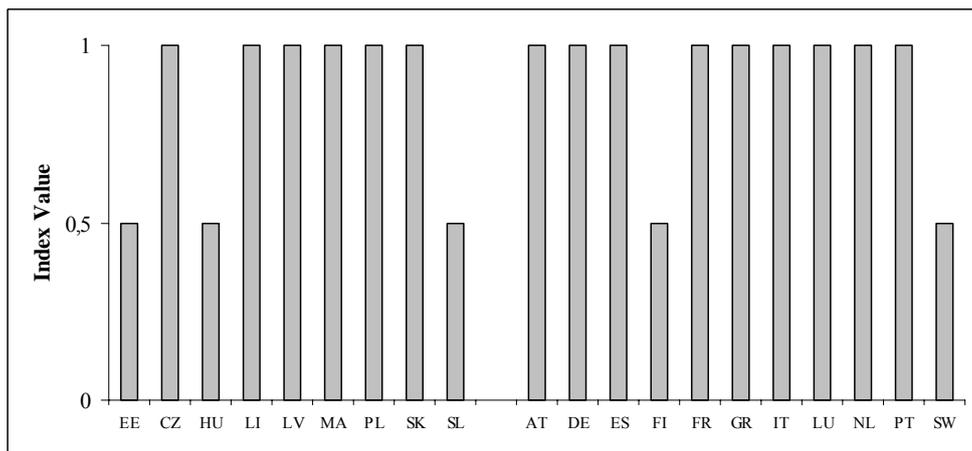
**1997**



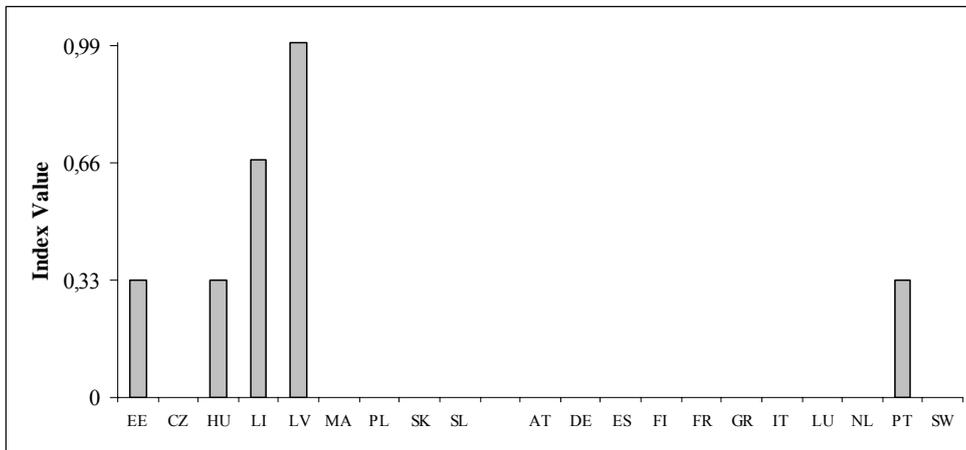
**2001**



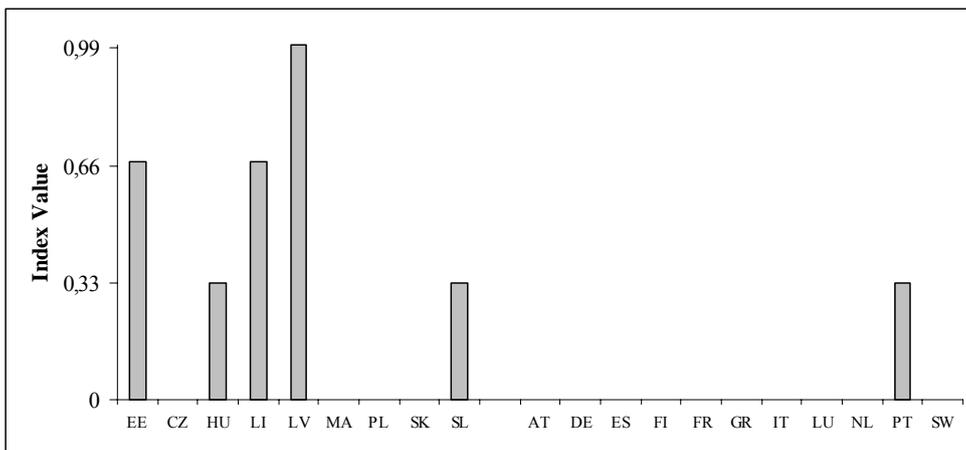
**2005**



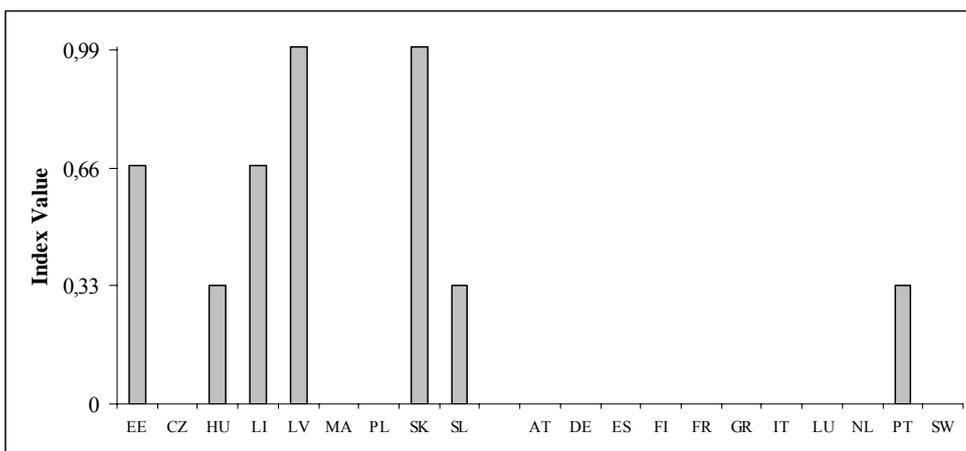
**Figure 5: Transparency of M&A Criteria Index  
1997**



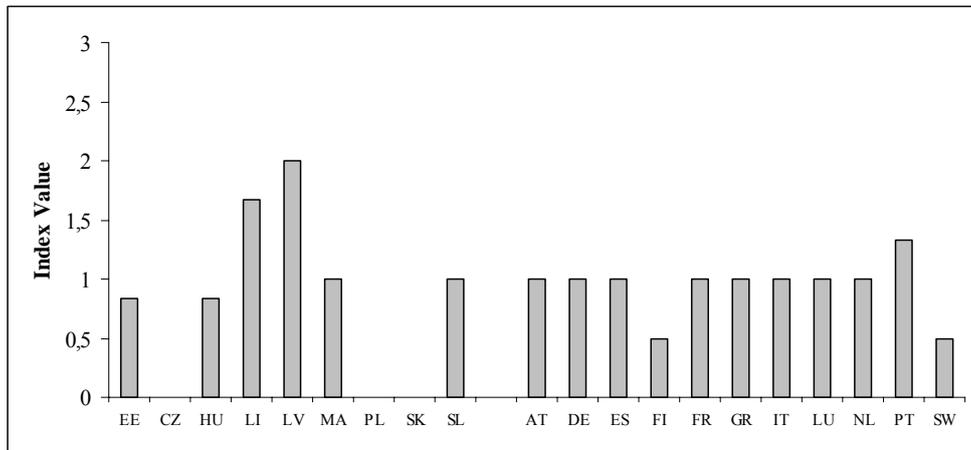
**2001**



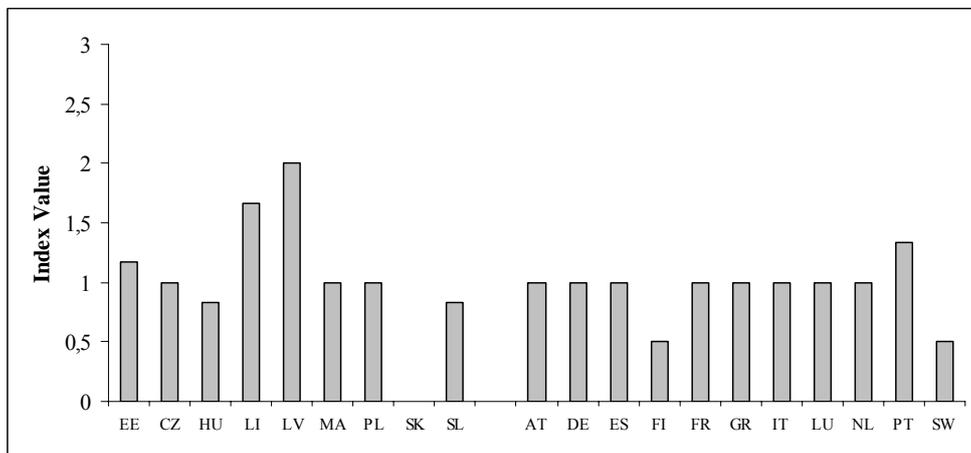
**2005**



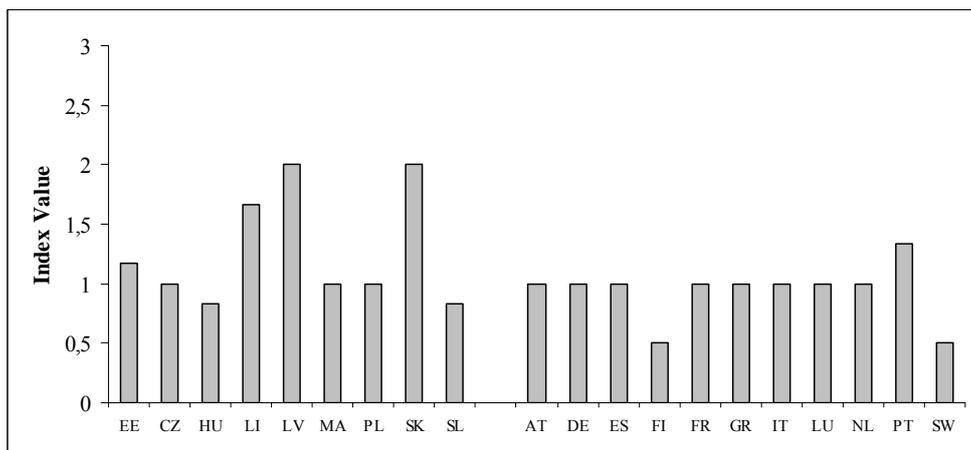
**Figure 6: Aggregate M&A Criteria Index**  
1997



**2001**

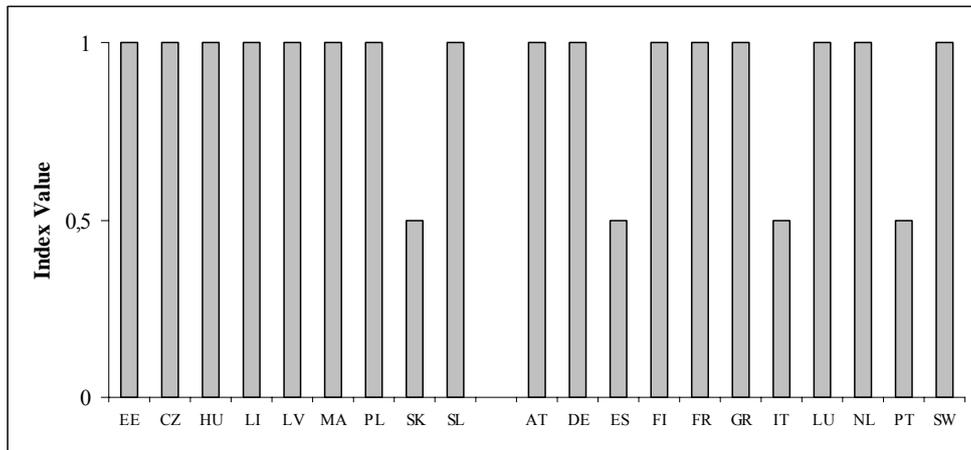


**2005**

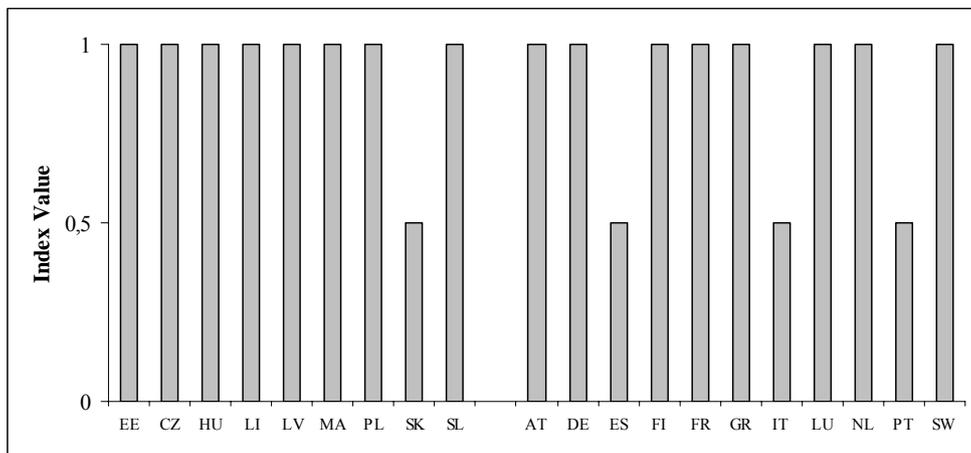


**Figure 7: Approval Requirements Index**

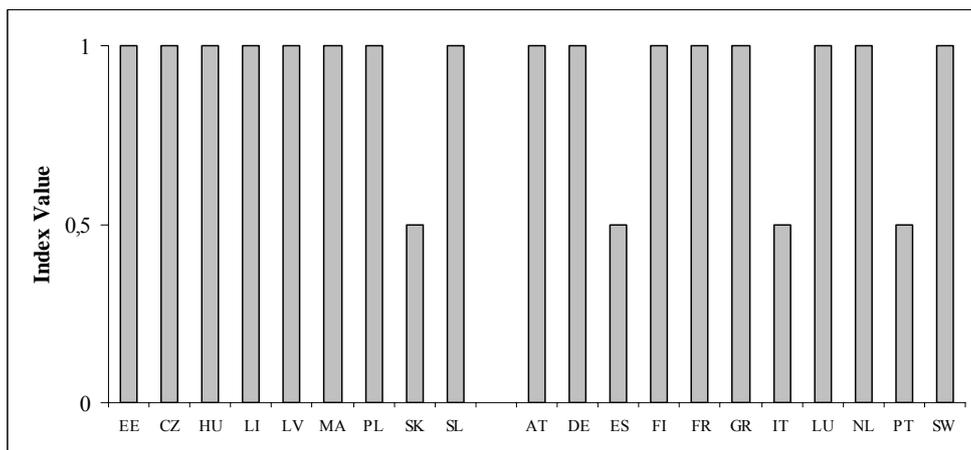
**1997**



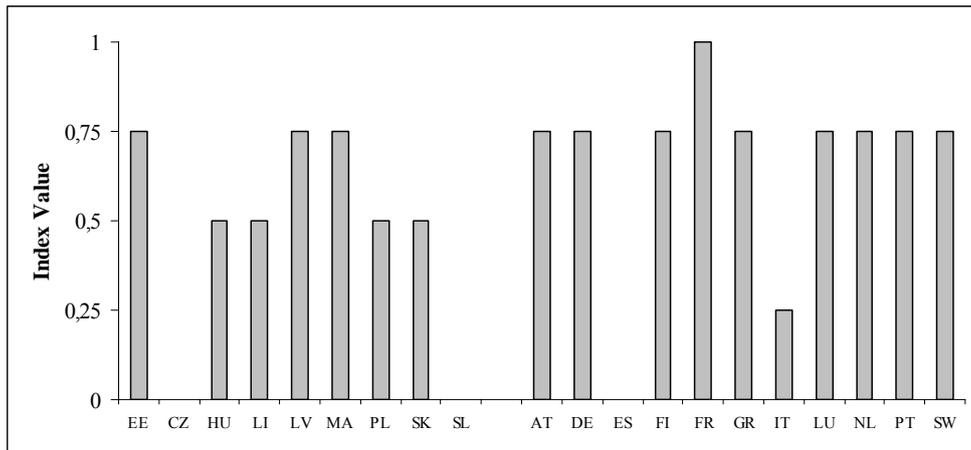
**2001**



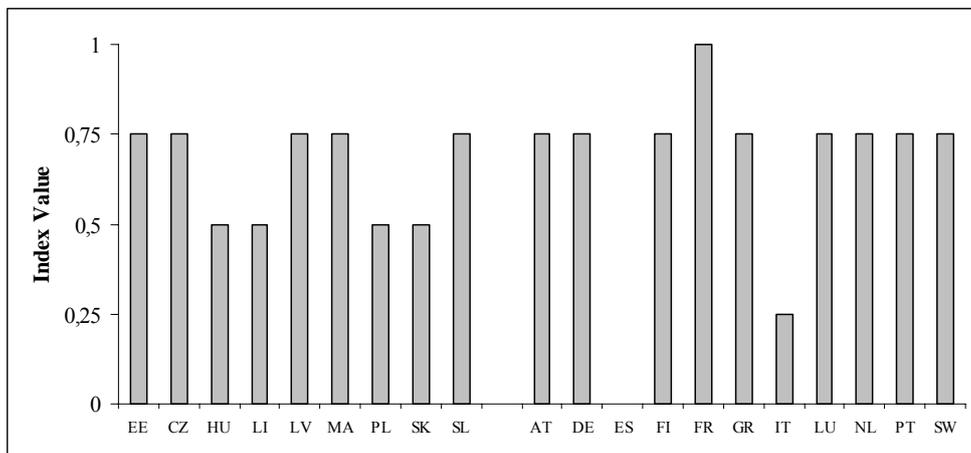
**2005**



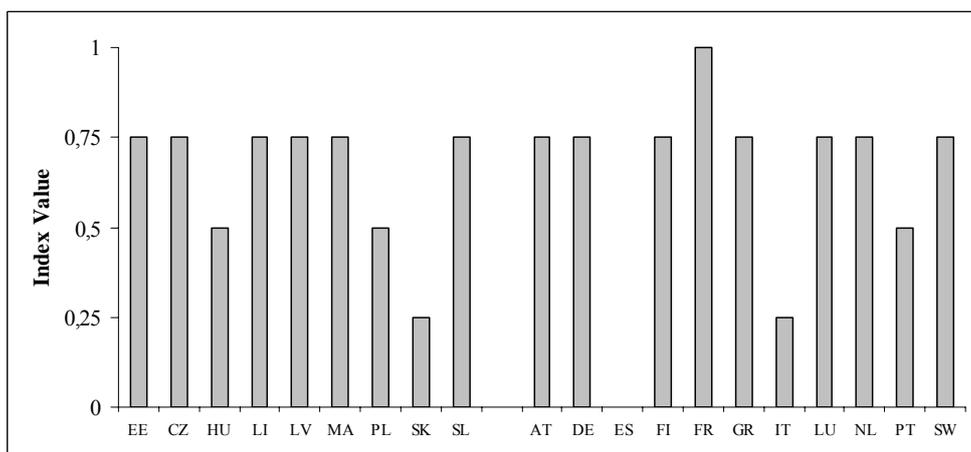
**Figure 8: Frequency of Approval Requirements Index  
1997**



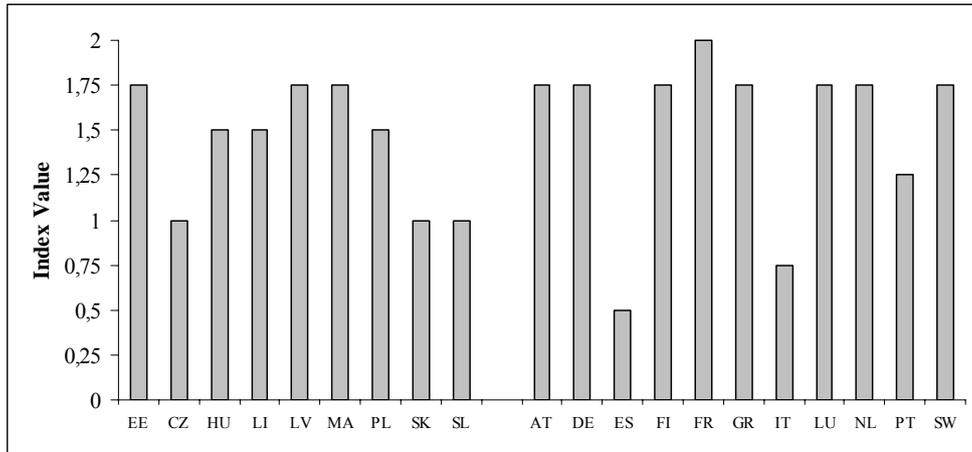
**2001**



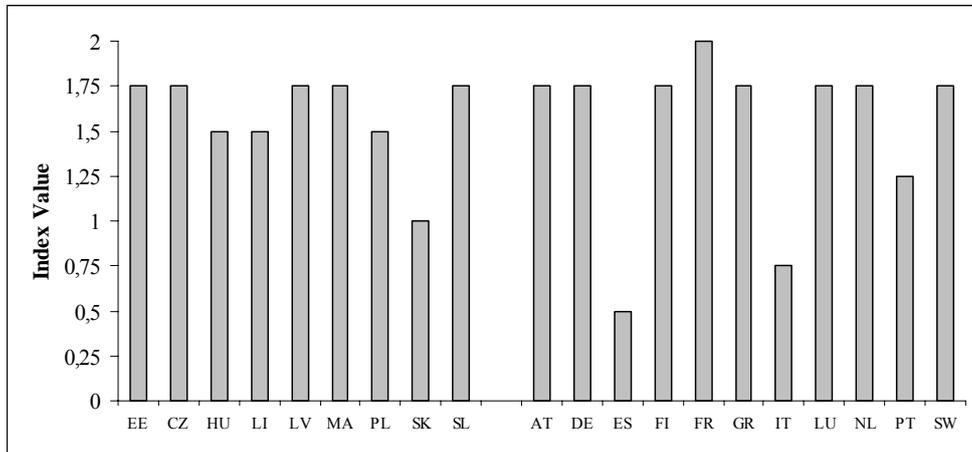
**2005**



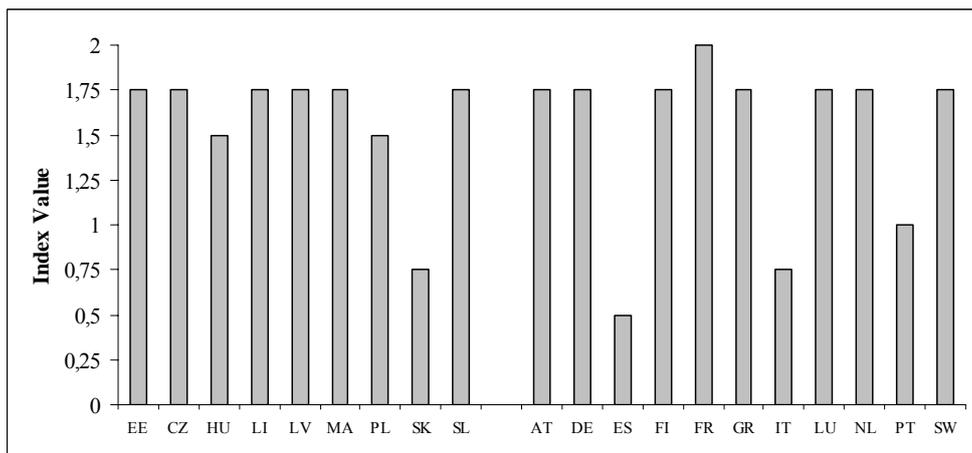
**Figure 9: Aggregate Approval Requirements Index  
1997**



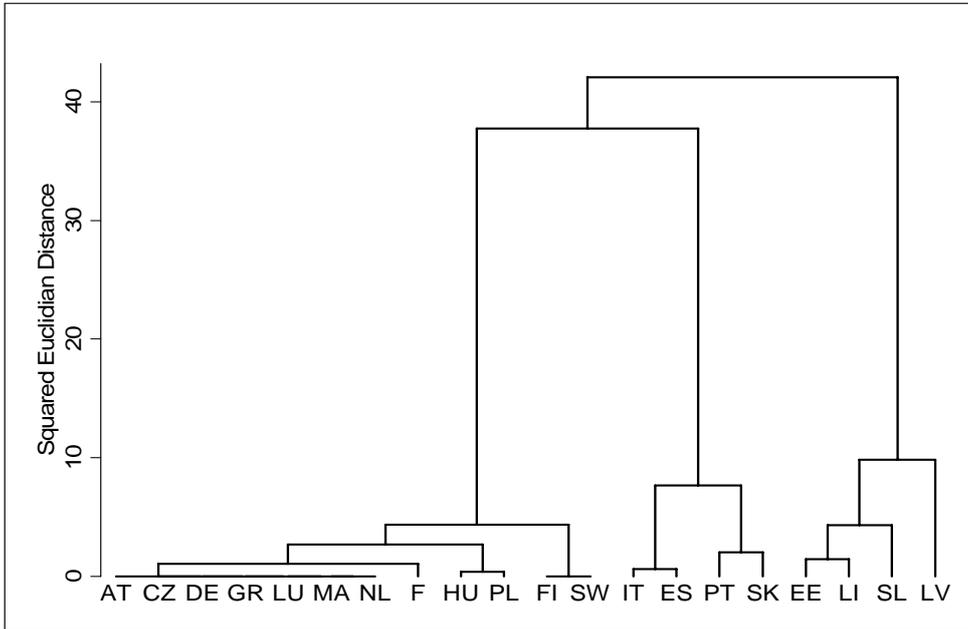
**2001**



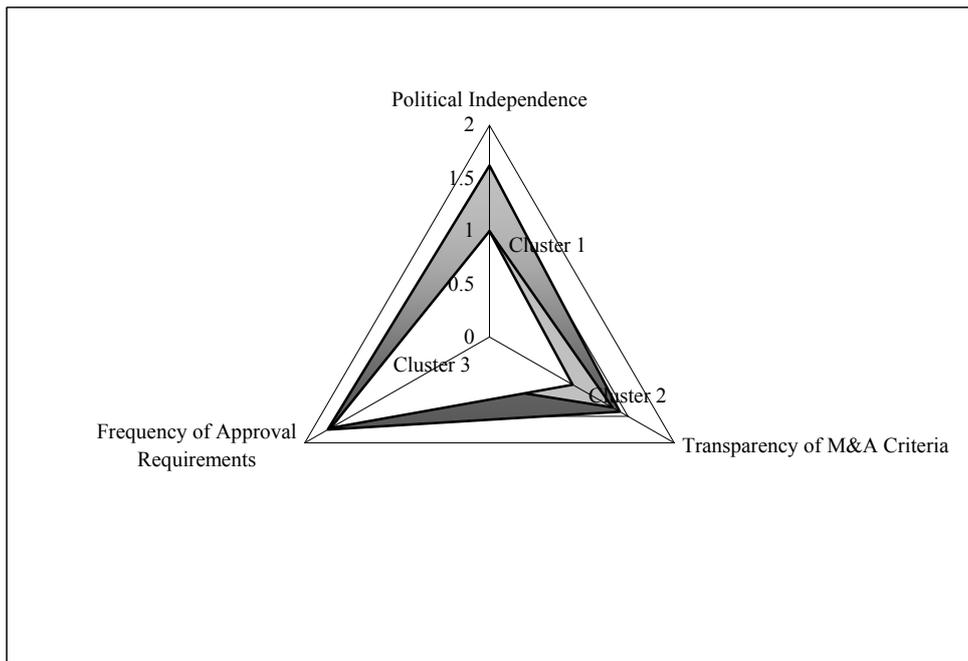
**2005**



**Figure 10: Dendrogram**



**Figure 11: Cluster Mean Analysis**



**Table 1: The Questionnaire**

**1. Restrictions on Ownership**

a) Was there a **maximum** percentage of bank capital that could be owned by a **single domestic** investor (legal entity or natural person) between 1990 and 2005?

Yes  No

If **yes**, please fill out:

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Ownership limit (in % of total capital)																

b) Was there a **maximum** percentage of bank capital that could be owned by a **single foreign** investor (legal entity or natural person) between 1990 and 2005?

Yes  No

If **yes**, please fill out:

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Ownership limit (in % of total capital)																

c) Was there a maximum percentage of bank capital that could **collectively** be owned by **foreign** investors (legal entities or natural persons) between 1990 and 2005?

Yes  No

If **yes**, please fill out:

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Ownership limit (in % of total capital)																

**2. Approval and Reporting Requirements**

a) Did the transfer of bank ownership between **domestic** investors have to be reported to the supervisory authority and/or any other institution (e.g. government, competition authority, central bank) in your country between 1990 and 2005?

Yes  No

If **yes**, please explain what percent of bank capital had to be transferred between domestic investors to be subject to **reporting** to an institution in your country between 1990 and 2005:

<u>Percent of Bank Capital:</u>	<u>Name of the Institution to be informed:</u>	<u>Time Period:</u>
---------------------------------	--	---------------------

b) Did the transfer of bank ownership between **domestic and foreign** investors have to be reported to the supervisory authority and/or any other institution (e.g. government, competition authority, central bank) in your country between 1990 and 2005?

Yes  No

If **yes**, please explain what percent of bank capital had to be transferred between domestic and foreign investors to be subject to **reporting** to an institution in your country:

<u>Percent of Bank Capital:</u>	<u>Name of the Institution to be informed:</u>	<u>Time Period:</u>

c) Did the transfer of bank ownership between **domestic** investors require **approval** by the supervisory authority and/or any other institution (e.g. government, competition authority, central bank) in your country between 1990 and 2005?

Yes  No

If **yes**, please explain what percent of bank capital had to be transferred between domestic investors to be subject to **approval** by any institution in your country:

<u>Percent of Bank Capital:</u>	<u>Name of the Institution that gives Approval:</u>	<u>Time Period:</u>

d) Did the transfer of bank ownership between **domestic and foreign** investors require **approval** by the supervisory authority and/or any other institution (e.g. government, competition authority, central bank) in your country between 1990 and 2005?

Yes  No

If **yes**, please explain what percent of bank capital had to be transferred between domestic and foreign investors to be subject to **approval** by any institution in your country:

<u>Percent of Bank Capital:</u>	<u>Name of the Institution that gives Approval:</u>	<u>Time Period:</u>

### 3. Transparency of the Supervisory Review Process

a) Bank supervisory authorities in the EU are allowed to block mergers in the banking sector to ensure sound and prudent management of credit institutions, if they are not satisfied with the “suitability and qualifications of the proposed investor” (Article 19 of the EU Banking Directive). Please note what **criteria** (e.g. financial solidity, reputation of the investor, potential benefits of a merger for customers in your country) your institution used between 1990 and 2005 to assess the suitability and the qualifications of the proposed investor:

<u>Criteria to assess the suitability of the proposed investor:</u>	<u>Time Period:</u>

b) Was the institution in your country legally required to **publish the decision and the reasons**, if it is **not** satisfied with the suitability and the qualifications of the proposed investor?

Yes  No

If **yes**, please specify (X) in which years the supervisory authority in your country was legally required to publish the decision and the reasons for blocking a proposed merger in the banking sector in your country:

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Publication of the decision and the reasons</b>																

**Table 2: Data Sources**

Country	Source	Date
AT	Bundesgesetz über das Bankwesen (BWG)	1993
CZ	Questionnaire	2007
CZ	Czech Republic, Act of the Czech Republic No. 21/1992 Sb. on banks	1992
CZ	New York University School of Law, Conditions for the Establishment of New Banks in the Czech Republic	1994
CZ	New York University School of Law, The Act of July 8, 1994 passed by the Czech Parliament	1994
CZ	Matoušek, R.: The Czech Banking System in the Light of Regulation and Supervision, Selected Issues WP, No. 5.	2005
DE	Questionnaire	2007
DE	Federal Republic of Germany, Kreditwesengesetz	1988
EE	IMF, Report on the Observance of Standards and Codes (ROSC) Estonia	2000
EE	Republic of Estonia, Eesti Pank, Law on Credit Institutions	1994
EE	Eesti Pank, Credit Institutions Act	1999
EE	Republic of Estonia, Credit Institutions Act	2005
ES	Republic of Spain, Law 26/1988: Discipline and Intervention of Credit Institutions	1988
ES	Bank of Spain, Law 13/1994: Law of Autonomy of the Banco de España	1994
ES	Republic of Spain, Royal Decree 1245/1995	1995
ES	IMF, Country Report No. 06/218: Financial Sector Assessment Program	2006
FI	Republic of Finland, Act on the Operation of a Foreign Credit Institution or Financial Institution in Finland	2001
FI	Republic of Finland, Act on Credit Institutions	2005
FR	Banque de France, Comité des Établissements de Crédit et des Entreprises d'Investissement, Annual Report	2005
FR	Banque de France, Comité de la Réglementation Bancaire et financière, French Banking Act 24 January 1984	1984
FR	Republic of France, Regulation 96-16 of December 1996	2001
FR	Republic of France, Regulation 92-13 of 23 December 1992	2005
FR	IMF, Country Report No. 05/186	2005
FR	Republic of France, Regulation 92-14 of December 1992	2006
GR	Questionnaire	2007
GR	The Impact of the Banking Directives on the Greek Banking System	2004
HU	Act CXII of 1996 on Credit Institutions and Financial Enterprises	1997
HU	Act CXII of 1996 on Credit Institutions and Financial Enterprises	2006
HU	Barsi, T., Overview on Banking Regulations. International Law Office Internet Publication	2000
HU	Budai, J. und H. Bozsonyik, Preperation for Single Market Supervision Tasks	2001
HU	IMF, Country Report No. 05/348	2005
HU	Hungarian Financial Supervisory Authority: Authorization guidelines (Money Market).	2006

IT	Questionnaire	2007
IT	Banca of Italy, The 1993 Banking Law	1993
IT	Republic of Italy, The 1993 Banking Law	2000
IT	IMF Country Report No. 04/133	2004
IT	IMF, Financial System Stability Assessment	2006
LI	Questionnaire	2007
LI	New York University School of Law, Law on Commercial (Joint Stock) Banks	1992
LI	Bank of Lithuania, Operations of Credit Institutions in 2000	2000
LI	Bank of Lithuania, The Law on the Bank of Lithuania	1994
LI	Republic of Lithuania, Law on Commercial Banks	1994
LI	Republic of Lithuania, Law on Banks	2004
LI	Republic of Lithuania, Law on Commercial (Joint Stock) Banks	2005
LI	Operations of Credit Institutions in 2004	2005
LI	Republic of Lithuania, Law on Financial Institutions	2005
LU	Questionnaire	2007
LV	Questionnaire	2007
LV	Bank of Latvia, Regulations on granting licenses to perform banking transactions	1993
LV	Republic of Latvia, Law of National Republic of Latvia	1998
LV	Bank of Latvia, Credit Institutions Supervision Department, Annual Report 1999	2000
LV	Bank of Latvia, Operations of Credit Institutions in 2000	2000
MA	Questionnaire	2007
MA	Banking Act, Act XV of 1994	1994
NL	Credit System Supervision Manual, Act on the Supervision of the Credit System 1992	2005
NL	De Nederlandsche Bank, Bank Act 1998	2000
PL	New York University School of Law, The Banking Law of January 31, 1989	1992
PL	New York University School of Law, Act of December 19, 1992	1993
PL	Republic of Poland, The Banking Act of August 29, 1997	1998
PL	National Bank of Poland, The Polish Banking System in the Nineties	2001
PT	Questionnaire	2007
PT	IMF, Financial Sector Assessment Program	2006
SK	Questionnaire	2007
SK	National Bank of Slovakia, European Banking Directives and Their Implementation in the Slovak Republic	2000
SK	Republic of Slovakia, Act on Banks	2001
SL	Republic of Slovenia, Law on Banks and Savings Banks	1991
SL	Republic of Slovenia, Banking Act	1999
SL	Republic of Slovenia, Official Gazette of the Republic of Slovenia, Banking Act	1999
SL	Republic of Slovenia, Act on the Amendments and Additions to the Banking Act	2001
SL	Bank of Slovenia, Annual Overview	2004
SL	Bank of Slovenia, Law on the Bank of Slovenia	1991
SL	Bank of Slovenia, Bank of Slovenia Act	2002
SL	Bank of Slovenia, Regulation on the Harmonisation of the Amounts of the minimum initial capital of a bank and a savings bank	2004
SL	Republic of Slovenia, Act on the Amendments and Additions to the Banking Act 2	2004
SL	New York University School of Law, Law on Banks and Savings Banks	2007
SW	Questionnaire	2007
SW	Republic of Sweden, The Banking Business Act (SFS 1987:617)	1987

**Table 3: Spearman Rank Correlation Coefficients  
- All Countries -**

	Approval Authority Index	Appointment Authority Index	M&A Criteria Index	Transparency of M&A Criteria Index	Approval Requirements Index	Frequency of Approval Requirements Index
Approval Authority Index	1.00					
Appointment Authority Index	0.11	1.00				
M&A Criteria Index	0.03	-0.24*	1.00			
Transparency of M&A Criteria Index	0.13*	0.69*	-0.15*	1.00		
Approval Requirements Index	-0.10	0.09	-0.12	-0.03	1.00	
Frequency of Approval Requirements Index	0.03	-0.02	0.04	-0.09	0.58*	1.00

\*indicates significance at the 10 percent level

**- Western Europe -**

	Approval Authority Index	Appointment Authority Index	M&A Criteria Index	Transparency of M&A Criteria Index	Approval Requirements Index	Frequency of Approval Requirements Index
Approval Authority Index	1.00					
Appointment Authority Index	-					
M&A Criteria Index	-0.11	-	1.00			
Transparency of M&A Criteria Index	0.07	-	0.15	1.00		
Approval Requirements Index	-0.14	-	-0.29*	-0.52*	1.00	
Frequency of Approval Requirements Index	-0.06	-	-0.13	-0.08	0.77*	1.00

\*indicates significance at the 10 percent level

### Central and Eastern Europe -

	Approval Authority Index	Appointment Authority Index	M&A Criteria Index	Transparency of M&A Criteria Index	Approval Requirements Index	Frequency of Approval Requirements Index
Approval Authority Index	1.00					
Appointment Authority Index	0.16	1.00				
M&A Criteria Index	0.28	-0.07	1.00			
Transparency of M&A Criteria Index	0.17	0.65*	0.09	1.00		
Approval Requirements Index	-0.06	-0.05	0.22*	-0.03	1.00	
Frequency of Approval Requirements Index	0.29	0.29*	0.12	0.12	0.42*	1.00

\* indicates significance at the 10 percent level