

〔研究ノート〕

## **The European Banking Market System and Its Convergence**

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### **Abstract**

This study analyzes whether or not the removal of financial barriers will create a single, competitive market in the European Union (EU) area. An empirical analysis is used to compare national indicators of banking structure and performance. Contrary to widely held expectations, the recent harmonization and liberalization points to a lack of convergence. It is doubtful that a convergence market has been realized in the EU.

### **I . Introduction**

The introduction of Euro has been successfully performed. The change from each currency to the Euro and the abolishment of each country's former currency has encountered few problems. The value of Euro has been almost stable.

The countries of the EU have experienced many evolutions in their financial systems and in financial regulatory frameworks. For more than 10 years, these countries have undergone a rapid process of the creation of a common financial market and the harmonization of the regulatory systems. On the other hand, deregulation has been ongoing

from the beginning of the 1980s all over the world, especially in developed countries. These trends have accelerated market integration in European countries that are subject to a tradition of intervention and protectionism. The analysis of the impact of market integration and deregulation policies on the European banking markets is important. The future of Euro and financial stability and development depend on these markets.

This paper considers whether or not convergence has been obtained among European countries. I use the empirical method to assess convergence. This paper analyzes a convergence of the financial market using empirical methodology and then presents an analysis of the results.

## II. Recent Regulation and Convergence

The European banking markets have changed substantially over the past decade, partially as a result of the creation of the single internal market. This paper tests the hypothesis that deregulation and harmonization of national banking systems are sufficient conditions to promote a process of convergence. It seems natural that the European banking systems have converged toward a common European frontier following the process of EU legislative harmonization. However, some studies have indicated that there is little evidence to suggest that European banking systems have converged.<sup>(1)</sup>

The variables that have been used in this analysis define the characteristics of the structure and performance of each single banking system.<sup>(2)</sup> These are shown in Tables 1a and 1b.

Table 1a Variables of Banking Performance

Content	Definitions
Profitability	Return on equity (ROE ; %)
Risk	Standard deviation of ROE
Capitalization	Capital and reserve/Total assets (%)

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Table 1b Variables of Banking Structure

Content	Definitions
Monetary stability	Inflation (consumer price) (%)
Price competition	Lending rate- deposit rate (%)
Degree of openness	Cross-border bank deposits of nonbanks by residence of borrowing bank/Cross- border bank deposits of nonbanks by residence of depositors

Source. Bank Profitability (OECD), IFS (IMF) 2002.

I obtained the initial evaluation of the convergence level by computing performance and structure variables using the matrices of the Euclidean distances among the European banking systems. The sample periods are from 1993 to 1998 and 1999 to 2002. In 1993, the Maastricht Treaty was established. In 1999, the new currency, the Euro, was introduced. The result is shown in Tables 2a and 2b.

Table 2a Euclidean distance (1993-1998)

	AU	BE	DE	FI	FR	GE	GR	IR	IT	LU	NE	PO	SP	SW	UK
AU	0.0														
BE	4.1	0.0													
DE	3.9	6.2	0.0												
FI	5.6	6.5	7.0	0.0											
FR	6.2	2.6	7.4	7.0	0.0										
GE	5.2	6.4	5.6	3.5	5.6	0.0									
GR	6.9	4.5	6.4	4.6	5.4	5.4	0.0								
IR	4.9	5.8	3.8	7.5	4.8	6.4	10.2	0.0							
IT	5.0	7.9	7.4	5.6	6.3	5.7	5.4	3.6	0.0						
LU	5.2	5.4	6.8	5.4	4.7	9.5	6.4	6.5	6.6	0.0					
NE	4.6	5.2	6.4	5.8	5.8	3.5	6.8	5.1	10.4	6.5	0.0				
PO	7.0	4.7	5.8	7.2	6.5	4.8	7.5	2.9	5.2	3.8	4.4	0.0			
SP	6.8	6.5	6.2	5.9	4.8	8.6	5.1	8.5	5.4	7.4	5.6	7.8	0.0		
SW	4.2	3.8	5.4	8.9	5.2	3.9	6.4	6.4	6.8	9.6	6.5	6.5	9.1	0.0	
UK	4.9	3.9	5.9	5.6	3.8	7.7	6.4	8.8	9.6	2.5	5.7	8.4	5.7	5.4	0.0

Table 2b Euclidean distance (1999-2002)

	AU	BE	DE	FI	FR	GE	GR	IR	IT	LU	NE	PO	SP	SW	UK
AU	0.0														
BE	10.2	0.0													
DE	11.8	12.0	0.0												
FI	12.5	11.8	12.5	0.0											
FR	13.5	15.2	12.4	14.5	0.0										
GE	10.8	18.8	10.9	15.5	14.4	0.0									
GR	9.4	19.8	15.6	16.3	12.8	10.8	0.0								
IR	8.6	20.1	12.5	12.8	16.4	9.4	12.2	0.0							
IT	7.8	18.5	14.5	17.1	15.5	20.3	13.4	14.2	0.0						
LU	13.2	14.2	19.5	16.4	14.7	15.4	15.2	15.2	15.2	0.0					
NE	14.1	11.8	15.4	15.5	16.4	18.2	12.0	16.2	12.8	11.8	0.0				
PO	10.9	10.9	10.8	14.1	12.8	21.3	12.8	14.5	17.1	12.5	11.8	0.0			
SP	9.7	16.5	8.9	12.7	17.4	18.8	13.4	15.5	15.6	15.4	12.8	13.0	0.0		
SW	6.9	9.9	9.6	14.6	18.2	16.8	16.7	16.3	13.2	16.3	15.6	12.5	12.2	0.0	
UK	8.9	12.2	22.5	20.8	24.5	18.8	19.8	21.5	20.8	10.9	16.5	18.5	9.6	10.8	0.0

The average distance increases greatly, from 6.12 to 15.12. This reveals that divergences between countries have widened with ongoing market integration.

Interpretation of the increased divergences must take into account the different interactions between banking structure and performance in the EU countries. The chosen methodology is based on the principal components analysis that permits synthesis in the two dimensions that have been used to define the characteristics of structure and performance of the various European banking systems.

Tables 3 and 4 provide the results of the principal components analysis.

**Table 3** Principal Components Analysis for Each Country

Country	1993-1998		1999-2002	
	Performance	Structure	Performance	Structure
Austria	-5.03	0.98	-4.89	0.12
Belgium	-4.02	3.65	2.03	3.22
Denmark	-2.22	1.08	-2.70	1.24
Finland	2.28	-0.03	1.15	0.99
France	-1.04	1.23	-8.52	-2.55
Germany	3.28	-1.08	1.55	3.44
Greece	1.08	-0.08	1.11	-2.09
Ireland	2.45	1.98	2.06	3.05
Italy	1.54	0.98	-3.64	1.88
Luxemburg	1.33	0.45	-0.75	0.73
Netherlands	5.44	2.54	5.28	2.58
Portugal	2.83	1.38	2.51	2.05
Spain	1.88	-2.86	-5.08	0.09
Sweden	-0.12	2.12	-1.05	1.39
United Kingdom	-5.84	-3.66	10.54	1.24

**Table 4** Percentages of Total Variability of Principal Components

Components	1993-1998	1999-2002
Performance	50.26	66.24
Structure	30.25	20.36
Cumulative	80.51	86.60

The percentages of the total variability confirm that it is possible to interpret the configuration of the system by these countries with only a small loss of information.

### III. Interpretations

As seen in the results presented above, the considerable improvement between the two periods of performance in the UK is the most impressive. The stimulation of efficiency in production derived from the market selection that facilitated the exit of the inefficient banks probably was the critical factor.

The Belgian system, too, shows significant progress. The German system is confirmed stable, with high performance. All of the other countries, in particular France and Italy, have moved backwards.

It is interesting that the results appear, nevertheless, sufficiently meaningful to confirm that there are no indicators of convergence. The divergences in performance and structure have become accentuated whereas the legislative systems for free and competitive banking markets are ongoing.

### IV. Conclusion

This paper denies the unification of the single European market. This new knowledge offers a contribution to an understanding of the necessary regulatory adjustments and of effective strategies for banks. De Grauwe (1996) stated that the transition to the European single currency will improve a new process that was initiated by the liberalization of capital movements and by the unification of the banking markets.

The European national financial systems will face a new shock of no lesser relevance than the former shocks. The disappearance of the currency or financial system barrier will redesign the national markets. Entry from foreign capital eventually will be free, and there are no regulatory constraints on banking activity in the EU. Banks must improve their competitiveness (Berglof and Bolton, 2003). There would be a lot of change in European banking systems. There are a lot of rooms for it. From now on, M&A,

mainly of small or mid-sized banks will occur. Such adjustment appears to have intensified recently : there has been an increase in merger activity including cross-border co-operation type, an establishment of alliances, and introduction of new products and services.

## NOTES

1. Montanaro, Scala, and Tonveronach (2001) is the example.
2. The classification is based on Montanaro, Scala, and Tonveronach (2001).

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