



# Mergers & Acquisitions NOTE

DG ECFIN  
European Commission

N° 4  
April 2007

**In this issue :**

Editorial	p. 1
M&A overview	p. 2
European integration from the perspective of M&A activity	p. 11

This note is issued by  
Directorate E,  
Economic Evaluation Service

**Board of editors for this issue:**

J.H. Schmidt, F. Ilzkovitz,  
R. Meiklejohn, G. Garnier,  
C. Buelens, R. Gomez Villalba

**For more info :**  
[gaelle.garnier@ec.europa.eu](mailto:gaelle.garnier@ec.europa.eu)

© European Commission 2007

## *Editorial*

*By Klaus Regling, Director General, DG ECFIN*

*The aim of the internal market is to secure ever greater European market integration in order for the Union's citizens and businesses to be able to benefit fully from globalisation whilst at the same time safeguarding Europe's social models. Among other things, the internal market is expected to ensure a level playing field among enterprises across the EU and encourage them to engage more in cross-border activities. It is also a single market for a knowledge society which should attract companies from across the world. In this context, this note focuses on the effect of the internal market on cross-border mergers and acquisitions involving EU firms.*

*European integration in general, and EMU in particular, seem to have stimulated intra-EU cross-border M&A activity and to have enhanced the attractiveness of the EU's knowledge-intensive business services for non-EU multinationals. As M&A activity has been growing in the EU in sectors such as software, engineering and R&D services, which are the driving forces of the knowledge economy, it could potentially help transform the pattern of the EU's specialisation by increasing the importance of high-technology goods and services. However, European integration has not yet translated into an increasing EU presence in growing foreign markets and sectors such as the Chinese service market.*

*The first part of the note gives an overview of M&A activity over the last year. In 2006, firms continued to show an increasing appetite for investment, which is reflected by both a higher number of observed deals and a higher aggregate value than in previous years. While this upsurge is visible in all regions of the world, it is more pronounced in the EU than in the USA or Asia.*

*Klaus Regling*

# M&A overview

## 1. Overall merger and acquisition activity

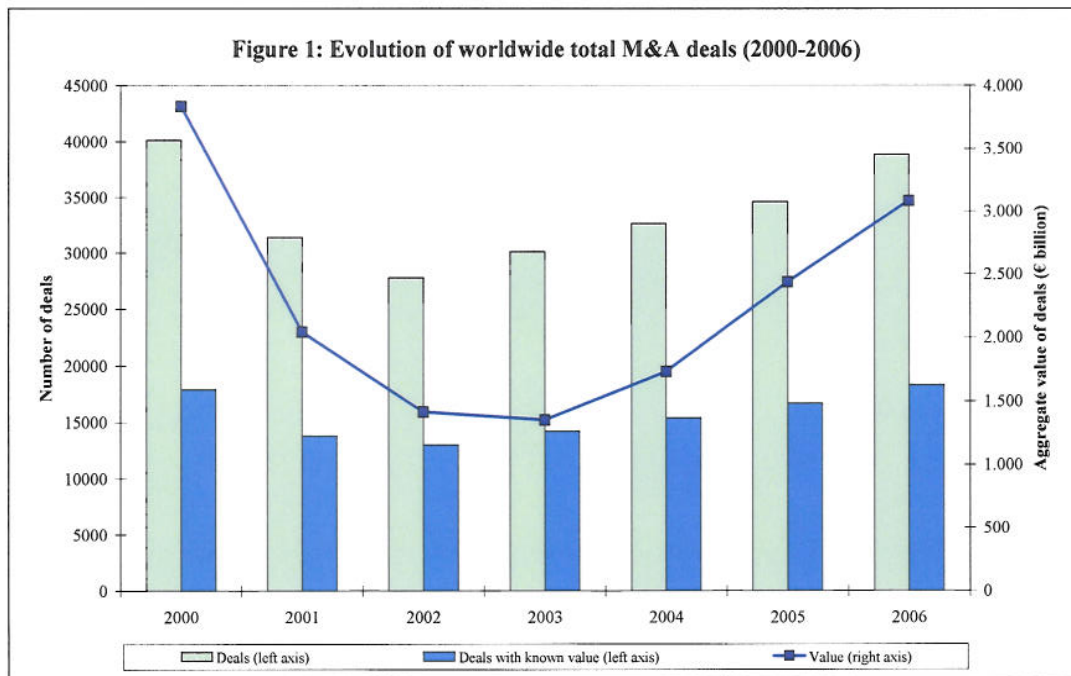
### 1.1. Global trends

The last global merger and acquisition (M&A) wave, which reached its crest at the turn of the century, came to an end in 2001 and was followed by two years of stable M&A activity. Since 2004, however, firms are again showing an increasing appetite for investing in other firms, which is reflected in both a growing number of observed deals and a higher aggregate value. Figure 1 below presents the annual evolution of M&A since 2000 in terms of number and aggregate value of completed and pending deals.

The number of recorded deals increased from about 34,500 in 2005 to nearly 39,000 in 2006<sup>1</sup>. During this time, the aggregate value of deals rose from € 2,435 billion to € 3,082 billion<sup>2</sup>. For comparison, the number of deals in 2000 slightly exceeded 40,000 and amounted to an aggregate value of around € 3,800 billion. Since 2003, the average value of deals has constantly increased.

While the majority – approximately three quarters – of deals have been taking place domestically, i.e. within the same country, the average value of individual deals has been consistently higher when they were cross-border than when they were domestic. While the average values of both domestic and cross-border M&A have been increasing in parallel to M&A activity, the average value cross-border deals has risen faster.

*A new merger wave?*



<sup>1</sup> The data are provided by Thomson Financial Services. For further information see the box at the end.

<sup>2</sup> The M&A database does not contain the value of every individual merger or acquisition. For the years 2005 and 2006 respectively, the deal value is known for 48% and 47% of all the deals recorded in the database. While this implies that the aggregated values are underestimated, one can, however, reasonably assume this underestimation to be small, since the values of the largest deals are generally known.



## 1.2. Regional trends

Around 80% of worldwide M&A activity is concentrated in the EU, the USA and, increasingly, in Asia. Since the driving motivations behind individual deals can be very heterogeneous, the analysis of M&A locations is separately performed for target and bidder regions: the first part of the analysis focuses on the firms whose stakes are acquired by others, distinguishing them by their home region. The second part classifies bidders, i.e. firms which raise their stakes in others, by their location.

### Target analysis

The number of firms targeted in M&A transactions in 2006 was roughly in the same order of magnitude across the three regions. The USA was home to most firms targeted in 2006 (11,200 targeted companies; 29% of worldwide M&A), followed by the EU (10,400; 27%) and Asia (9,200; 24%). The geographical distribution has not changed dramatically over the past four years, but saw a substantial reshuffling prior to that, as a result of the mounting importance of Asia – and in particular China – as an investment location<sup>3</sup>.

The annual evolution of the number and value of M&A targets by region, starting in 2000 is depicted in figure 2 below. It is apparent that while the current worldwide expansion in M&A activity is mirrored in the different regions, its intensity differs. Over the last year, the number of firms targeted increased most rapidly in the EU and the USA. The number of Asian firms acquired in 2006 on the other hand only increased modestly in comparison to 2005. Taking a longer timeframe and looking at the global M&A recovery since its take-off in 2002, the number of M&A targets in the EU has not grown as fast as in the USA and Asia. Whereas the number of deals involving US targets is now again approaching the vicinity of the level observed during the last merger wave, the number of deals involving EU targets is still far from reaching the level observed in 2000. Asian firms' attractiveness as objects of M&A transactions has been growing steadily every year.

The distribution of the aggregated value of M&A targets is more heterogeneous, with the USA (€1,400 billion) accounting for the largest share (45% of worldwide M&A value). The EU targets represent 30% of worldwide M&A value (€918 billion), while firms in Asia make up 8% (€260 billion)<sup>4</sup>.

As mentioned above, a strong 'home bias' characterises M&A transactions. The left panel of table 1 displays the geographical distribution of the bidders that have targeted firms in the three regions in 2006. The share of firms that were targeted by bidders of the same nationality ranges from 64% in the EU to 86% in the USA. In 2006 as many firm acquisitions in Asia were carried out by EU bidders as by their US counterparts. Over the previous years, however, US firms were in general a little more active in Asia. The table also reveals that regional dynamics may play a role in the determinants of M&A, as witnessed by a high number of cross-border transactions within the EU and Asia.

**Table 1: Geographical classification of M&A deals, 2006**

	Origin of bidders:						Location of targets:				
	Domestic	EU	US	Asia	Total		Domestic	EU	US	Asia	Total
<b>Location of target:</b>						<b>Origin of bidders:</b>					
EU	64,0%	19,0%	7,5%	1,4%	10417	EU	63,2%	18,8%	4,6%	3,7%	10551
US	86,9%	4,3%	-	1,5%	11211	US	83,6%	6,7%	-	3,3%	11639
Asia	75,8%	4,2%	4,2%	11,0%	9156	Asia	81,6%	1,7%	1,9%	11,8%	8501

<sup>3</sup> See previous issues of this note.

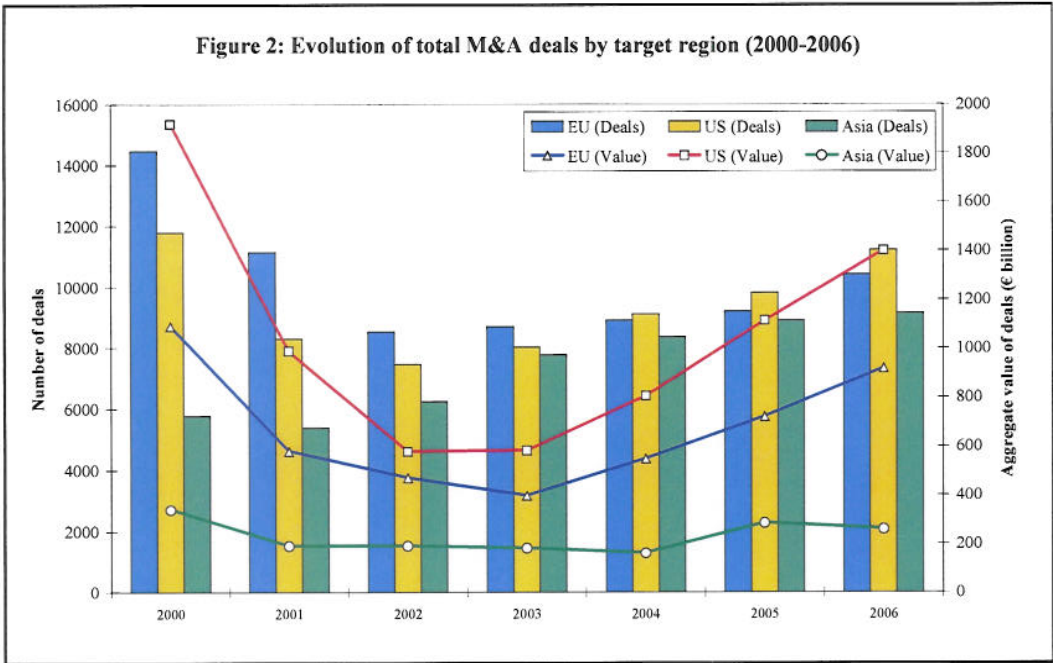
<sup>4</sup> Because value data are not available for all mergers these values are based respectively on 41% (EU), 40% and 58% (Asia) of the total number of completed and pending deals in each region.

*M&A targets are evenly distributed between the USA, the EU and Asia*

*After an initial focus on the USA and Asia, the global M&A upturn is now also being more strongly felt in the EU*

*M&A transactions have a strong home bias in all regions*

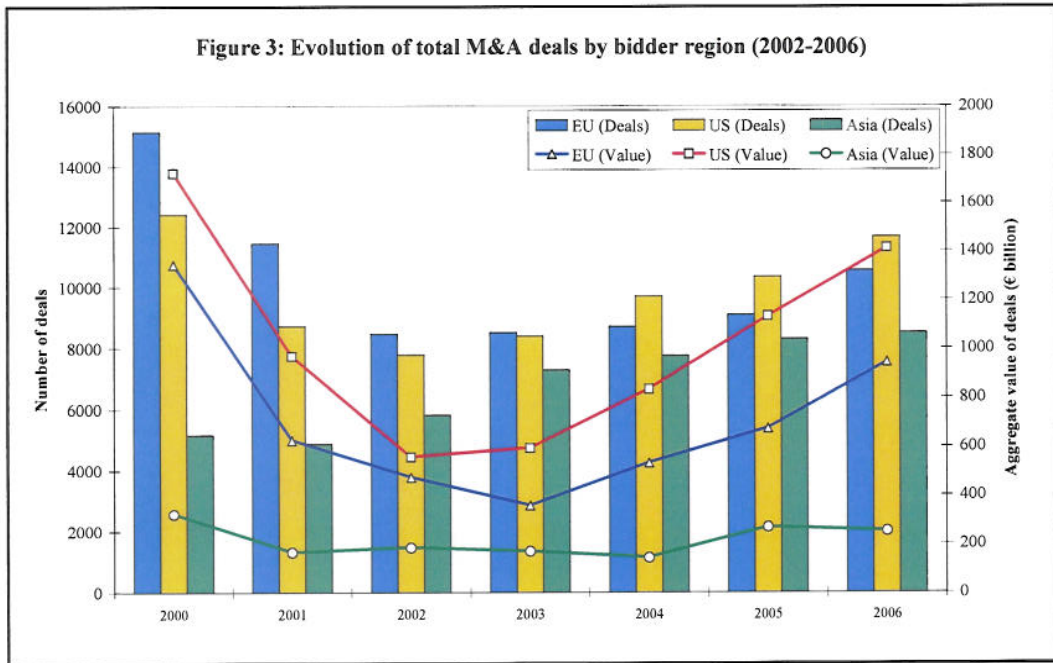




*Bidder analysis*

US firms were the most active bidders in 2006, being at the origin of about 11,700 deals (30% of global deals), followed by EU companies, which themselves initiated 10,500 deals (27%). Even though they have been remarkably entering the stage in the past decade, Asian firms are still not as present as their US and EU counterparts and are less prominent as bidders (8,500 deals; 22%), than as targets.

Analogously to figure 2 above, figure 3 displays the number and value of annual M&A transactions classified by the location of buyers. It shows that the number of bidding firms has increased in all regions analysed. Between 2005 and 2006, this increase was most pronounced in the EU. As a share of worldwide spending on M&A, US firms lead with €1,400 billion (46%), ahead of EU firms (€940 billion, 31%), and Asian firms, which play a much smaller role in value terms (€250 billion; 8%).



*US firms confirm their position as the main and financially most powerful M&A initiators*

*In 2006 the increase in the number of bids by EU firms was higher than elsewhere*



*The bidder distribution for EU15 and NMS firms is very different...*

*...as NMS firms are primarily acquired through EU cross-border operations*

The right side of table 1 shows where bidding firms looked for their targets in 2006. For the EU and the USA the figures were essentially the same as in the converse analysis, exhibiting a strong domestic and regional bias. Asian firms however were more internationally involved as targets rather than as bidders.

## 2. Geographical patterns of EU firms' M&A activity

This section provides a broad geographical taxonomy of M&A deals involving EU firms. In particular, it distinguishes between firms from the EU15 and new Member States (NMS)<sup>1</sup>.

The left side of table 2 organises deals in which EU firms figured as a target in 2006 by the region of origin of the bidder. It distinguishes between domestic, Community (EU cross-border) and other bidders. As seen above, for 64% of the deals, the targeted EU firms and their bidders shared the same nationality. Where deals were cross-border, the distribution between EU and non-EU bidders was approximately even: in 19% of all cases bidders were located inside the EU, while in 17% of cases they were located outside. This pattern is substantially dissimilar for EU15 and NMS firms. Indeed, firms in the NMS were far more likely to be targeted by foreign firms – three quarters of which were themselves based in the EU.

The table also refines the classification by providing the same information for targeted firms at Member State level. Besides confirming the distinct patterns of bidders targeting EU15 and NMS firms respectively, the data also suggest a positive relationship between a country's size and the frequency of domestic M&A. While for Spain, Italy, the United Kingdom and France the share of targets acquired by domestic bidders exceeded 70%, it is below 30% in small Member States such as the Czech Republic, Latvia, Lithuania, the Slovak Republic and Luxembourg.

**Table 2: Breakdown of total EU M&A (number of deals) into domestic, community and international operations, 2006**

EU firms as targets					EU firms as bidders				
	Origin of bidder:			Number of Targets		Location of target:			Number of Bids
	Domestic	EU CB	ROW			Domestic	EU CB	ROW	
EU25	64,0%	19,0%	17,0%	10417	EU25	63,2%	18,8%	18,0%	10551
EU15	65,6%	17,5%	16,9%	9863	EU15	63,2%	18,9%	17,8%	10224
NMS	36,1%	46,6%	17,3%	554	NMS	61,2%	15,3%	23,5%	327
Austria	54,5%	31,4%	14,1%	191	Austria	41,9%	30,2%	27,8%	248
Belgium	44,4%	36,7%	18,9%	259	Belgium	47,3%	38,3%	14,4%	243
Cyprus	39,1%	34,8%	26,1%	23	Cyprus	20,0%	17,8%	62,2%	45
Czech Republic	29,6%	47,2%	23,2%	125	Czech Republic	67,3%	23,6%	9,1%	55
Denmark	41,7%	32,9%	25,4%	240	Denmark	46,9%	33,3%	19,7%	213
Estonia	41,4%	44,8%	13,8%	29	Estonia	54,5%	40,9%	4,5%	22
Finland	61,8%	25,1%	13,1%	275	Finland	60,9%	26,5%	12,5%	279
France	71,0%	15,7%	13,3%	1353	France	68,9%	17,0%	14,1%	1394
Germany	56,2%	23,9%	19,9%	1686	Germany	68,7%	16,6%	14,7%	1378
Greece	57,3%	26,7%	16,0%	75	Greece	49,4%	17,2%	33,3%	87
Hungary	34,5%	50,0%	15,5%	84	Hungary	61,7%	6,4%	31,9%	47
Ireland	50,3%	29,3%	20,4%	167	Ireland	46,4%	30,9%	22,7%	181
Italy	72,0%	16,2%	11,8%	739	Italy	74,7%	12,9%	12,4%	712
Latvia	26,9%	34,6%	38,5%	26	Latvia	77,8%	11,1%	11,1%	9
Lithuania	25,6%	59,0%	15,4%	39	Lithuania	66,7%	13,3%	20,0%	15
Luxembourg	10,0%	53,3%	36,7%	30	Luxembourg	3,6%	56,6%	39,8%	83
Malta	33,3%	0,0%	66,7%	6	Malta	50,0%	0,0%	50,0%	4
Netherlands	61,3%	21,4%	17,3%	542	Netherlands	50,6%	28,5%	20,9%	656
Poland	42,4%	46,2%	11,4%	158	Poland	73,6%	13,2%	13,2%	91
Portugal	53,7%	36,1%	10,2%	108	Portugal	67,4%	25,6%	7,0%	86
Slovak Republic	14,3%	78,6%	7,1%	28	Slovak Republic	57,1%	28,6%	14,3%	7
Slovenia	63,9%	25,0%	11,1%	36	Slovenia	71,9%	0,0%	28,1%	32
Spain	75,3%	15,5%	9,2%	785	Spain	76,2%	12,4%	11,5%	776
Sweden	67,7%	17,3%	15,0%	715	Sweden	61,4%	22,7%	15,9%	788
United Kingdom	72,0%	7,5%	20,5%	2698	United Kingdom	62,6%	14,9%	22,5%	3100

Note: EU CB= EU cross-border, ROW= Rest of the World



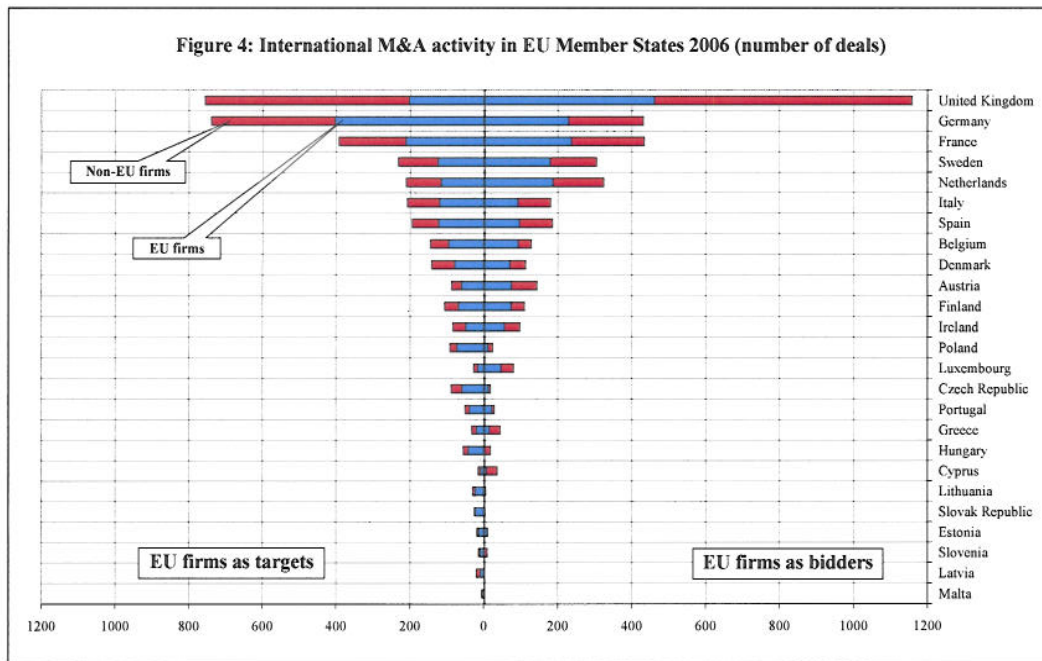
Table 3 shows, analogously to the upper part of table 2, how incoming M&A value flows were distributed according to their origin. Domestic M&A made up a smaller part in the aggregate M&A value than they did in the aggregate number of deals. EU cross-border deals, however, accounted for a bigger share when measured in value terms. This is particularly true for NMS, where EU cross-border flows have accounted for 70% of the aggregate M&A value.

**Table 3: Breakdown of total EU M&A (value in € billion) into domestic, community and international operations, 2006**

EU firms as targets	Origin of bidder:			Value of Targets	EU firms as bidders	Location of target:			Value of Bids
	Domestic	EU CB	ROW			Domestic	EU CB	ROW	
EU25	55,3%	28,6%	16,1%	918,1	EU25	53,9%	27,9%	18,2%	942,5
EU15	56,0%	27,8%	16,2%	900,9	EU15	54,1%	27,6%	18,2%	931,8
NMS	21,4%	68,9%	9,7%	17,1	NMS	34,5%	47,6%	17,9%	10,6

Note: EU CB= EU cross-border, ROW= Rest of the World

Figure 4 isolates international deals in which EU firms were involved. The left panel splits deals in which EU firms figured as cross-border targets into a bidder's location either in- or outside the EU. While the number of EU and non-EU bidders was of the same magnitude overall, the relative weights show strong variations across Member States. Firms in all but three Member States were more likely to be targeted by EU than by non-EU firms. The most notable exception in that respect was the UK, where over 70% of targets were acquired by firms located outside the EU. With more than 700 acquisitions by foreign companies, the UK is also the most targeted Member State in the EU, as it is also for domestic M&A.



The right side of table 2 shows the geographical bidding pattern of EU firms. The information is again displayed at an aggregate (EU15, NMS and EU25) and at the Member State level. The observations already made for the target analysis are generally confirmed: EU firms predominantly acquire stakes in domestic firms. On the face of it, however, EU15 and NMS firms do not seem to follow markedly different acquisition strategies as far as the location of their targets is concerned.

Cross-border bids are on average split equally between EU and non-EU targets. This observation, which is apparent from the right panel of figure 4, holds for most large Member States (France, Germany, Italy, Poland and Spain). Nonetheless, there is some heterogeneity depending on the country of origin of the bidder. Hungarian, Greek and Lithuanian firms have shown a relatively high propensity to make acquisitions outside the EU, while Estonian, Portuguese, Belgian and Czech firms have been more likely to pick their international targets inside the EU. For many of these countries, however, the absolute

*Cross-border M&A have a higher average value than domestic deals*

*The geographical focus of EU firms is very heterogeneous...*

*... and UK firms stand out for being predominantly involved in deals outside the EU*

*On average, cross-border bids are equally allocated between EU and non-EU targets*



*Many cross-border deals involve firms from neighbouring countries*

number of deals is low. In contrast, 60% of deals initiated by firms located in the United Kingdom – which account for about 30% of EU firms' international bids – have targeted non-EU firms.

The weight of deals in which EU firms bid for non-EU ones, measured as a proportion of all bids by EU firms, is the same regardless of whether this is expressed as a share of the aggregate number or the aggregate value of deals (18%). As shown in table 3, EU cross-border deals, however, make up a higher share in value terms (28%) than in total number of deals (19%), implying that these deals are larger than domestic ones.

Table 4 focuses on intra-EU M&A deals in 2006: the diagonal entries represent the number of domestic deals. The final column and the last row show the share of a Member State in the aggregate number of firms targeted, and the aggregate number of firms bidding respectively. In the light of the above analysis, it is not surprising that the diagonal is filled with about 77% of intra-EU M&A deals. A closer look also indicates that firms' bidding patterns seem to be highly influenced by distance and common borders. An illustrative example involving Belgian firms highlights that firms in neighbouring countries were the most targeted (France, the Netherlands and Germany). Analogously, it was firms from these countries (as well as from the UK) which were the main bidders for Belgian firms. Commonly offered explanations for this phenomenon include shorter intra-firm distances, which reduce the costs of monitoring and intra-firm trade. Other common characteristics shared by the firms' respective countries of origin, such as language, customs and historical links, are another frequent explanation.

**Table 4: Intra-EU M&A deals 2006**

Target location:	Bidder location:																										Total	%
	AT	BE	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE	IT	LV	LT	LU	MT	NL	PL	PT	SK	SL	ES	SE	UK			
Austria	104	1	0	1	2	0	0	4	35	0	0	1	3	0	0	1	0	0	2	0	0	0	2	5	3	164	1.9	
Belgium	1	115	0	0	0	0	1	31	13	0	0	1	3	0	0	1	0	22	0	0	0	0	1	2	19	210	2.4	
Cyprus	0	0	9	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0.2	
Czech Republic	5	2	2	37	0	0	1	7	20	0	0	0	1	0	0	1	0	5	1	0	2	0	1	2	9	96	1.1	
Denmark	0	0	1	0	100	0	7	2	7	0	1	3	0	0	0	1	0	9	0	0	0	0	0	36	12	179	2.1	
Estonia	0	0	0	0	0	12	2	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	5	2	25	0.3	
Finland	0	2	1	0	7	3	170	1	2	0	0	0	3	0	0	0	1	0	0	0	0	1	32	16	239	2.8		
France	5	27	0	0	5	0	2	961	40	1	0	1	14	1	0	3	0	12	0	3	0	0	19	13	66	1173	13.6	
Germany	47	10	0	4	11	0	9	48	947	2	0	8	27	0	0	17	0	45	0	1	0	0	8	29	137	1350	15.6	
Greece	0	0	3	0	0	0	4	2	43	0	0	2	0	0	0	0	1	0	0	0	0	3	0	5	63	0.7		
Hungary	4	3	0	1	0	0	1	6	7	0	29	2	1	0	0	2	0	2	0	0	0	0	0	1	12	71	0.8	
Ireland	1	0	0	0	0	0	0	3	2	0	0	84	0	0	1	0	3	0	0	0	0	0	1	1	37	133	1.5	
Italy	1	4	0	0	0	0	2	30	15	1	0	1	532	0	0	4	0	12	2	0	0	0	22	2	24	652	7.5	
Latvia	1	0	0	0	0	1	1	2	1	0	0	0	0	7	1	0	0	0	0	0	0	0	0	2	0	16	0.2	
Lithuania	0	0	0	0	1	5	4	2	0	0	0	0	0	10	1	0	0	4	0	0	0	0	0	4	2	33	0.4	
Luxembourg	0	4	0	0	0	0	0	2	0	0	0	0	2	0	0	3	0	2	0	0	0	0	0	0	6	19	0.2	
Malta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0.0	
Netherlands	0	18	0	0	5	0	3	12	12	1	0	3	9	0	0	3	0	332	2	1	0	0	5	9	33	448	5.2	
Poland	2	5	0	6	5	0	6	7	9	0	1	0	5	0	1	1	0	8	67	1	0	0	2	3	11	140	1.6	
Portugal	0	0	0	0	1	0	1	6	2	0	0	0	1	0	0	1	0	2	0	58	0	0	16	0	9	97	1.1	
Slovak Republic	5	1	0	1	0	0	1	2	6	0	0	0	1	0	0	0	0	1	0	0	4	0	0	1	3	26	0.3	
Slovenia	0	1	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	23	0	2	2	32	0.4		
Spain	0	4	0	0	6	0	1	29	7	0	1	2	11	0	0	1	0	13	1	16	0	0	591	7	23	713	8.2	
Sweden	3	1	1	0	22	0	31	9	10	0	0	1	1	0	0	1	0	12	0	0	0	0	2	484	30	608	7.0	
United Kingdom	0	10	0	0	6	0	1	29	37	1	0	33	6	0	0	7	0	37	0	0	0	12	23	1942	2144	24.8		
Total	179	208	17	50	171	21	244	1198	1176	58	32	140	624	8	12	50	2	519	79	80	6	23	687	663	2403	8650	100	
%	2.1	2.4	0.2	0.6	2.0	0.2	2.8	13.8	13.6	0.7	0.4	1.6	7.2	0.1	0.1	0.6	0.0	6.0	0.9	0.9	0.1	0.3	7.9	7.7	27.8	100		

### 3. Sectoral dimension of M&A activity

This section classifies deals by sector<sup>5</sup>. Table 5 organises the deals that were announced or concluded worldwide in 2006 according to the respective sectors of the bidding and the targeted firms. The large number (62%) of firms acquired in 2006 were active in the different services sectors<sup>6</sup>, followed by the manufacturing sector (27%). Within the

<sup>5</sup> For the purpose of this note we refer to the 'divisions' identified in the SIC classification as sectors. Firms are classified according to their primary activity.

<sup>6</sup> The combined service sectors comprise network industries; wholesale trade; retail trade; Finance, Insurance and Real Estate; and other services (which include hotels, personal services, business services, health services, legal services, etc.).

*Two thirds of global M&A activity is concentrated in the services sectors*



combined services sectors, firms in the other services and financial services sectors were the most targeted. In total, firms belonging to the different services sectors accounted for 69% of bids. A majority of them (37% of all bids) start off in the financial sector. This is not necessarily unexpected, since banks and holdings assume a very active function in M&A activity. The manufacturing sector accounted for 22% of bids worldwide.

**Table 5: Decomposition of global M&A deals by sector, 2006**

Bidder sector:												
	Agriculture, Forestry and Fishing	Mining	Construction	Manufacturing	Network industries	Wholesale Trade	Retail Trade	Finance, Insurance and Real Estate	Other Services	Public Administration	Total	%
Target sector:												
Agriculture, Forestry and Fishing	113	1	0	54	3	18	2	111	14	1	317	0,8%
Mining	3	1987	9	152	52	31	17	495	65	7	2818	7,3%
Construction	0	22	286	81	33	13	8	283	80	2	808	2,1%
Manufacturing	64	104	100	6202	170	391	91	2966	516	20	10624	27,3%
Network industries	3	64	53	249	1980	74	27	989	289	38	3766	9,7%
Wholesale Trade	12	25	16	443	42	595	81	365	105	1	1685	4,3%
Retail Trade	4	15	2	126	54	86	757	565	104	2	1715	4,4%
Finance, Insurance and Real Estate	15	42	79	283	105	43	59	5773	344	27	6770	17,4%
Other Services	14	64	80	970	435	141	114	2716	5720	22	10276	26,4%
Public Administration	0	2	1	6	12	2	1	23	10	15	72	0,2%
<b>Total</b>	<b>228</b>	<b>2326</b>	<b>626</b>	<b>8566</b>	<b>2886</b>	<b>1394</b>	<b>1157</b>	<b>14286</b>	<b>7247</b>	<b>135</b>	<b>38851</b>	<b>100,0%</b>
<b>%</b>	<b>0,6%</b>	<b>6,0%</b>	<b>1,6%</b>	<b>22,0%</b>	<b>7,4%</b>	<b>3,6%</b>	<b>3,0%</b>	<b>36,8%</b>	<b>18,7%</b>	<b>0,3%</b>	<b>100,0%</b>	

The analogous information for deals that occurred inside the EU (both domestic and cross-border) is displayed in table 6. Of all bids recorded in 2006, 66% targeted the services sectors and in particular other services (27%) and the financial sector (16%). Network industries, which have increasingly been opened up to competition also represent a respectable share of targeted firms (12%). The manufacturing sector accounted for 28% of targeted firms. About 39% of bids originated in the financial sector, 21% in the manufacturing sector and 19% in the other services sector. A similar analysis of domestic M&A activity in the USA reveals that the sectoral allocation of deals is slightly more tilted toward the services sectors.

**Table 6: Decomposition of intra-EU M&A deals by sector, 2006**

Bidder sector:												
	Agriculture, Forestry and Fishing	Mining	Construction	Manufacturing	Network industries	Wholesale Trade	Retail Trade	Finance, Insurance and Real Estate	Other Services	Public Administration	Total	%
Target sector:												
Agriculture, Forestry and Fishing	21	0	0	10	0	6	0	14	4	0	55	0,6%
Mining	0	61	4	10	6	0	4	22	4	0	111	1,3%
Construction	0	0	127	24	7	1	4	89	28	1	281	3,2%
Manufacturing	11	10	40	1319	38	89	16	825	122	5	2475	28,6%
Network industries	0	8	31	55	567	19	8	239	67	8	1002	11,6%
Wholesale Trade	2	5	6	123	10	164	26	118	25	0	479	5,5%
Retail Trade	2	2	0	37	16	16	211	154	15	0	453	5,2%
Finance, Insurance and Real Estate	0	1	24	22	10	2	6	1272	57	5	1399	16,2%
Other Services	2	9	26	186	131	28	21	644	1319	11	2377	27,5%
Public Administration	0	0	0	1	5	0	0	6	3	1	16	0,2%
<b>Total</b>	<b>38</b>	<b>96</b>	<b>258</b>	<b>1787</b>	<b>790</b>	<b>325</b>	<b>296</b>	<b>3383</b>	<b>1644</b>	<b>31</b>	<b>8648</b>	<b>100,0%</b>
<b>%</b>	<b>0,4%</b>	<b>1,1%</b>	<b>3,0%</b>	<b>20,7%</b>	<b>9,1%</b>	<b>3,8%</b>	<b>3,4%</b>	<b>39,1%</b>	<b>19,0%</b>	<b>0,4%</b>	<b>100,0%</b>	

Table 7 (upper-left panel) shows in which sectors EU firms picked their targets. Domestic M&A were more skewed towards the different services sectors (67%). With increasing geographical distance, however, the proportion of manufacturing firms acquired also increases: indeed, their share in the total number of targets rises from 27% to 33%, 40% and 48% for deals involving domestic, Community, US and Asian firms respectively. In the USA, 70% of domestic M&A occurred in the services sectors. It also emerges that in comparison to their EU counterparts, US firms investing abroad focussed more on the services sectors: indeed, 62% of acquisitions carried out both in the EU and in Asia targeted firms in one of these sectors. In comparison, only 45% of EU acquisition in Asia targeted these sectors. The bottom panels show the sectoral acquisition pattern for firms in Asia and

*The sectoral distribution of M&A in the USA is slightly more tilted to the services sectors than is the case in the EU*

*The proportion of manufacturing firms targeted is bigger in cross-border deals and increases with distance*



the world total<sup>7</sup>. The importance of firms in the manufacturing sector was relatively greater in Asia than in the EU or the US, which to some extent also reflects the local economic structure. In general, it turns out that the manufacturing sector plays a more prominent role in cross-border deals. This may in part be explained by the higher tradability of manufactured products and the greater ease of fragmenting the production chain along geographical lines. This allows firms to adjust and optimise their production pattern in such a way as to better seize the opportunities provided by comparably more favourable production conditions in different locations. In contrast, many services are provided locally and there are fewer efficiency gains to be expected from a diversification beyond national borders.

**Table 7: Classification of M&A targets by region and sector, 2006 (in %)**

Target region:	Bidder region: EU					Bidder region: US			
	Domestic	EU CB	US	Asia	ROW	EU	US	Asia	ROW
Target sector:									
Agriculture, Forestry and Fishing	0,7%	0,5%	0,2%	1,6%	1,1%	0,1%	0,5%	0,1%	0,8%
Mining	1,2%	1,6%	2,7%	2,3%	13,6%	0,4%	4,5%	0,4%	14,1%
Construction	3,5%	2,3%	1,7%	2,6%	1,0%	1,0%	1,2%	1,0%	0,9%
Manufacturing	27,3%	33,1%	40,5%	48,3%	25,9%	36,4%	23,9%	36,4%	32,1%
Network industries	11,8%	11,0%	7,3%	5,4%	11,9%	6,1%	8,4%	6,1%	8,3%
Wholesale Trade	5,1%	7,2%	4,2%	1,0%	4,5%	3,3%	3,8%	3,3%	3,2%
Retail Trade	5,7%	3,7%	1,0%	2,6%	2,6%	2,2%	4,7%	2,2%	2,7%
Finance, Insurance and Real Estate	16,0%	16,8%	8,7%	17,3%	19,7%	15,0%	17,8%	15,0%	10,2%
Other Services	28,6%	23,8%	33,7%	18,6%	19,7%	35,5%	34,9%	35,5%	27,6%
Public Administration	0,2%	0,1%	0,0%	0,3%	0,0%	0,0%	0,2%	0,0%	0,1%
<i>Total (number of deals)</i>	<i>6666</i>	<i>1984</i>	<i>481</i>	<i>387</i>	<i>1033</i>	<i>786</i>	<i>9742</i>	<i>384</i>	<i>747</i>
Target region:	Bidder region: Asia					Bidder region: World			
	Domestic	Asia CB	EU	US	ROW	EU	US	Asia	World
Target sector:									
Agriculture, Forestry and Fishing	1,0%	0,8%	0,0%	0,6%	1,2%	0,3%	0,3%	0,7%	0,8%
Mining	1,5%	3,0%	3,5%	3,0%	27,9%	3,5%	13,5%	6,2%	7,3%
Construction	2,8%	2,2%	0,7%	0,0%	0,8%	1,6%	1,0%	2,1%	2,1%
Manufacturing	32,2%	33,3%	48,9%	43,6%	28,7%	33,2%	32,6%	38,1%	27,3%
Network industries	7,8%	11,3%	11,3%	8,5%	11,6%	9,2%	8,2%	8,3%	9,7%
Wholesale Trade	5,0%	4,6%	3,5%	4,2%	2,8%	2,9%	3,1%	2,8%	4,3%
Retail Trade	6,2%	2,0%	2,1%	1,2%	2,0%	2,3%	1,3%	2,6%	4,4%
Finance, Insurance and Real Estate	20,7%	26,4%	7,8%	7,9%	12,7%	14,6%	10,5%	18,3%	17,4%
Other Services	22,5%	16,0%	22,0%	30,9%	11,6%	32,3%	29,5%	20,6%	26,4%
Public Administration	0,2%	0,4%	0,0%	0,0%	0,8%	0,1%	0,0%	0,2%	0,2%
<i>Total (number of deals)</i>	<i>6938</i>	<i>1006</i>	<i>141</i>	<i>165</i>	<i>251</i>	<i>1916</i>	<i>1469</i>	<i>1212</i>	<i>38851</i>

Note: EU CB= EU cross-border, Asia CB= Asia cross-border, ROW= Rest of the World; the bottom right panel excludes domestic and intra-regional deals in the EU, the US and Asia.

*M&A deals predominantly occur between firms in the same sector – in the EU this proportion is higher for cross-border than for domestic deals*

Tables 5 and 6 show that a high number of deals were concluded between firms in the same sector. At the global level these deals accounted for about 60%, inside the EU for 58%<sup>8</sup>. It is interesting to note that in the EU this percentage was much higher for cross-border (66%) than for domestic (57%) deals. While the data do not allow precise classification of the deals as horizontal, vertical or conglomerate M&A, they may nonetheless give rough indications on the type of deal. In that respect the relatively high share of Community deals taking place within the same sector may suggest market integration in the EU.

<sup>7</sup> Domestic and intra-regional deals are excluded here.

<sup>8</sup> At the more disaggregated level (2-digit SIC) the equivalent figures are 46% and 44%.



**Box: Notes on the database and conventions**

M&A statistics in this note are based on data provided by Thomson Financial Services (TFS). The database covers all acquisitions of shareholdings of 5% or more and with a value of over US\$1 million as well as acquisitions for which the value is unknown. Although it endeavours to collect and present information which is as complete as possible, the nature of the information makes the coverage somewhat arbitrary. This is because although major operations affecting publicly listed companies are often officially published, the numerous purchases of smaller or unlisted companies are more difficult to identify. Also, subjective assessments are often inevitable e.g. as regards the date and sectoral classifications of a merger and acquisition operation.

In addition, a number of conventions have been established when drafting this M&A note. We take account of both completed and pending ('pending', 'pending subject to regulatory approval', and 'intended') deals. We use the TFS classification for the sectoral aspects of M&A (SIC classification, different from NACE classification). Moreover, sectoral activities are defined according to the target's main activity, as this is the activity most likely to interest the bidder and also because the targeted sector is the one in which the effects of an operation are likely to be the greatest. Finally it is important to note that the database does not contain value data for a significant number of deals. However these are mostly small deals since the value of large operations can usually be ascertained. The value data are therefore underestimated, though not by a large amount.



# European integration from the perspective of M&A activity

by *Gaëlle Garnier*

## *I. Introduction*

To what extent has the process of European integration affected M&A activity involving European companies? Has the introduction of the euro led to an increased number of cross-border M&A between firms located within the euro area? Has the EU market become a more attractive place to invest as it becomes progressively more integrated? Finally, have EU firms been encouraged to enter new markets outside the EU as the internal market has created a more competitive environment and EU firms became more efficient? This article attempts to suggest some answers to these questions in the light of the analysis of the evolution of cross-border M&A in the world over the 1990s and since the year 2005.

The first section describes the expected effect of European integration on M&A activity. The second section analyses the evidence concerning the actual effect of market integration on intra-EU M&A activity, while the third and fourth sections discuss the position of EU firms in the world, as targets and bidders respectively. The last section concludes.

## *II. What is the expected effect of European market integration on cross-border M&A activity?*

The internal market policy may be expected to have three main effects on merger and acquisitions activity involving EU firms.

Most obviously, European integration is expected to increase the numbers of cross-border mergers within the EU<sup>1</sup>. As market integration changes the nature of competition, it leads to two main categories of strategic reactions. On one hand, EU firms may try to become more efficient. They may enter new markets through M&A in order to increase their sales, thereby reducing their average costs. This may be possible thanks to the acquisition of an international distribution network or a locally well-known brand name for example. EU firms may also acquire other firms with the aim of restructuring as they try to exploit scale economies<sup>2</sup> and divest production processes for which they now find suppliers offering better supply conditions within the EU (Rondi L. et al, 2004). These divested businesses offer new opportunities for acquisitions. On the other hand, increased competitive pressures may also lead to defensive M&A as firms can be motivated by strategic concerns such as avoiding being taken over by foreign companies or eliminating potential or actual competitors in order to restore market power that has been weakened by economic openness.

*European integration  
should boost merger  
and acquisition  
activity between EU  
Member States ...*

<sup>1</sup> Empirical evidence gives contradictory results: Bertrand O and Zitouna H., (2006) do not find any strong link between market integration and M&A activity. However Delannay and Meon (2006) produce econometric results suggesting that the likelihood of cross-border M&A is significantly greater when both countries are members of the EU.

<sup>2</sup> Kokko A. and Gustavsson P (2004) explain that regional integration is likely to be accompanied by substantial restructuring through M&A as weak firms are eaten by strong remaining ones which thereby can grow larger. Economies of scale are obtained thanks to the acquisitions of existing plants and companies throughout the region and mergers with former competitors



European integration should also encourage entry on the EU market from firms located outside the EU. While, in the short run, the expectation is that market integration will lead to fewer firms that are larger in size as result of restructuring within the EU, in the medium to long run, entry of non-EU low cost producers attracted by the larger integrated EU market can be expected (Veugelers R., 2004). In addition, mergers are a means of breaking down the barriers to the transfer of know-how created by national frontiers. As the EU becomes a more integrated and efficient market, acquisitions in the EU by non-EU firms may also be explained by the opportunities they offer for technology sourcing and possible synergies with the acquired firm as well as access to the knowledge of other EU firms which are part of the acquired firm's network.

Finally, and to the extent that foreign entry leads to tougher competition and results in efficiency gains in the EU, European firms may, in the sequel, be led to expand their activities beyond the EU's borders. First, as EU firms become more competitive they may get access to new foreign markets in order to exploit their competitive advantage. Second, as a result of increasing competitive pressure in their domestic markets, they may try to get access to assets from abroad such as cheaper inputs in developing countries or new knowledge in more technologically advanced countries in order to further increase their competitiveness. Increasing integration is therefore expected to lead to an increased number of acquisitions, in particular in sectors where competition has intensified.

*... and increase the attractiveness of EU firms as targets for non-EU companies...*

*...and reinforce their position as acquirers outside the EU's borders*

### **Box 1 - The theoretical links between economic integration and incentives to merge or acquire another company**

While the traditional Industrial organisation (IO) literature showed that market integration is expected to reduce the incentives for M&A (Stigler, 1950; Salant et al.1983) because mergers in integrated market are not profitable, the endogenous merger theory<sup>3</sup> has recently shown that economic integration can be expected to trigger cross-border M&A.

Bjortan (2004) shows that economic integration can trigger cross-border M&A by reducing the reservation prices of target firms<sup>4</sup> as a result of intensified competition in the absence of a merger and reduced competition post-merger which increases the willingness to pay on the part of the acquiring firm. In addition, it may decrease the business stealing effects<sup>5</sup> and render the merger profitable in the case of relatively still high trade costs. Horn and Persson (2001) also suggest that, in a context of international oligopolies, a reduction in trade costs will lead to international mergers, contrary to what the tariff-jumping argument would suggest. Yildiz (2003) also shows that as trade becomes bilaterally liberalised, firms have an incentive to merge internationally in order to seek assets or advantages such as superior technologies or privileged access to the distribution channels in new countries.

Neary (2004, 2006) uses a two-country model of oligopoly in general equilibrium which draws from the traditions of both IO and international trade theory and allows for strategic interaction between firms. "The model implies that trade liberalisation can trigger international merger waves, in the process of encouraging countries to specialise and trade more in accordance with comparative advantage". This is because mergers happen as low-cost firms buy out higher-cost foreign rivals and thereby improve resource allocation<sup>6</sup>.

<sup>3</sup> Endogenous merger theory analyses firms' incentives to merge in a broader context that takes into account alternatives to mergers such as internal growth as well as the reaction of firms outside the merger.

<sup>4</sup> The reservation price is defined by the profit of the target firm in the absence of a merger. Market integration reduces the reservation price as the marginal costs of the exporters go down.

<sup>5</sup> The business stealing effect is the fact that the firms competing with the merged entity will expand their production and steal part of the merged entity market's share as a result of lower trade costs which reduce the sales costs of exporters.

<sup>6</sup> M&A seem to complement rather than substitute trade as firms with comparative advantages may merge with or acquire less competitive foreign firms, thereby improving resource allocation. Brakman, Garretsen and Van Marrewijk (2005) indeed show empirically that firms from sectors in which the country under consideration has a comparative advantage are more likely to be engaged in cross-border mergers. Lipsey and Feliciano (2002) show that M&A flows into the USA tend to go in the same direction as trade and originate in countries with comparative advantages in the industry concerned.



According to Boone (2006), M&A may happen in response to shocks such as liberalisation when sectors become more competitive. Firms merge or acquire another company in response to constraints on expansion (i.e. time and capital constraints). The idea is that greater competition increases the opportunity cost of the constraints, thereby making mergers to alleviate the constraint more profitable. If the target company generates sufficient cash to compensate for any additional debt burden arising from the takeover, this can be used to finance new business opportunities.

Finally, some models based on the endogenous theory of mergers propose strategic concerns as an explanation for M&A. It may be that shocks such as the integration of a market may lead managers who want to remain independent to merge with another company in order to avoid coming under the control of a foreign firm (Gorton, Kahl and Rosen, 2004).

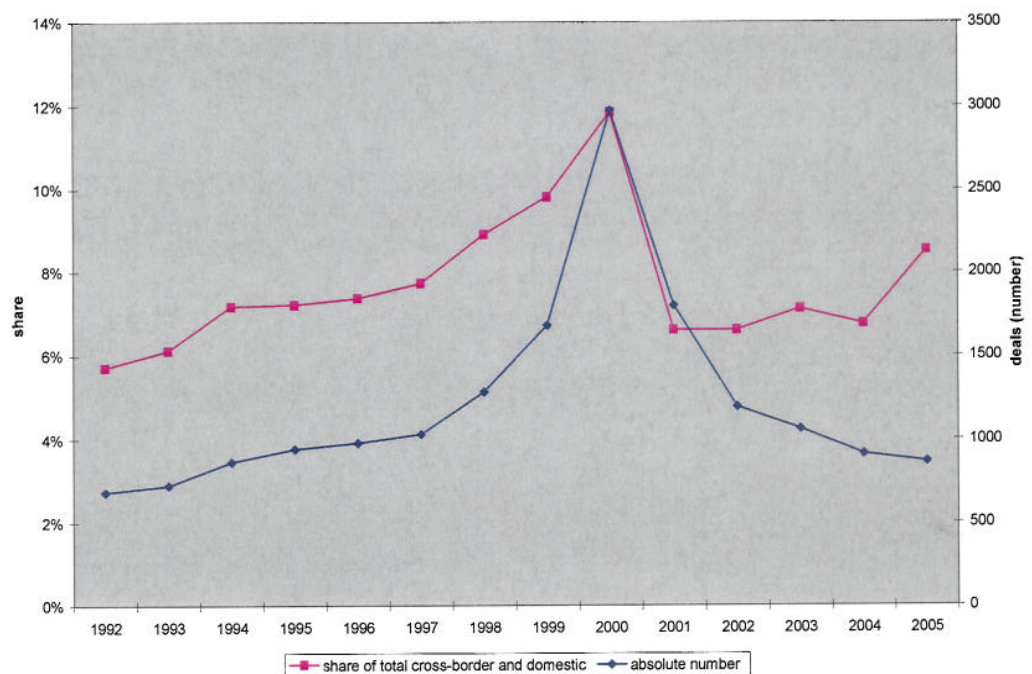
### III. Intra-EU M&A

This section considers whether the major steps of European integration appear to have been accompanied by the first effect, namely an increase in intra-EU cross border M&A activity.

There was an upward trend of intra-EU cross-border M&A in value and number from the beginning of the 1990s until 2000 (graph 1). During this period, the share of intra-EU cross-border M&A in the total number of acquisitions in the EU (including also cross-border acquisitions by non-EU firms and purely domestic deals) also increased, suggesting that M&A were increasingly used as a channel for cross border market access within the EU (graph 1). This should however not be interpreted as reflecting solely the effect of European integration as there are also other factors at play. First, the evolution of M&A activity in the EU followed a worldwide merger wave explained by factors such as business cycles and stock market booms. Second, it is difficult to disentangle M&A activity resulting from market integration within the EU from the effects of world market integration and the resulting worldwide restructuring linked to globalisation.

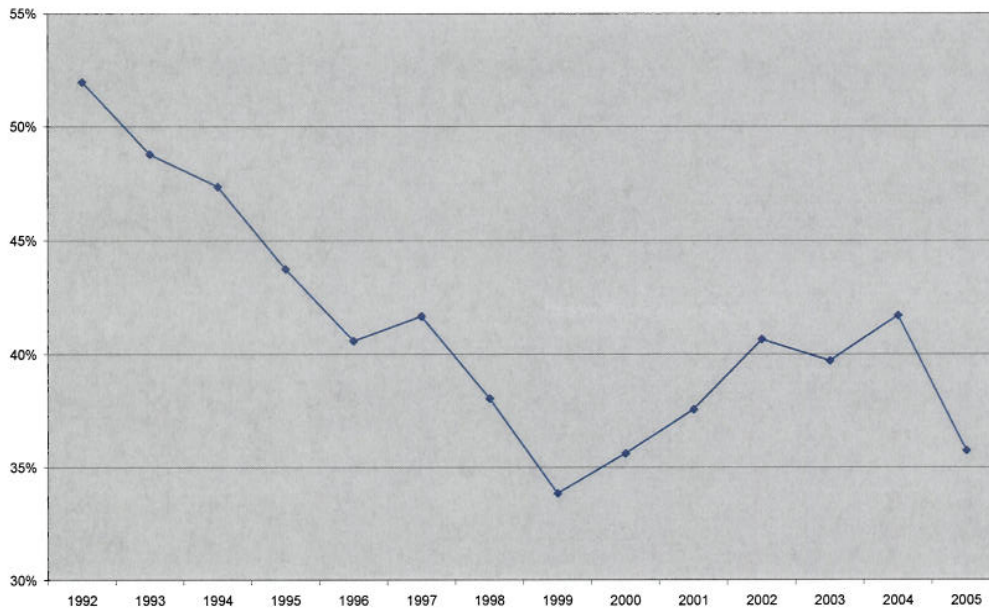
*It is difficult to disentangle the effect of European integration from world market integration*

**Graph 1: Intra-EU cross-border deals**





**Graph 2: Intra-euro-zone cross-border M&A as a share of the total number of cross-border acquisitions by euro-zone companies**



*The introduction of the euro seems to have been accompanied by an increase in M&A operations, especially in the knowledge-intensive business services sectors*

However, the data suggest that EMU may have had an effect as the introduction of the euro was accompanied by a boost in the number of M&A between euro area Member States; the share of intra-EU12 cross-border operations in the total number of acquisitions by euro-area companies increased from 34% in 1999 to 42% in 2004 despite the sluggish economic growth in the area ; this increase in M&A activity reversed the downward trend observed since the beginning of the 1990s (see graph 2) <sup>7</sup>. No such shift was observed in the EU25 beyond the euro-zone. The latest data however suggest that this might have been a temporary phenomenon as the ratio declined in 2005 to the 2000 level.

The shares of intra-euro-zone acquisitions relative to the worldwide number of acquisitions by euro-zone firms increased in certain sectors such as the energy and communication, retail trade, and finance <sup>8</sup> (graph 3). The services sector and software and engineering (See box 2 on the sectoral classification) in particular contributed also largely to this shift: while 33% of cross border acquisitions by firms in the EU12 services sector were intra-euro-zone in 1995-99, the share increased to 43% after the introduction of the euro (see graph 3). Intra-Euro zone cross-border M&A as a share of the total number of cross-border acquisitions by euro-zone companies were 34% in both software and engineering in 1995-99 and respectively 42% and 37% in 2000-2004.

<sup>7</sup> Even though of a different magnitude, this trend is also identifiable with FDI data according to OECD (2007), P Petroulas (2006), and Sousa J and Lochard J. (2006).

<sup>8</sup> While intra EU deals in the finance sector increased at a much slower rate than acquisitions by EU firms in third countries, intra euro-zone deals increased at a much quicker rate than acquisitions by euro-zone firms in third countries.



In these knowledge intensive business services sectors, the proliferation of varieties of services and the non transparency of price structures have led to a segmentation of markets by region and by reputation of providers (Kox and Rubalcaba, 2007). Increased price transparency as a result of the introduction of the euro may have reduced the ability of EU12 firms to segment national markets geographically and encouraged them to enter euro-zone markets and compete with foreign competitors. The reduction of the cost of managing multiple currencies also probably played a role.

There is however a second underlying effect to this shift which is the change in the sectoral composition of euro-zone worldwide M&A activity; the larger the sector becomes in terms of number of acquisitions the larger the impact of the increased share of M&A activity between euro area Member States<sup>9</sup>. The impact of the increase of M&A between euro area Member States in the software and engineering sectors has been large also because their shares in the overall number of acquisitions by euro-zone firms grew from 2.6% and 4.8% in 1991-1995 to 4% and 9.9% in 2001-2004 (See graph 4). Just as the engineering<sup>10</sup> and software<sup>11</sup> services were among the most rapidly growing sectors of the EU economy in terms of value added and employment (European Monitoring Centre on Change, 2005), M&A activity in those sectors also developed quickly.

In knowledge-intensive sectors where the service needs to be tailored to customer needs, foreign competitors have to be geographically present in domestic markets. This allows them for example to gain access to intangible assets such as workforce skills, intellectual property, and information systems specific to the domestic demand needs. Second, given the importance of reputation<sup>12</sup> and the high switching costs for customers<sup>13</sup>, acquisitions of domestic firms may be the only means of accessing foreign markets. In software services, a sector which is subject to rapid changes in technology and products (Kox H.L.M., 2001) and where competition is strong, small fast-growing firms are particularly attractive for more established large firms. In engineering, there is an increasing demand for integrated service products, such as project management, in which engineering is just one component (Kox H.L.M., 2001). M&A are one way in which firms can widen the range of skills that they can offer in order to meet this demand.

<sup>9</sup> The share of intra-euro-zone M&A in the total number of cross-border acquisitions by euro-zone companies can be decomposed by sub sector in the following way:

$$\frac{\sum_i A_i^{\epsilon \rightarrow \epsilon}}{\sum_i A_i^{\epsilon \rightarrow W}} = \frac{A_1^{\epsilon \rightarrow \epsilon}}{A_1^{\epsilon \rightarrow W}} \times \frac{A_1^{\epsilon \rightarrow W}}{\sum_i A_i^{\epsilon \rightarrow W}} + \frac{\sum_{i \neq 1} A_i^{\epsilon \rightarrow \epsilon}}{\sum_i A_i^{\epsilon \rightarrow W}} \quad \text{with } A_i^{\epsilon \rightarrow \epsilon} \text{ is the number of acquisitions}$$

intra euro-zone in sector i and  $A_i^{\epsilon \rightarrow W}$  is the number of acquisitions by euro-zone firms in the world in sector i.

<sup>10</sup> The engineering services include engineering services, accounting, research, management and related services.

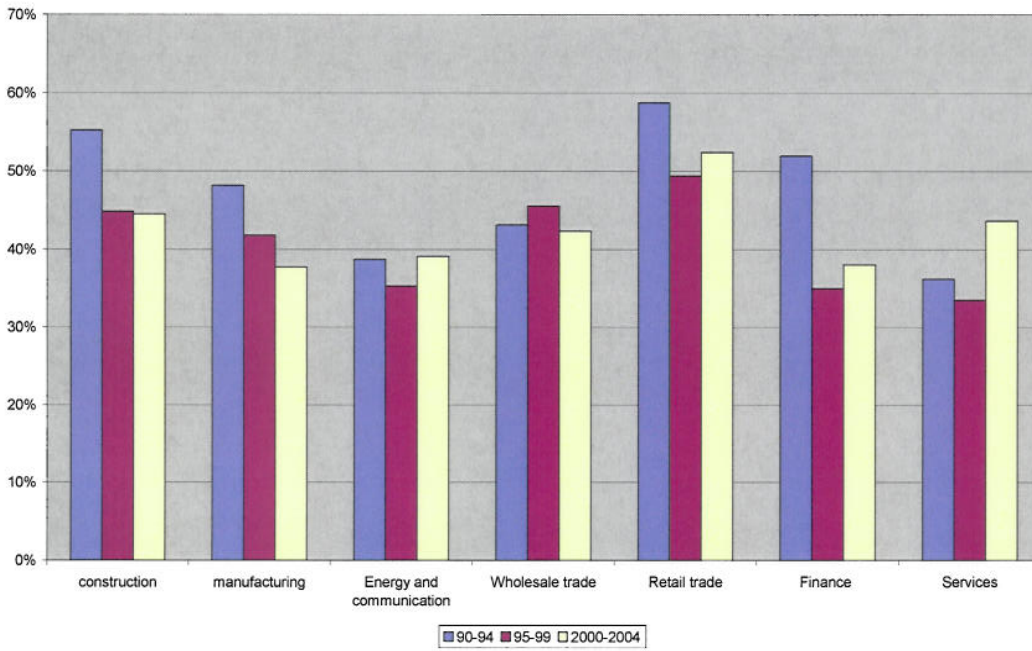
<sup>11</sup> The software services include computer programming services, pre-packaged software, computer integrated systems design, data processing services and information retrieval services, computer facilities management, computer rental and leasing, computer maintenance and repair and computer related services, nec. The software services for which M&A activity were large are pre-packaged software, computer integrated systems design, data processing services and information retrieval services.

<sup>12</sup> Information asymmetry between producers and clients explains why reputation plays a key role.

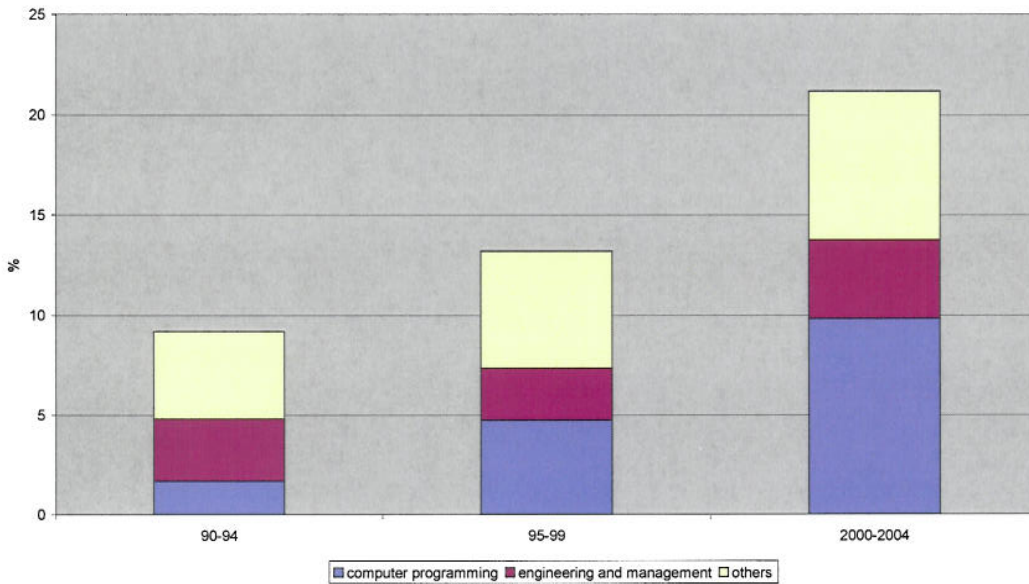
<sup>13</sup> "Client firms necessarily invest labour time and other resources in identifying, communicating and sometimes jointly solving specific business problems with the external business services providers" (Kox and Rubalcaba, 2007).



**Graph 3: Intra-euro-zone cross-border M&A as a share of the total number of cross-border acquisitions by euro-zone companies**



**Graph 4: Euro-zone Acquisitions in the service sector as a share of the total number of cross-border acquisitions by euro-zone firms**





*EU firms have become less attractive as targets over the 1990s*

#### **Box 2-Sectoral classification of services**

All services include energy and communication (E, SIC 40-49), wholesale trade (F, SIC 50-51), retail trade (G, SIC 52-59), Finance (H, SIC 60-67), Services (I, SIC 70-89).

The services sector (I) includes hotels, rooming houses, camps, and other lodging places, personal services, business services, automotive repair, services and parking, miscellaneous repair services, motion pictures, amusement and recreation services, health services, legal services, educational services, engineering, accounting, research, management, and related services. However M&A activity is largest in engineering and software services which are part of the business services.

The engineering services include engineering services, accounting, research, management and related services.

The software services include computer programming services, pre-packaged software, computer integrated systems design, data processing services and information retrieval services, computer facilities management, computer rental and leasing, computer maintenance and repair and computer related services, nec. The software services for which M&A activity were large are pre-packaged software, computer integrated systems design, data processing services and information retrieval services.

#### ***IV. EU companies as targets***

As the EU becomes a more integrated and efficient market it should become more attractive for foreign firms. This section attempts to analyse the weight of EU firms as targets by sector in order to assess whether EU companies have become more attractive and, if so, in which sectors.

The world share of acquisitions of EU firms by extra-EU firms decreased continuously over the 1990s. In 1992, EU firms accounted for 44% of world cross-border deals but by 2000 this share had fallen to 30% (See graph 5). There are a number of reasons for this.

First, the integration of European markets may have rendered a local presence of extra-EU companies in several Member States unnecessary.

Second, the integration of international markets has created new business opportunities, notably by allowing access to markets with larger growth potential and higher returns on investment. M&A investment in such countries does not necessarily mean a shift of M&A away from the EU but may represent additional investment that might not have taken place in the absence of international market integration. European firms themselves have increasingly acquired non-EU firms in all sectors. In the 90s, intra-EU cross border deals increased at a much slower rate than acquisitions by EU firms in third countries : in 1990 more than 60% of cross-border acquisitions by EU firms were intra-EU; in 2000, this share was less than 50%.

Third, this geographical shift mirrors the technological changes of recent years, which have greatly expanded the possibilities for further exploiting the international division of labour. This has affected in particular the worldwide location of manufacturing, the sector where the attractiveness of the EU seems to have decreased the most. The decreased weight of the EU as a target in total world manufacturing cross-border M&A was mainly due to lower investment in the low-tech and medium-low-tech segments of the EU manufacturing sector (Garnier, 2006).

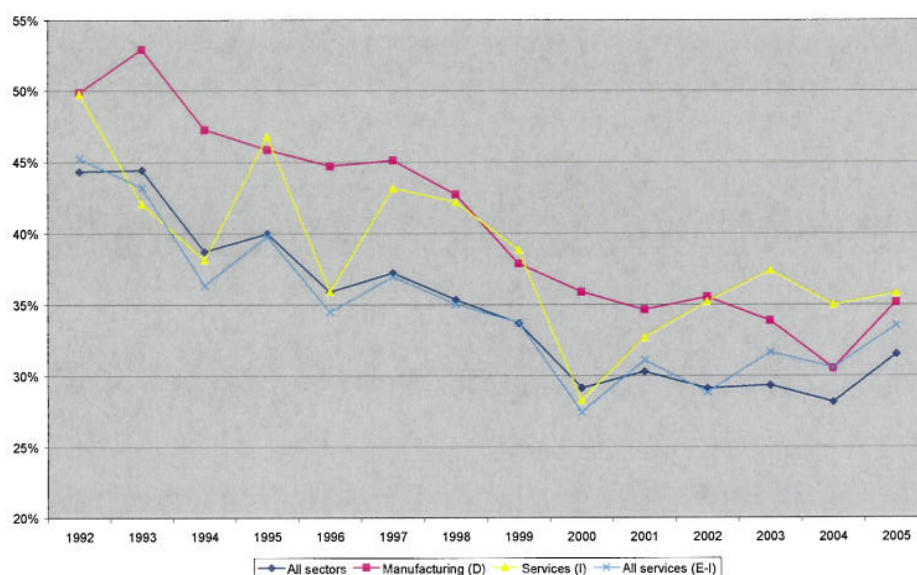


*However, EU companies in the knowledge-intensive business service sectors are increasingly targeted by non-EU multinationals*

Whereas the propensity of non-EU firms to acquire EU firms in general declined in the 1990s, non-EU firms' acquisitions of EU services sector firms have increased since 2000, breaking with the downward trend of the 1990s (see Graph 5). The increasing weight of the EU services sector was mainly explained by the EU software and to a lesser extent the R&D services sectors<sup>14</sup>. This shift may be explained by the shift of EU economic activity away from manufacturing towards the services sector.

More generally however, these observations seem to indicate an increased attractiveness of EU firms in those sectors. In 2000 EU software and R&D services firms accounted for respectively 28% and 37% of the total number of cross-border acquisitions by non-EU firms in those sectors. These shares increased to 36% and 46% by 2005. This may be explained by various reasons already mentioned above, such as high entry barriers on EU markets due to the non-standardised nature of such services, which requires access to intangible assets specific to EU markets. It may also be explained by the opportunities M&A offer for technology sourcing. In this respect, it is interesting to note that Kox and Rubalcaba (2007) show that these two sectors are the only knowledge intensive business services which have made a positive direct contribution to EU15 productivity growth. They explain that firms in those two sectors contributed actively to technological innovations as they were at the origin of most patent registrations in services (in Sweden, Denmark, Germany, Spain and Portugal they innovated more than manufacturing firms). Firms in software services seem in particular to contribute actively to ICT related innovations and to innovations that make the use of ICT more effective (e.g. development of solution-oriented software based on identifying industry problems and developing technical solutions).

**Graph 5: EU share of total number of cross-border acquisitions by non-EU firms**



<sup>14</sup> R&D services include research, development and testing services.



*Enhanced competition in the knowledge-intensive business services sectors should lead to positive spillovers in other sectors of the EU economy*

Whatever the rationale behind foreign entry in those sectors, it should be considered as a positive development for the EU. Increasing foreign entry in the knowledge-intensive branches of business services may play a key role in enhancing further the innovative capacity of those sectors while at the same time contributing to efficiency gains in other sectors of the EU economy. Indeed, another characteristic of knowledge-intensive branches of business services is that they indirectly contribute to the growth of other industries: first, they serve as a "facilitator of innovation when they support an organisation in the innovation process"(OECD, 2006). Second, they serve as "carriers of innovation" by helping to transfer existing knowledge between or within organisations, industries or networks so that it can be applied in a new context. For example, they contribute to knowledge diffusion by spreading best practices between client firms. Business services seem to be a more important source of external information than universities for innovating companies, according to studies in the Netherlands, the UK and Finland (Kox, H L.M., 2003). They may in particular play a key role for SMEs by giving them access to specialised knowledge and skills that were previously only accessible to large firms (Kox and Rubalcaba, 2007).

While most EU countries lag behind the top performers like the USA and Japan in terms of innovation, this recent upturn in cross-border acquisitions could help increase allocative efficiency within a sector identified as vital to support the EU's innovative capacity across sectors. In this respect, it is interesting to note that the most recent data on labour productivity growth in the euro area show an interruption in the downward trend, resulting from increases in labour productivity growth in the finance and business services sectors followed by increases in manufacturing and finally in trade and transport<sup>15</sup>. This may be partly explained by increased competition within the EU knowledge-intensive business services sector which has started to spread knowledge to other sectors of the economy.

In conclusion, the world position of the EU as target may have turned the corner on the decreasing trend of the 1990s as the EU knowledge-intensive business services sector has become more attractive. As this sector has positive spillover effects to other sectors of the EU economy, this could be a sign that the internal market is on its way to becoming more innovative and shifting towards sectors with a higher value added activity.

## ***V. The world position of EU firms as bidders***

The internal market is a step towards a more successful integration of the EU economy in world markets. With a better business environment brought about by increased competitive pressures within the EU, European firms may be led to expand their activities beyond the EU's borders in order to benefit fully from the opportunities of globalisation. This section attempts to ascertain whether EU firms have indeed been encouraged to enter new markets and, if so, in which sectors.

As international market integration in the 1990s allowed access to markets with larger growth potential and higher returns on investment, EU firms seized new business opportunities and increasingly acquired non-EU firms, and thus expanded their activities beyond EU borders. The share of acquisitions of non-EU firms in total EU acquisitions was 33% in 1991 and 44% in 2000.

---

<sup>15</sup> DG ECFIN internal note, 2006, on recent developments in the euro area, distinguishing between cyclical and trend developments.



However, judging from the pattern of M&A activity, the integration of the EU into the world economy overall seems to have been losing momentum over recent years. From 2000 to 2004, the number and value of acquisitions by EU firms decreased in both absolute and relative terms in all sectors. In particular, the share of cross-border acquisitions by euro-zone firms in total cross-border acquisitions of non EU-firms fell.

One explanation could be that the introduction of the euro has diverted acquisitions of non EU-firms to the advantage of euro-zone companies<sup>16</sup>. Another explanation for this might lie in the euro-zone's weak growth performance in the first half of the decade, as slow market growth means there is less capital to invest in acquisitions. EU multinationals need to generate profit in order to finance acquisitions, particularly given the imperfection of EU financial markets (Aghion et al., 2006). On the other hand, the fall in interest rates following the introduction of the euro may have partly compensated for the sluggish economic growth.

Whatever the factors underlying this evolution, the EU's presence in the rapidly growing countries of Asia has been limited, especially in comparison to the EU's current major competitors such as the USA. In 2000-2003, the EU's share of inward M&A in Asia was relatively low (17%), indeed 3% lower than it was in 1990-93 (Garnier, 2004). This was mainly due to fewer acquisitions in the services and finance sectors (see graph 6). The difference *vis-à-vis* the US is striking; between 2000 and 2004 the number of acquisitions by US firms in both sectors was twice that of EU firms.

Today China's economy is predominantly tilted toward manufacturing and the services sector is markedly underdeveloped<sup>17</sup>. "Chinese firms tend to import technology by purchasing foreign manufacturing equipment, often in complete sets such as assembly lines; throughout the 1980s and 1990s, hardware accounted for more than 80% of China's technology imports, whereas "know how" services and consulting accounted for about 5% and 3% respectively." (Gilboy, 2004). As the services sector provides input which can directly and indirectly improve the efficiency of industry, the Chinese services sector will increasingly provide many opportunities in the future (Adhikari, Rames and Yongzheng Yang, 2002) particularly in banking, insurance, distribution, telecommunications and business services (McKinsey, 2005). Increasing the EU's presence in these rapidly growing countries would probably be beneficial for the EU's growth prospects.

*European firms have become less active, relative to firms from the rest of the world, as acquirers beyond the EU's borders ...*

*...in fast-growing sectors and markets such as the service sector in China*

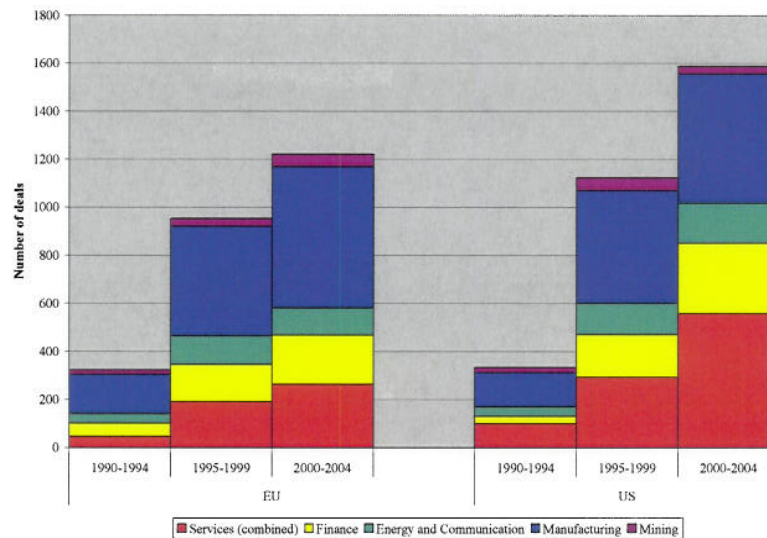
---

<sup>16</sup> There are three sectors where intra-EU cross border deals have increased at a much faster rate than acquisitions by EU firms in third countries since 2000 in comparison to the second half of the 90s. These are energy and communication, retail trade and services.

<sup>17</sup> McKinsey, 2005, "China's looming talent shortage - To make the move from manufacturing to services, China must raise the quality of its university graduates", McKinsey Quarterly, Number 4.



**Graph 6: EU and US M&A in Asia**



## VI. Conclusions

This article has attempted to ascertain whether the internal market has encouraged M&A between EU companies, whether it has helped increase the attractiveness of EU firms for non-EU companies and finally whether it has offered a solid basis for the penetration of new markets outside the EU.

It is difficult to disentangle the effect of European integration from other factors and in particular from world market integration, the technological changes of recent years, and the shift of economic activity in the EU towards the services sector. There seems however to be an EMU effect in the sense that EU12 firms have refocused their acquisitions on the euro-zone. The introduction of the euro seems to have increased the incentives for intra-EU M&A activity in knowledge-intensive business services for which markets used to be particularly segmented.

Whereas the propensity of non-EU firms to acquire EU firms declined in the 1990s, it has revived since 2000. In services, notably in business services, the share of EU firms as targets of cross-border M&A has clearly increased, breaking with the decreasing trend of the previous years. Non-EU multinationals have increasingly taken over EU companies in the knowledge-intensive business services branches such as software and R&D services. This upturn should increase allocative efficiency within a sector identified as vital for the support of the EU's innovative capacity. It may be a sign that the internal market is on its way to becoming more innovative and shifting towards sectors with a higher value added activity.

However, while the internal market in general, and the introduction of the euro in particular, appear to have helped increase M&A operations in the EU and to enhance the attractiveness of the EU's knowledge-intensive business services, this has not yet translated into an increasing EU presence in growing foreign markets and sectors such as the Chinese service market. This seems to indicate that further potential gains may be expected. In this context, it is interesting to recall that as illustrated in the first part of the M&A Note, the upsurge of M&A activity was in 2006 more pronounced in the EU than in the USA and Asia.



## *References.*

Adhikari, Rames and Yongzheng Yang, 2002, « China's Increasing Openness: Threat or Opportunity to Others ? » unpublished manuscript, Asian development Bank and International Monetary Fund.

Aghion P., T.Fally, and S.Scarpetta, 2006, Credit Constraints as a Barrier to the Entry and Post-Entry Growth of Firms: Lessons from Firm-Level Cross Country Panel Data.

Bertrand O and Habib Zitouna, 2006, "Trade Liberalization and Industrial Restructuring: the role of Cross-Border Mergers and Acquisitions", *Journal of Economics and Management Strategy*, vol.15, N°2,

Bjortan K, 2004, Economic Integration and the profitability of cross-border mergers and acquisitions, *European Economic Review*, vol 48, issue 6, pages 1211-1226.

Boone , 2006, Firms merge in response to constraints, discussion paper n°2006-60, Tilburg university.

Brakman, Garretsen and Van Marrewijk, 2005, Cross-border Mergers and Acquisitions : on revealed Comparative Advantage and Mergers waves, CESIFO working paper n°1602.

De Sousa & Lochard, 2006, "Union monétaire et IDE : quels sont les effets de l'euro ?", *Revue Economique*, forthcoming.

European monitoring center of Change, 2005, Knowledge-intensive business services-policies, issues and the future

Garnier, 2006, Less M&A in the EU manufacturing sector but more in China : what economic implications for the EU? In M&A Note n°3, European Commission

Garnier G, 2004, International M&A activity: impact of globalisation, in M&A Note n°1 European Commission.

Gilboj G.J., 2004, "The Myth behind China's Miracle", *Foreign Affairs*.

Gorton G., Kahl M. and Rosen L, 2004, Eat or be Eaten: A Theory of Mergers and Mergers Waves, NBER Working Paper 11364.

Horn H. and L. Persson, 2001, The Equilibrium Ownership of an International Oligopoly, *Journal of International Economics*, vol.53, n°2: 307-333.

Kokko, A. and P. Gustavsson, 2004., Regional Integration, FDI, and Regional Development. *EIB Papers*, Vol. 9, No.1, pp. 110-135.

Kox H.L.M and Rubalcaba L., 2007, Analysing the Contribution of Business Services to European Economic Growth, BEER paper n°9.

Kox H.L.M., 2001, Exposure of the business services industry to international competition, CPB document N°10.



Kox H.L.M., 2003, The contribution of business services to aggregate productivity growth, working paper.

McKinsey, 2005, "China's looming talent shortage- To make the move from manufacturing to services, China must raise the quality of its university graduates", McKinsey Quarterly, Number 4.

Lipsey Robert E. and Zadia Feliciano, 2002. "Foreign Entry into U.S. Manufacturing by Takeovers and the Creation of New Firms," NBER Working Papers 9122.

Méon P.G. and A.-F. Delannay, 2006. "The impact of European integration on the nineties' wave of mergers and acquisitions," Working Papers DULBEA 06-12.RS, Université libre de Bruxelles, Department of Applied Economics (DULBEA).

Neary, 2004, Cross-border mergers as instruments of comparative advantage, working paper, june .

OECD , 2007, Economic survey, Euro Area.

OECD , 2006, Innovation and Knowledge-Intensive Service Activities, Paris.

Petroulas P., 2006, The effect of the Euro on FDI, working paper, Bank of Greece, Economic Research Department.

Rondi, L., L. Sleuwaegen and D. Vannoni, 2004,: "Changes in the Industrial and Geographical Diversification of Leading Firms in European Manufacturing", in: A. Dierx, F. Ilzkovitz and K. Sekkat Eds. *European Integration and the Functioning of Product Markets*, Edward Elgar.

Salant S.W., Switzer S and Reynolds R.J., 1983, Losses due to merger : the effects of an exogeneous change in industry structure on Cournot-Nash equilibrium, *Quarterly journal of Economics* 98, pp. 185-199.

Stigler, 1950, Monopoly and oligopoly by merger, *American Economic Review*, 40 pp23-34.

Veugelers, R. ,2004,: "Industrial Concentration, Market Integration and Efficiency in the European Union", in: A. Dierx, F. Ilzkovitz and K. Sekkat Eds. *European Integration and the Functioning of Product Markets*, Edward Elgar.

Yildiz H. M, 2003, "National Versus International Mergers and Trade Liberalization" FEEM Working Paper No. 56.2003.