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Merger Control in the New Economy

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ABSTRACT

Merger Control in the New Economy*

by Lars-Hendrik Röller and Christian Wey

This paper addresses the potential for conflict between antitrust authorities in the arena of merger control in the new economy. By "new economy" we mean two related developments. First, the internationalization of the economy, i.e. the ability to sell and produce products world-wide, and secondly, markets with certain characteristics such as network effects and other aspects of natural monopoly. We focus on three types of substantive issues in merger control - market definition, assessment of competitive effects, and the role of remedies. We argue that the scope for conflict varies significantly across these three arenas. In particular, conflict over market definition is less likely. By contrast, the assessment of competitive effects and the role of remedies are areas where conflict between antitrust authorities may be more likely in "new economy- type" markets.

Keywords: Merger, New Economy, Competition Policy, International Conflict

JEL Classification: L1, L4

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ZUSAMMENFASSUNG

Fusionskontrolle in der New Ecomomy

Diese Arbeit identifiziert Konfliktpotentiale zwischen Wettbewerbsbehörden in der Fusionskontrolle von New Economy-Fällen. Mit „New Economy“ bezeichnen wir zwei miteinander verbundene Entwicklungen: Erstens die Internalisierung der Ökonomien, womit die Möglichkeiten weltweit zu verkaufen und zu produzieren gemeint sind, und zweitens bestimmte Markteigenschaften wie Netzwerkeffekte sowie Produktionsbedingungen natürlicher Monopole. Wir fokussieren auf drei substantielle Problembereiche internationaler Fusionskontrolle: die Marktabgrenzung, die Einschätzung der Wettbewerbswirkungen und die Rolle von Abhilfemaßnahmen. Wir argumentieren, daß sich die Gefahren internationaler Konflikte sehr unterschiedlich über diese drei Bereiche verteilen. Insbesondere sind Konflikte über die Abgrenzung des relevanten Marktes weniger wahrscheinlich. Im Gegensatz hierzu sprechen eine Reihe von Gründen dafür, daß Konfliktsituationen sowohl bei der Einschätzung der Wettbewerbswirkungen von Fusionen als auch bei der Anwendung von Abhilfemaßnahmen wahrscheinlicher werden in New Economy-Märkten.

1. Introduction

Terms like "new economy" or "globalization" have been used to describe a set of key developments beginning in the late 20th century. Amongst those are technological changes, as well as other policy measures (such as integration, deregulation, privatization, etc.), which increase competition at the international as well as national levels. As a result of these major developments a number of fundamental changes are taking place, with important implications for the way we organize our education systems, labor markets, and the welfare state.

One of the most important policy instruments affecting the way markets perform in the new economy is competition policy. More specifically, this paper addresses the potential for conflict between antitrust authorities on the arena of merger control in the new economy. At this point it might be useful to define what we mean be new economy in this context. By "new economy" we are concerned with two related developments. First, the internationalization of the economy, i.e. the ability to sell and produce products worldwide at low costs. As a direct result, it is increasingly common for national business conduct to have anticompetitive consequences in other countries. We do not attempt to explain why this is the case, for instance through the availability of new technologies (like the internet) or a reduction in geographic entry barriers. We simply take this for granted and explore its implications for international competition policy.

Secondly, new economy involves markets where certain characteristics - which typically create market failures - are strongly at work. These include network effects, both on the consumer side as well as on the firm side, which introduces standard setting, as well as the complicated issue of natural monopoly. Other aspects include the complementarity of products as well as the role of access to essential facilities. Again, we take these characteristics as given and explore the implications for international competition policy.

For a number of reasons it appears that competition policy in international markets is likely to be at the forefront of important policy decisions. This is a result of the need to coordinate amongst nations whose companies are competing in similar and related markets. An effective and transparent institutional environment to handle such conflicts is currently being debated by policy makers. We will elaborate on this point in the following section.

There are other political and economic constraints that will raise the importance of international competition policy. "Globalization" implies competition among governments, as well as less independence for national policy. This is most apparent in the arena of taxation, where the interdependencies are increasing. As a result, international competition policy is becoming more central for national governments, as other instruments may be less effective. Finally, the international rules that govern competition, access and entry bear serious consequences for the economies of

developing countries[1]. For all these reasons it appears that international competition policy will become an increasingly important dimension of the new economy.

As the economy is becoming more international, it appears natural that the "rules that govern the competitive process" need to be international as well. This point has also been made strongly by antitrust agencies. According to the (former) U.S. Assistant Attorney General Joel Klein (2000), the advance of "globalization" in the years to come will only enhance the scope for conflict and further integration of antitrust proceedings across jurisdictions will be necessary. Similar remarks have been put forward by the EU Antitrust authorities. According to the EU Commissioner for Competition Policy Mario Monti, the increasing internationalization of the economy "creates very important challenges to antitrust authorities around the world" (Monti, 2000, page 8).

This paper assesses the potential for conflict in merger control between national (or regional) competition policy authorities. We focus on the arena of merger control, as this is the area of competition policy where the international dimension is the strongest. Indeed, close to two thirds of the EU-U.S. joint involvements in competition policy cases has been with regard to merger control. In addition, there have been a number of high-profile cases where there has been substantial disagreement between the U.S. and European antitrust authorities. The purpose of this paper is to investigate the conditions under which conflict in merger control is likely to emerge.

The paper is organized as follows. The next section will document some of the main trends in merger control. Section 3 summarizes the current institutional framework for handling international cases. Section 4 addresses the scope of conflict between competition policy agencies. Section 5 concludes.

2. Trends and Issues

Companies have reacted to the changes in the economy. This has produced a large number of mergers and alliances, both at the national and international level. Figure 1 illustrates this trend as far as EU notification of mergers is concerned. As can be seen the number of cases has increased from approx. 50 in the early 90's to over 300 by the end of the 90's. A similar picture emerges for the U.S., where the numbers of transactions filed under the Hart-Scott-Rodino Act increased from 1,328 in 1991 to 4938 in 2000. Figure 2 shows all the M&A deals and their deal value for the U.S. The numbers are very striking, in particular in the second half of the 90's M&A activity has sharply risen towards the end of the 90's. In fact, the increase in total value of the deals is even more pronounced. As has been widely reported, merger activity for 2001 does not reflect the dramatic increases of the 90's, even though the reduction in number of deals is more striking than in value. Overall, there is little doubt that merger activity has been increasing throughout the 90's and will be at a significant level for some time to come.

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1 For instance, South Africa has recently passed and implemented a new – and more effective- competition policy law. The South African Government (center-left) believes that competition policy is an effective policy instrument to make sure that entry takes place, giving young South-Africans an opportunity to share economic development.

Figures 1 and 2 go here!

A second trend relates to cross-border mergers. Using data provided by the World Investment Report, Figure 3 plots the cross-border M&A activity for deals that are worth more than $1bn. It can be seen that the cross-border investment through those "Mega Mergers" has more than doubled in the last four years. Even more striking is the increase in total value of those deals. In 1988 and 1999 (the last year for which we have data) the value of Mega Mergers has gone up from just over $100bn to roughly $500bn. Figure 4 documents the percentage of Mega Mergers in all cross-border mergers. As one can see, Mega Mergers in 1999 make up less than 2 percent in numbers, while their value represents approx. 70%. Overall, cross-border activity has been increasing significantly in the late 90's and much of this cross-border activity takes place through Mega Mergers.

Figures 3 and 4 go here!

There is evidence that the merger wave is not equally strong across all sectors of the economy. The claim that most mergers are in the sector of the economy that is loosely referred to as the "new economy" is somewhat difficult to support by data, since it is not easy to divide sectors into those that are in the new economy and those sectors that are old economy. Figure 5 shows the available EU data on sectors that have been subject to the highest merger activities for the running year 2000 as per October. As can be seen, the data is only suggestive. However, the two-digit industries with the most number of mergers are *Machinery and Computer Equipment* and *Business Services*. Figure 6 takes a closer look at the Business Service industry, which indicates that most of the merger cases were within the Computer Programming sector (close to 1800 cases). Even though this evidence is rather sketchy, it may nevertheless give some support to the claim that merger activity in sectors often referred to as "new economy" is substantial.

Figures 5 and 6 go here!

In sum, there appear to be three major trends that emerge. Merger activity is substantial and has been increasing throughout the 90's, there is a significant international dimension in competition policy cases, and a good number of mergers take place in sectors that can loosely be defined as new economy.

The next section will briefly describe the types of initiatives for cooperation between antitrust agencies that have been put in place in the 90's, as well as mention some of the current proposals that are being discussed.

3. Cooperation and Convergence between Antitrust Authorities

There have been a number of high profile merger cases, like Aerospatiale/de Havilland, Boeing/Mc Donnell-Douglas, Gencor/Lonrho, Exxon/Mobile, Worldcom/MCI, MCI WorldCom/Sprint, BT/AT&T, Air Liquide/BOC, AOL Time Warner and GE/Honeywell, which have recently underlined potential for close cooperation between countries (or perhaps lack thereof) in the implementation of antitrust rules. In fact, about

half of the Commission's recent in-depth type II merger cases have been dealt with in co-operation with U.S. competition agencies (Schaub 2000, pages 3-4). Even though there has rarely been an outright disagreement between antitrust agencies in terms of their final decision, there have been instances where the final outcomes of procedures have been different. In 1997, the merger between *Mc Donnell-Douglas* and *Boeing* led to an important conflict between U.S. and EU antitrust authorities, which spilled over to their political governments. The merger was allowed by U.S. authorities at a time when EU authorities were expressing serious concerns. The conflict escalated and a trade war was avoided at the last minute when the parties accepted to modify their operation to satisfy the demands of the EU. More recently, the GE/Honeywell case has illustrated some difficulty in the convergence process between the U.S. authorities and the EU. The proposed concentration between two U.S. firms was blocked by the Commission, while it had been approved by the Department of Justice in the U.S. This was the first time that a U.S. merger involving domestic firms had been prevented by a non-U.S. authority, provoking harsh criticism from U.S. politicians, policy makers, as well as some academics.

Antitrust authorities have responded to these developments by creating cooperative agreements or reforms directed towards the *convergence on procedural* as well as *substantive issues*. Early such attempts are the bilateral co-operation agreements, which are meant to reduce the scope for conflict by sharing information, coordinating procedures, and by efforts to converge on substantive issues. A prominent example is that of the agreement between the U.S. and the Commission, which was applicable as of 1995[2]. In the period 1995-1998, this Agreement gave rise to contacts on more than 200 competition policy cases (Commission of the European Communities, 1999). In addition to the EU-U.S. Agreement, the EU has negotiated bilateral agreements with several other countries, such as Canada, Israel, Russia, and many other Central and Eastern European countries. An agreement with Japan is apparently close to conclusion.

In terms of the EU-U.S. Agreement of 1991, it is noteworthy that a majority of these cases has been in the arena of merger control. Table 1 reports the number of notifications under the EU-U.S. Agreement. As can be seen, the number of cases has been substantially increased on the EU side, while notifications from the U.S. side has been stable. In particular, in terms of merger cases, EU notifications have increased from 11 cases in 1992 to some 59 cases in 1999. It appears from this data that the international side of competition policy is becoming more important throughout the 90s.

2 Agreement between the Government of the United States of America and the Commission of the European Communities regarding the application of their competition laws (OJ L 95, 27.4.95, pp. 47 and 50).

Table 1

(Notified cases under the Agreement between the European Communities and the Government of the United States of America regarding the application of their competition laws)

Year	EC Notifications	U.S. Notifications		Merger Notifications
		FTC	DoJ	
1992	26	20	20 (=40)	11 (EC) + 31 (US)
1993	44	22	18 (=40)	20 (EC) + 20 (US)
1994	29	16	19 (=35)	18 (EC) + 20 (US)
1995	42	14	21 (=35)	31 (EC) + 18 (US)
1996	48	20	18 (=38)	35 (EC) + 27 (US)
1997	42	12	24 (=36)	30 (EC) + 20 (US)
1998	52	22	24 (=46)	43 (EC) + 39 (US)
1999	70	26	23 (=49)	59 (EC) + 39 (US)

Source: Commission of the European Communities (2000)

Bilateral arrangements are now regarded as insufficient by both the U.S. and European antitrust authorities (see Monti 2000). To cope with the perceived need for increased international co-ordination in competition policy, the EU has generally followed a *dual approach***,** where both bilateral (like the EU-U.S. Agreement described above) are complemented by attempts to create an institutional framework for multilateral exchange on antitrust issues. The former Assistant Attorney-General of the U.S. DoJ Joel Klein has stated that “bilateral co-operation is an essential template but by itself is insufficient to cope with present and future challenges posed by global mergers” (EC Competition Policy Newsletter, 2000, page 2).

Even though many antitrust officials and academic (see Jacquemin et al. (1998), or Klodt (2001)) agree that a multilateral initiative is called for, there appears to be diverging views as to the appropriate institutional setting. While the EU has been proposing a Multilateral Framework Agreement on Competition Policy as part of the WTO[3], the U.S. side has favored the so-called Global Competition Initiative (GCI), which has been proposed by a U.S. advisory committee on international competition policy, called the International Competition Policy Advisory Committee ICPAC. In particular, the ICPAC report concludes in its findings that “existing multilateral organizations are nor equipped to handle some competition conflicts between nations” (ICPAC, 2000, page 30). Instead they propose a “less bureaucratic” light institutional structure – modeled after the G7 summit. While maintaining the multilateral fora as a *long term endeavor*, the EU side has also welcomed the GCI as a venue to discuss convergence and create a “common worldwide ‘competition culture’” (see Schaub (2001)).

3 Since 1996 there has been a WTO Competition Working Group as well as OECD working parties to discuss these issues.

Besides international cooperative agreements and fora, there is another possibility to achieve greater convergence amongst antitrust authorities, namely the unilateral reform of merger guidelines. The EU has issued in December 2001 a "Green Paper on the Review of Council regulation No 4064/89" (Commission of the European Communities (2001)), which includes several potential changes to the merger guidelines. Besides a number of procedural and jurisdictional issues there are also substantive areas where convergence to the U.S. standard is envisaged. For instance, it has been alleged that the law concerning the substantive test leads to convergence problems between the EU and U.S. Another issue is that of the application of an efficiency defense, which is not actively used by the EU, contrary to the U.S. procedures. It should be emphasized that the Green Paper's objectives go beyond the issue of convergence and that it remains to be seen what changes will ultimately survive.

In general, cooperation amongst antitrust agencies can therefore be divided into two kinds of issues. First, there are sizeable procedural benefits such as sharing information, reducing the scope for misunderstandings, streamlining and simplifying filing requirements, etc.[4] Second there is convergence on substantive issues, which is perhaps the most difficult - yet important - issue in international antitrust. Given the different legal and institutional setting, there is definite scope for conflict such that convergence on substantive matters is of considerable importance. The next section will investigate whether the "new economy" enhances the likelihood of conflict in international antitrust.

4. The Scope for Conflict in Merger Control

We will now illustrate how the scope for conflict is affected in the new economy. In the following subsections we focus on the three main substantive issues in merger control:[5]

(4.1) market definition

(4.2) assessment of competitive effects, and

(4.3) appropriateness of remedies.

We will now address these three issues in more detail. The first subsection assumes that the agencies are following a simple consumer surplus standard and asks whether the scope of conflict is likely to increase when markets are becoming more international. It is important to emphasize that we assume that there is no disagreement on the assessment of dominance and that remedies play no role in this context. In other words we concentrate on the likely emergence of conflict regarding issue (4.1), i.e. the

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4 According to the antitrust agencies the extensive and frequent interactions between the FTC and the DoJ on the one side and the DG Comp on the other, has led to substantial benefits since the Agreement came into force in 1995 (see for instance Schaub 2000, Monti 2000).

5 These are also the three areas of cooperation mentioned in the EU-U.S. agreement discussed above. In October 1999, DG Comp, the FTC and the DOJ have decided to create a EU/U.S. Merger Working Group whose role is to enhance transatlantic cooperation in "global mergers" by considering issues (i)-(iii). However, this attempt to achieve convergence is likely to be rather narrow and has so far reportedly only addressed issue (iii).

definition of markets. The following subsections will address the scope of conflict concerning issues (4.2) and (4.3).

4.1 Conflict over Market Definition

The presumption that the scope for conflict is (quantitatively) important and likely to increase in the future has so far not been supported by formal analysis (see Bacchetta et al. (1998)). Neven and Röller (2001a) attempt to provide the rudiments of such an analysis. They develop a model of international merger control and undertake a positive analysis of the scope for conflict[6].

In particular, it is assumed that the objective of antitrust authorities is to defend consumers' interests. This assumption is a fair description of the objective, which is currently assigned to both U.S. and EU agencies in charge of merger control. For instance, Art. 2 of the merger regulation stipulates that the merger task force should be solely concerned about restrictions of competition and that efficiency benefits should only be taken into account in so far as consumers are not hurt. Hence, it would appear that the merger regulation is concerned with consumer surplus. The U.S. antitrust legislation has a similar focus on consumers (see e.g. Gellhorn and Kovacic (1994)). Such a narrow objective can also be rationalized in the presence of regulatory failures (see for instance Besanko and Spulber (1993) or Neven and Röller (2001b)).

The second aspect of the model is that all countries affected by a merger will assert jurisdiction, and that each country has effectively a veto power on any proposed merger. This is in line which current practice, and has indeed been observed in several merger cases.

Finally, the essential features of the procedure followed by the main antitrust agencies are introduced. In particular, both the decision taken by the agencies on market definition (using the elasticity of demand), as well as the analysis of dominance through evaluation of market shares and treshholds are included.

Given a particular distribution of mergers in terms of their sales across countries, Neven and Röller (2001a) then characterize both the scope and the type of conflict that may arise. It is shown that the scope for conflict in international merger control is rather limited. In particular, whenever national antitrust agencies define the global market as relevant, no conflict can ever emerge. In this sense, internationalization of the economy cannot explain why national agencies disagree. A second robust finding is that a positive correlation across jurisdictions in market shares of the merging parties lowers the potential for conflict. To the extent that market integration produces correlated market shares, a more integrated market is subject to less conflict between antitrust agencies.

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6 A related question has been addressed by Neven and Röller (2000), where the question of allocation of jurisdiction is addressed. In principle, the scope for conflict should be affected by the rules governing the assertion of jurisdictions. The paper concludes, using a formal analysis of merger control, that the allocation of jurisdiction matters surprisingly little for the outcome of merger control. That is, the circumstances where delegation to a single centralized authority would lead to a different outcome from the simultaneous assertion of jurisdiction may not be that frequent.

Finally, it is shown that the difference in country size matters only when there is conflict over the relevant market, i.e. when one country defines the global market as relevant while the other country considers the national market as relevant. In those circumstances countries of unequal size have a lower probability of conflict.

In sum, the above analysis makes a simple, but perhaps forceful point: since both correlated market shares and global market definitions are associated with an open and integrated economic area, it appears that the scope for conflict in international merger control is less likely to occur when economic integration is high. Those results can therefore be interpreted to suggest that "globalization" should not be seen as the source of conflict between national antitrust agencies, but should rather help alleviate such frictions.

There are a number of important qualifications and implications to the previous argument. Recall that the above model assumes that national agencies follow their mandate and protect consumer interests. This may of course be an idealistic assumption in an international context. To the extent that national agencies are associated with the pursuit of other objectives, like the defense of national champions, the above conclusion would be invalid. In other words, conflict may emerge precisely because national agencies are not following their mandate.

A second source of conflict may be that antitrust agencies are subject to influence activities by competing firms. There is ample anecdotal evidence that lobbying by special interest is attempted. Even though lobbying by firms in a merger case can be efficient (see Neven and Röller 2001b), it may also create incentives for an agency to discount consumer interest.

4.2 Competitive Effects in the New Economy

Recall that the above analysis abstracts from the other two substantive issues in merger control that agencies might disagree over: (4.2) the assessment of competitive effects, and (4.3) the appropriateness of remedies. This section addresses (4.2). We proceed in two steps. First, we briefly review the distinguishing characteristics of competition in new economy markets and, second, we discuss whether the scope for conflict between jurisdictions might widen in new economy-type markets.

Distinguishing features of competition in new economy markets

A central feature of the new economy is the presence of network effects.[7] While traditional analysis assumes that a product's intrinsic value is the main source of benefit to consumers, network products create value by integrating products, businesses, and consumers into networks. In those networks, a single product or service has little or no value in isolation, but generates value when combined with others. More importantly, the benefit a user derives from consuming a network product increases with the number of total users of the same or compatible products. These "network effects" arise in

7 In the following we consider network effects as the most important feature of new economy markets. Seminal contributions to the economic analysis of network effects are Katz and Shapiro (1985, 1986) and Farrell and Saloner (1985, 1986). Overviews over the relevant literature and related issues are provided by Liebowitz and Margolis (1999), Wey (1999), and Shapiro and Varian (2000).

markets for operating systems and application software as well as in telephone and fax networks[8]. While this phenomenon is not entirely new, the degree to which networks shape business strategies today has changed fundamentally.

Other key characteristics of the new economy include the existence of strong complementarities between products. For instance, a computer operating system and its software applications are strong complements. Software production is also subject to significant economies of scale. For example, it is very costly to produce the first copy of an operating system but less and less to produce additional copies. In other words, the production technology is more likely to resemble that of a natural monopoly.

These characteristics of the new economy have important implications for market structure and antitrust. Network effects, complementarities between products, and non-convex costs give rise to "critical mass" and "chicken-and-egg" problems that lead to winner-takes-it-all outcomes. Whenever a product standard gains critical mass with a sufficient supply of complementary products, it will tend to be dominant. On the other hand, a new product standard is doomed to fail, if adoption of the standard does not reach momentum and supply of complements is too low[9]. For this reason markets with substantial network effects are rather different from more traditional markets as concentration is more likely to occur.

The implication for antitrust is that consumers may be better of in concentrated markets. A monopolist may benefit consumers in network markets simply by internalizing the network effects and complementarities between products. In this sense, consumers have a preference for concentration, which merger control needs to account for when trading off the alleged abuses of dominance with the additional benefits accruing from larger network effects.

There are, however, also factors that may hurt consumers. A crucial dimension of competition in the new economy is the existence of switching costs. Consumers need to invest in order to use a product (for example to learn how to use an operating system), which tends to create lock-in effects as well as the possibility of being orphaned with an inferior technology standard. Switching costs give rise to "installed base effects", which can create entry barriers and first-mover advantages. That is, network effects may "tip"

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8 Network effects are also present in other generic situation. For instance, when consumers buy durable hardware, each consumer forms expectations about the availability and variety of compatible software in the future. The larger the network of users of a particular software format, the higher the value consumers attach to the hardware that uses this format. This hardware/software paradigm (Katz and Shapiro (1985)) applies to many markets in the information economy: computer hardware and application software, credit-card networks, VCRs and video cassettes, etc. Network effects are also present the Internet sector. For instance, in the Worldcom/MCI case the U.S. and EU antitrust authorities found significant network effects in the market for top-level Internet services.

9 This problem emerges regularly in the consumer electronics area. Video cassettes and VCRs are strong complements and are subject to network externalities: the demand for VCRs is positively correlated with the availability and variety of video cassettes and the demand for video cassettes depends on the installed base of VCRs of the same format. To market the VCR, consumers have to be convinced about the availability of video cassettes in the future. Integration is one way to overcome this coordination problem (example is Nintendo selling an entire system, consisting of a machine and proprietary games).

markets very quickly in favor of a dominant incumbent and give rise to first-mover advantages. For example, network effects taken together with consumer lock-in may create entry barriers that protect a monopolist for a significant time span.

Overall, this short characterization shows that the economic forces at work in the new economy differ significantly from those underlying the standard textbook model of markets. Network effects, product complementarities, and production economies give rise to winner-takes-it-all phenomena. As a result the economics of antitrust becomes more complicated and a simple "market-share" view of the world is less appropriate.

The scope of conflict in the new economy

While all these issues are not new, the significance of these effects is much larger in network markets than in old economy-type markets. Most importantly, a static market-share model of competition is less relevant in many new economy mergers.

As a result we believe that the scope for conflict over the assessment of competitive effects is likely to increase in new economy-type markets. There are several reasons for this. First, as we have argued above the assessment of the competitive effects involves trading off increases in concentration (as measured by market shares or Herfindahl indices) with possible benefits stemming from increased coordination, standardization and possible efficiency gains. Often these benefits to consumers are difficult to measure and relatively fewer simple rules through which they can be assessed are available. Antitrust agencies face considerable uncertainty and rather imprecise information regarding the technological environment and potential benefits to consumers. Given this difficulty in measurement there is ample scope to disagree in a particular case. Moreover, this is more likely to happen the larger the perceived benefits of monopoly are, i.e. precisely in those circumstances where new-economy characteristics are present.

Second, we submit that the existing differences in competition laws between the U.S. and the EU are centered around the assessment of competitive effects (i.e. substantive issue (4.2)) as they relate to the characteristics of new economy-type markets. Take for instance the treatment of efficiencies. While the U.S. substantially revised its merger guidelines in 1997 to integrate efficiencies more fully into their merger review, the European Commission does not officially consider efficiency defenses[10]. Given this difference it is perhaps more likely that conflict in those markets where the perceived efficiency gains are higher (i.e. new economy cases) is more likely to emerge. Another example is the substantive standards that are used by various antitrust agencies in merger cases. While U.S. merger control relies on the concept of substantial lessening competition ("the SLC-test") the European Commission's assessment is based on the concept of market dominance ("the MD-test"). Given these differences for assessing competitive effects, it seems likely that conflict in new economy markets increases. In

10 In the U.S. the efficiency defense enters merger control via the 1992 Horizontal Merger Guidelines, revised April 8, 1997. While the European Commission's merger regulation does not suggest that efficiencies are irrelevant in merger control, there are indications that it is relatively reluctant to take them explicitly into account. For a comparison of both regulations see Röller et al. (2000), Venit and Kolasky (2000), and Bundeskartellamt (2001).

fact the recent "Green Paper" by the European Commission on merger regulation (Commission of the European Communities (2001)) points precisely to those shortcomings and suggest a possible convergence with the U.S. practices as a way to convergence.

A final source of conflict may arise when industrial (often national) economic interests are likely to play an important role. For instance, national interests may be strong when the creation of an international standard is at stake, as a substantial amount of rent can be shifted from one country to another[11]. The presumption is that antitrust agencies are subject to influence activities not only by firms, but also by politicians (see for example the paper by Neven and Röller 2001b). In such a scenario industrial policy can create conflict between agencies. The likelihood of conflict therefore depends on the existence of such national rents, which is precisely the case in new economy-type markets.

In sum, we find that the likelihood of conflict over the competitive effects of a merger is higher in situations characterized as new economy markets. We now turn to the issue of remedies where similar potential for conflict may emerge.

4.3 The Role of Remedies in the New Economy

A final area for possible conflict is remedies. A merger may be approved after appropriate remedies have been agreed upon. For instance, in network industries remedies often involve access to the merging firms network and - to a somewhat lesser extent - divestiture of parts of the merged entities assets. For instance, Shapiro (1999) reports on a number of U.S.-cases in which mergers in network industries were allowed under the condition that competitors gained access. In particular, the antitrust authority forced the merging parties to license critical parts of the "enabling" technology to one or several of their competitors or demanded access of a rival's complementary product to the platform technology[12].

Disagreement between antitrust agencies may thus emerge whenever the assessment concerning the appropriateness of the remedies differs. This in turn, depends very much on the analysis regarding the competitive effects of a merger as discussed in the previous sections. We therefore would expect that disagreement over remedies would emerge under the same conditions, i.e. when the static market-share model is least appropriate.

In addition, it is worth emphasizing that remedies can also be subject to significant industrial policy concerns. Whenever a merging party needs to divest part of their

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11 For instance, standard setting in high-definition television has been heavily influenced by national interests in order to protect home based consumer electronic industries (for the U.S. side, see Farrell and Shapiro (1992)). Similarly, recent standard setting in electronic payment systems and global navigation satellite systems also reveals the active role of national governments to promote domestic standards (see OECD (2000)).

12 For instance, the WorldCom/MCI merger involving two U.S. telecommunications firms, where both the antitrust division of the Department of Justice and the European Commission were involved, resulted in the divestiture of MCI's $1.75 billion in internet assets – the largest divestiture in U.S. merger history at that time (see DoJ (1999)).

business, the question as to whom to sell to and at what price may involve some national interest politics. The strategic analysis of divestiture under antitrust pressures has not been formally analyzed, but aspects of rent-shifting are likely to play a key role here, which in turn can lead to conflict between national antitrust agencies.

5. Conclusion

This paper analyzes the scope for conflict in merger control between competition policy authorities and whether the scope for conflict is likely to increase in the new economy. By new economy we mean to focus on two aspects: the internationalization of the economy and the increased importance of network technologies. Within this context we address three potential areas of substance: market definition, the assessment of competitive effects, and the appropriateness of remedies.

With regard to the first issue, we have argued that the scope for conflict is lower in new economy-type markets. The intuition for this result is that antitrust agencies will come to similar conclusions about market definition whenever the economies are more integrated. In this sense, the emergence of the new economy should reduce the potential for conflict.

Concerning the other two arenas, we find that conflict is more likely in new economy markets. The reasons are threefold: first the nature of competition in new economy-type markets makes the static market share model less appropriate, second the current merger control guidelines have not converged in important areas, and third incentives for taking influence (by firms and governments) are more likely in new economy markets.

From this perspective the recently issued “Green Paper” on merger regulation and its focus on convergence appears to be more timely for markets which can be characterized as new economy.

References

Bacchetta, M., H. Horn and P. Mavroidis, (1998), "Do Negative Spillovers from Nationally Pursued Competition Policies Provide a Case for Multilateral Competition Rules", in Ehlermann and Laudati (eds), *European Competition Law Annual 1997: Objectives of Competition Policy*, Hart Publishing, Oxford.

Besanko, D. and D. Spulber, 1993, "Contested Mergers and Equilibrium Antitrust Policy", *The Journal of Law, Economics and Organisation*, 9,1-29.

Bundeskartellamt (2001), "Das Untersagungskriterium in der Fusionskontrolle – Marktbeherrschende Stellung versus Substantial Lessening Competition", Bonn.

Commission of the European Communities (1999), Commission Report to the Council and the European Parliament on the Application of the Agreement Between the European Communities and the Government of the United States of America Regarding the Application of Their Competition Laws 1 January 1998 to 31 December 1998", Brussels, April 1999.

Commission of the European Communities (2000), Report from the Commission to the Council and the European Parliament on the Application of the Agreement between the European Communities and the Government of the United States of America Regarding the Application of Their Competition Laws 1 January 1999 to 31 December 1999, Brussels, October 2000.

Commission of the European Communities (2001), Green Paper on the Review of Council Regulation (EEC) No 4064/89, Brussels.

DoJ (1999), Annual Report, FY 1999, Antitrust Division United States Department of Justice, Washington, D.C.

EC Competition Policy Newsletter (2000), No. 3, October.

Farrell, J. and Saloner, G. (1985), "Standardization, Compatibility, and Innovation", *Rand Journal of Economics*, 16, 70-83.

Farrell, J. and Saloner, G. (1986), "Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation", *American Economic Review*, 76, 940-955.

Farrell, J. and Shapiro, C. (1992), "Standard Setting in High-Definition Television", Brookings Papers on Economic Activity: Microeconomics, Brookings Institution, Washington, D.C.

Gellhorn, E. and Kovacic, W. (1994), "Antitrust Law and Economics in a Nutshell", West Publishing, St. Paul.

International Competition Policy Advisory Committee (2000), Final Report to the Attorney General and the Assistant Attorney General for Antitrust.

Jacquemin, A., P.J. Lloyd, P.K.M. Tharakan and J. Waelbroeck, (1998), "Competition Policy in an International Setting: The Way Ahead", *The World Economy*, 21 (8), November.

Klodt, H. (2001), "Conflicts and Conflict Resolution in International Anti-trust: Do We Need International Competition Rules?", *The World Economy*, 24(7), July.

Katz, M.L. and Shapiro, C. (1985), "Network Externalities, Competition, and Compatibility", *American Economic Review*, 75, 424-440.

Katz, M.L. and Shapiro, C. (1986), "Technology Adoption in the Presence of Network Externalities", *Journal of Political Economy*, 94, 822-841.

Klein, J., (2000), "Time for a Global Competition Initiative?", Mimeo, Department of Justice, Washington D.C.

Liebowitz, S. and Margolis, S. (1999), "Winners, Losers and Microsoft: Competition and Antitrust in High Technology", Independent Institute, Oakland, CA.

Monti, M. (2000), "European Competition Policy for the 21st Century", Speech to the Fordham Corporate Law Institute, New York, October 20th, 2000.

Neven, D. and L.-H. Röller, (2000), "The Allocation of Jurisdiction in International Antitrust", *European Economic Review Papers and Proceedings*, 44, 845-856.

Neven, D. and L.-H. Röller, (2001a), "The Scope of Conflict in International Merger Control", CEPR Discussion Paper No. 2621, London.

Neven, D. and L.-H. Röller, (2001b), "Consumer Surplus vs. Welfare Standard in a Political Economy Model of Merger Control", CEPR Discussion Paper No. 2620, London.

OECD (2000), OECD Information Technology Outlook 2000, Organization for Economic Co-operation and Development, Paris.

Röller, L.-H.; Stennek, J., and Verboven, F. (2000), Efficiency Gains from Mergers, *European Economy*, forthcoming.

Schaub, A. (2000), "Assessing International Mergers: the Commission's Approach", speech at the EC Merger Control 10th Anniversary Conference, Brussels. 14-15 September 2000.

Schaub, A. (2001), "The Global Competition Forum: How it should be organized and operated", speech at the European Policy Centre, Brussels 14 March 2001.

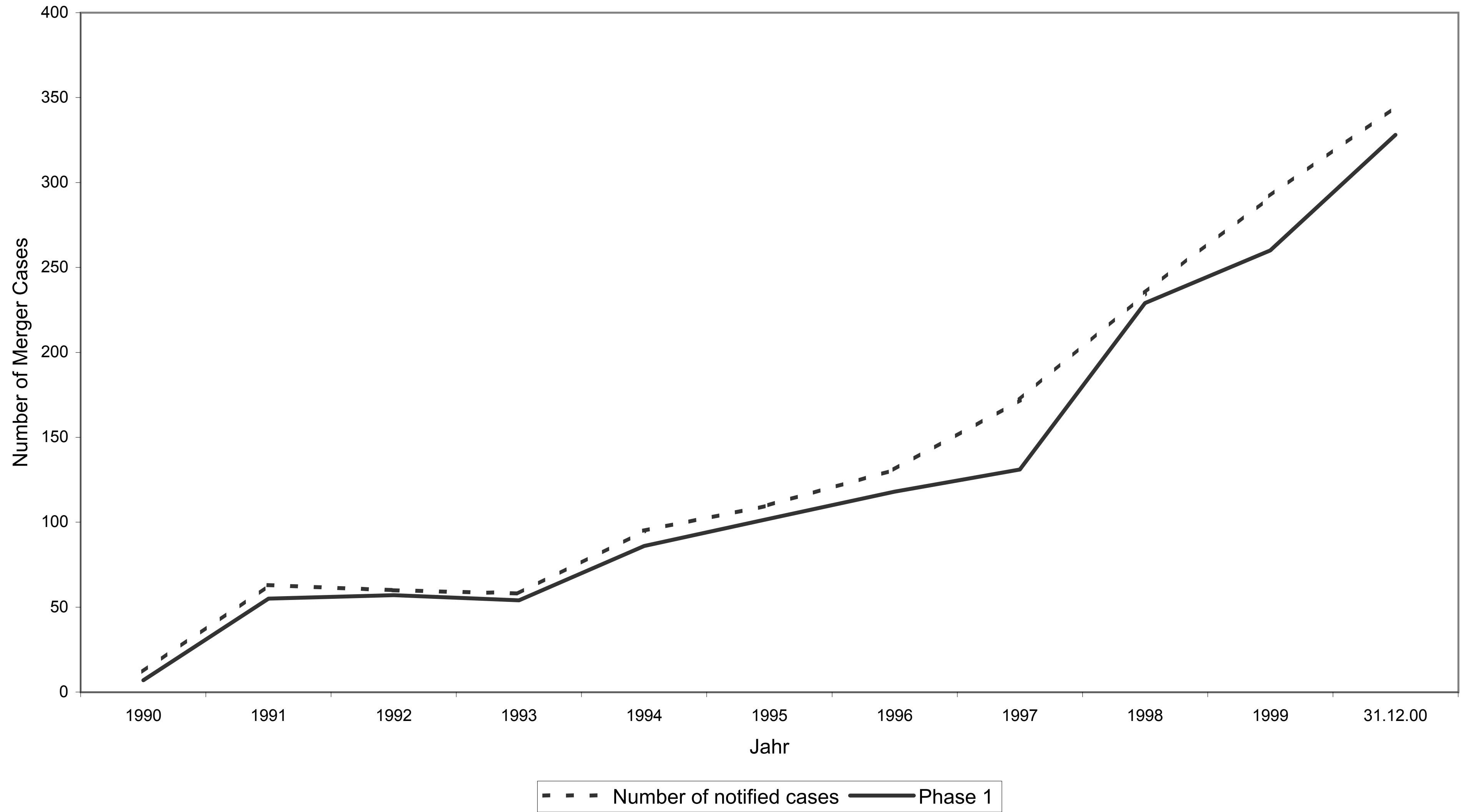
Shapiro, C. (1999), "Competition Policy in the Information Economy", Mimeo, University of Berkeley.

Shapiro, C. and Varian, H. R. (1999), "Information Rules: A Strategic Guide to the Network Economy", Harvard Business School Press, Boston, Massachusetts.

Venit, J.S. and Kolasky, W.J. (2000), "Substantive Convergence and Procedural Dissonance in Merger Review", in S.J. Evenett, Lehmann, A. and Steil, B. (eds), *Antitrust Goes Global: What Future for Transatlantic Cooperation*, Brookings Institution Press, Washington, D.C.

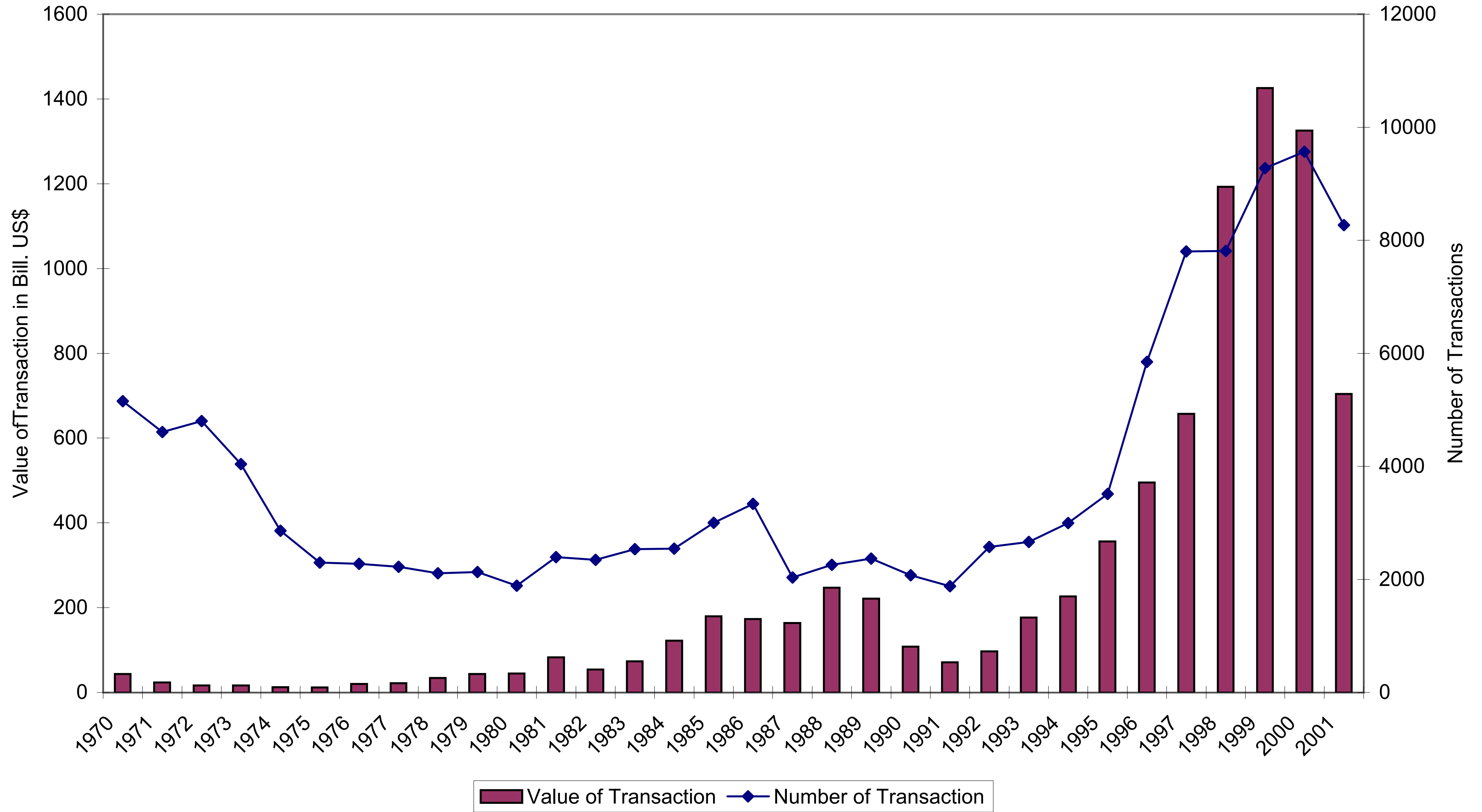
Wey, C. (1999), "Marktorganisation durch Standardisierung: Ein Beitrag zur Neuen Institutionenökonomik des Marktes", Edition Sigma, Berlin.

Figure 1



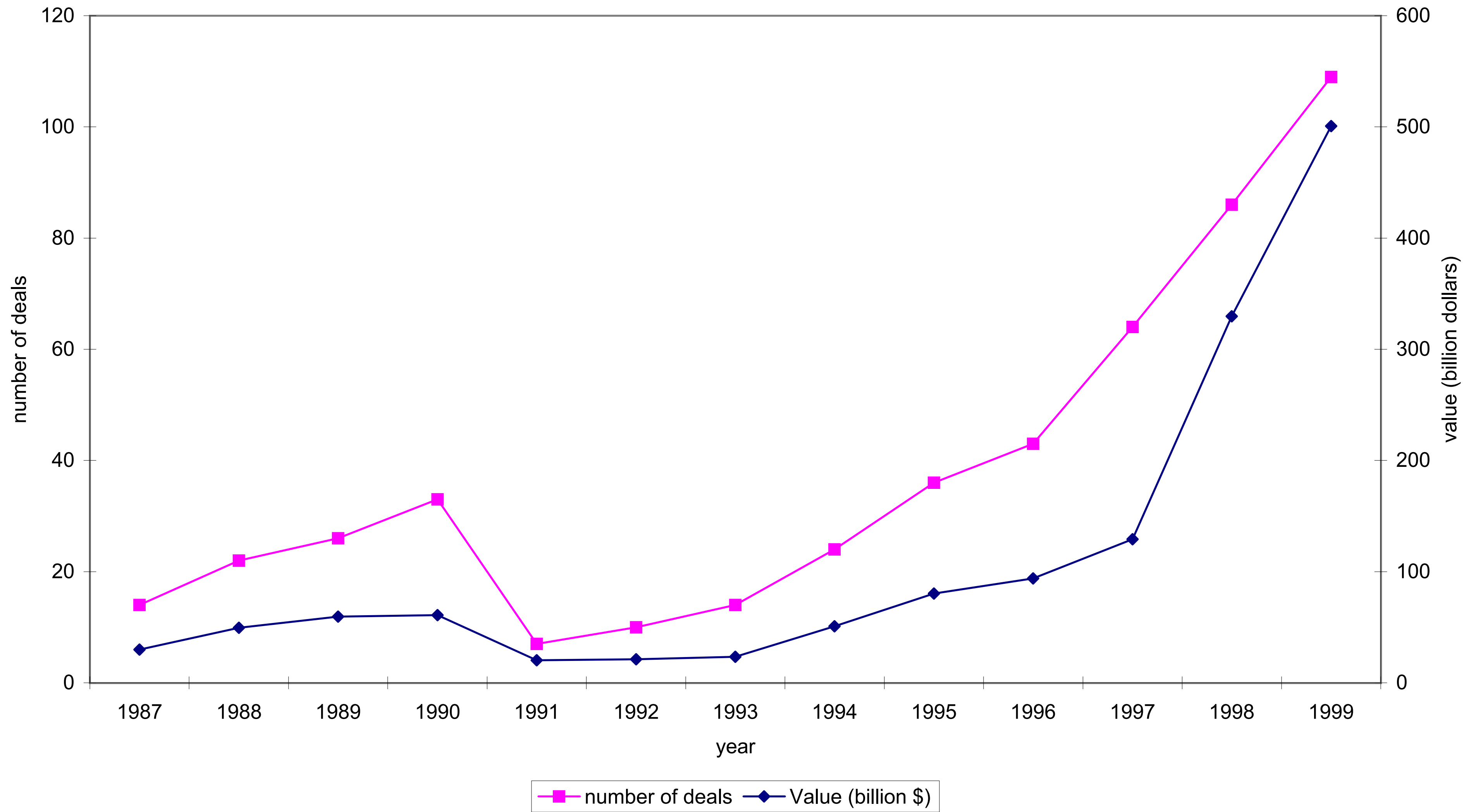
Source: http://europa.eu.int/comm/competition/mergers/cases/stats.html
21.09.1990 bis 31.12.2000

Figure 2



Source: www.mergerstat.com
Values calculated on the Base Equity price offered for all transactions in the Base.

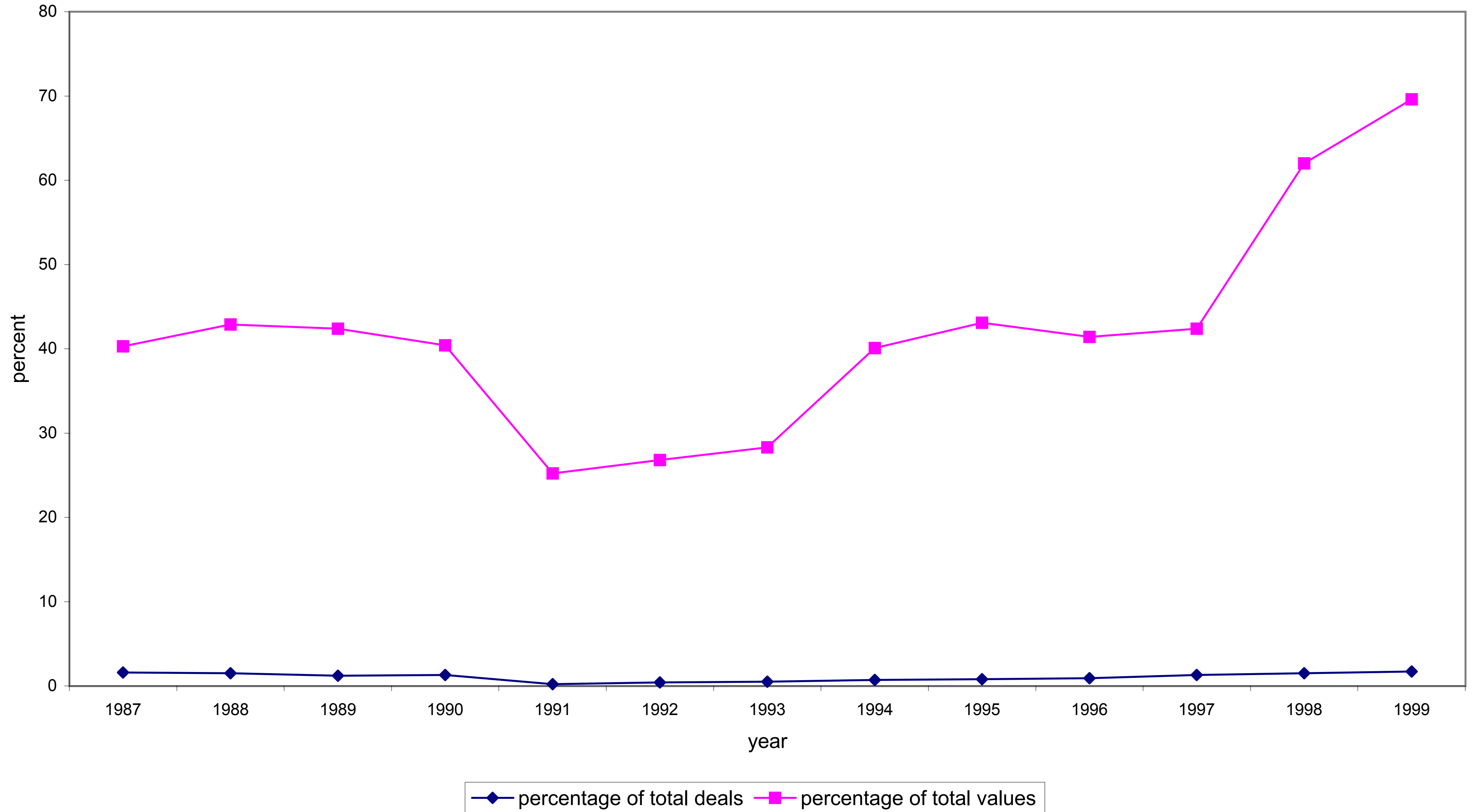
Figure 3



Source: World Investment Report 2000: Cross-border Merger and Acquisitions and Development, p. 108, tab. IV.2.

Figure 4

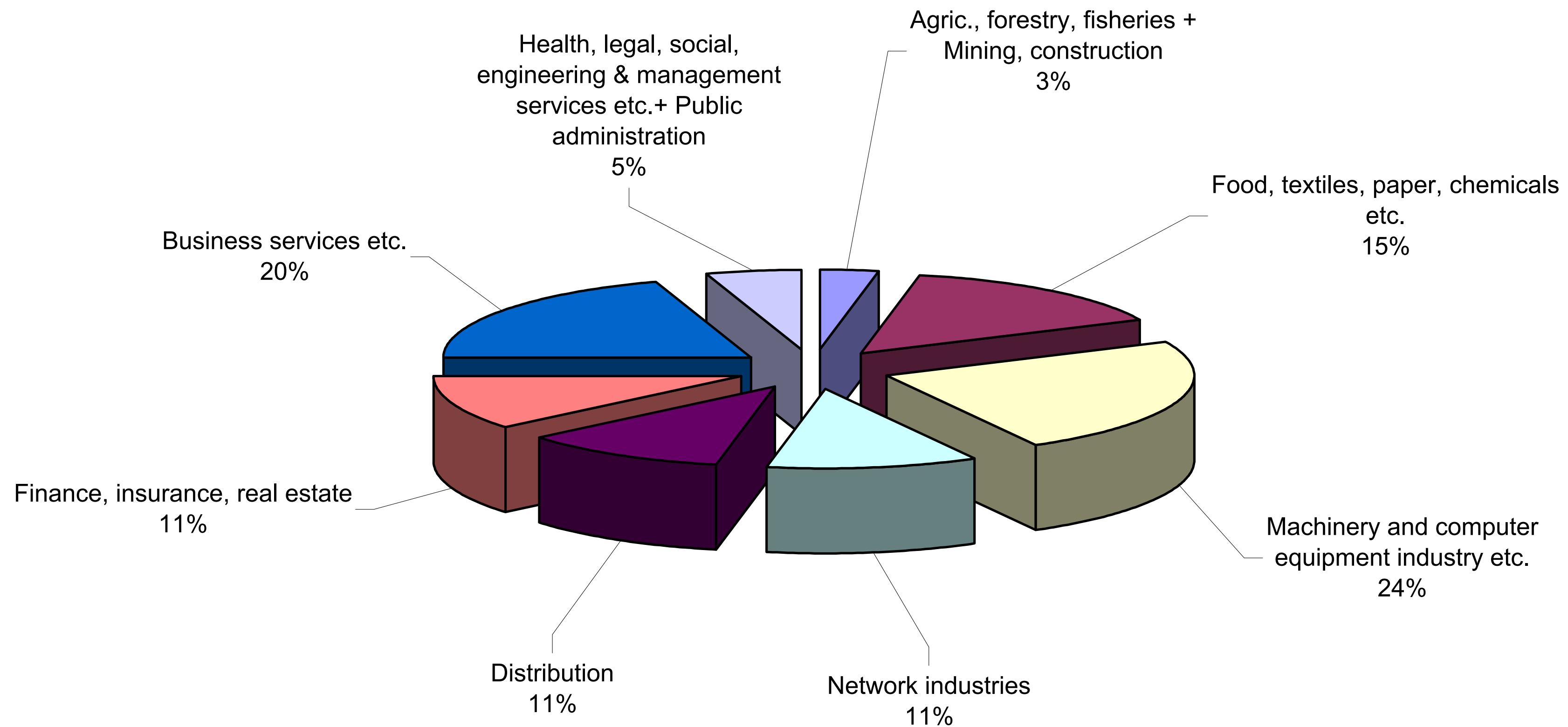
Cross border M&As with values over $1billion in percent, 1987-1999



Source: World Investment Report 2000: Cross-border Merger and Acquisitions and Development, p. 108, tab. IV.2.

Figure 5

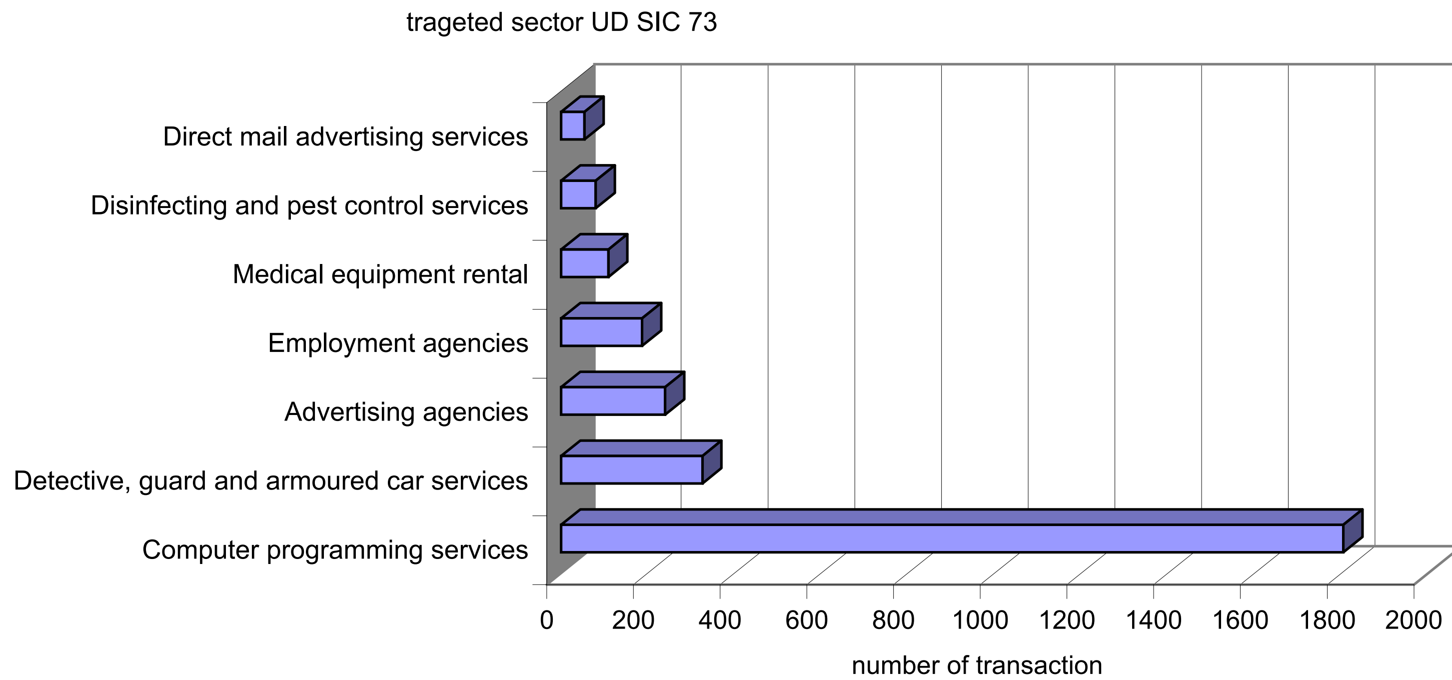
Sectoral breakdown of cross-border M & A operations with an EU target, 1998-1999



Quelle: European Economy, Supplement A Economic trends No. 5/6 - 2000, Mergers and Acquisitions, p. 15, gr. 11

Figure 6

Targeted sector US SIC 73 - Business services (cross-border+ national) 1998-99



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1995, The MIT Press

Julie Ann Elston
US Tax Reform and Investment: Reality and Rhetoric in the 1980s
1995, Avebury

Horst Albach
The Transformation of Firms and Markets:
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Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum, Vol. 34
1994, Almqvist & Wiksell International (Stockholm)

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