



the Autonomous Management School of  
Ghent University and Katholieke Universiteit Leuven

**Vlerick Leuven Gent Working Paper Series 2004/19**

## EUROPEAN INTEGRATION: THE THIRD STEP

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## **ABSTRACT**

A perception of declining EU competitiveness has intensified calls for structural reforms within the EU. This paper examines recent evidence on changes in relative EU competitiveness and considers the observed changes in relation to the evolving competitive environment facing EU firms during the past two decades. Our analysis suggests that recent declines in EU competitiveness reflect an adjustment (or lack thereof) within the EU in response to an evolutionary “Third Step” in the process of EU integration: global market integration. We find that, starting from the mid-1990s, the EU began to face unprecedented increases in external sources of competition. The rising competition from external sources has created pressures for EU firms to alter their organizational and product market strategies to meet the challenge of a globally integrating market. While many leading EU firms are found to have responded to this challenge, EU firms remain hampered by anachronistic EU product and labor market regulations. The growing calls for structural reform therefore reflect the increased external competitive pressure on EU firms as they attempt to respond to growing global competition and to thereby strengthen their global competitiveness.

(JEL Classification: D21, F02, F23, L10, O40)

Keywords: Competitiveness, European Integration, Foreign Competition, Globalization.

## EUROPEAN INTEGRATION: THE THIRD STEP

Many observers appear to agree that, over the past decade, the European Union (EU) has been losing competitiveness in the global economy. The perception of declining EU competitiveness has in turn led to more urgent calls for deep structural reforms of European labor markets and meaningful progress toward completing ongoing product market reforms.<sup>i</sup> In this paper we present recent data that supports the perception of lagging EU competitiveness and that identifies some of the causes of the worsening situation at a macroeconomic level. In addition to documenting the recent state of EU competitiveness, we also consider aspects of the changing competitive environment facing EU firms, and their strategic responses, in order to more broadly address the question of what factors have arisen during the past decade to make the recent calls for structural reform both more widespread and seemingly more urgent.

Our analysis suggests that the recent evolution of relative EU competitiveness represents an adjustment (or lack thereof) to a “Third Step” in the process of EU integration, namely, the process of integrating the EU into the global economy. Step 1 of EU integration began in 1958 with the formation of the European Customs Union that reduced formal tariff barriers between members and fostered an expansion of internal EU trade. However, barriers to the mobility of investment and labor within the EU remained. Step 2 of European integration began with the implementation, in 1987, of the Single European Act. Step 2 initiated removal of the remaining mobility barriers to capital and labor flows as well as various product market reforms intended to achieve the full economic integration of EU national markets. In Step 2, EU firms were freed from having to locate and operate in every EU country market. This freedom led many leading EU companies to revise their competitive strategies and to undertake significant restructuring as they sought to compete in an integrated EU market. The data we examine suggest that the changes wrought during Step 2 were largely completed by around 1993.

Many of the Step 2 internal reforms that enabled the creation of a single EU market also opened a window to the world. These reforms, coupled with those dealing with the multilateral rules governing international trade and investment that concluded in 1994 with the creation of the World Trade Organization, led EU firms to face increasingly strong competitive pressures from sources external to the EU starting the mid-1990s. Whereas the changes undertaken by EU firms during Step 2 were targeted to face the challenges of competing in a newly integrated *internal* market, these changes were not necessarily in line

with the changes needed to face the challenges of competing an integrated *global* market. As we will argue, the recent declines in EU competitiveness, and the present challenges to the EU, reflect the current efforts of EU firms to adjust to growing global competition.

The external competitive pressures now facing EU firms came a decade after US firms faced similar global competitive pressures. Like their US counterparts, EU firms have been responding to the challenges of global competition by changing both their organization and product market strategies. However, the attempts by EU firms to respond to the growing external sources of competition has uncovered and increasingly placed emphasis on the now anachronistic inflexibility of European labor markets, remaining product market restrictions, bureaucratic hindrances, and government policies. These liabilities were largely neutral during Step 2, in that they affected EU firms more or less equally, as they sought to operate in a single *internal* EU market. However, the growth in external sources of competition has meant that these liabilities are increasingly inhibiting the ability of EU firms to effectively compete in a *globally* integrating market.

### **THE RECENT STATE OF EU COMPETITIVENESS**

The European Commission operationally defines competitiveness to be “high and rising standards of living for a nation with the lowest possible level of involuntary unemployment, on a sustainable basis” (European Commission, 2003). Given this, the status of EU competitiveness on a comparative basis is perhaps best captured by the gap in Gross Domestic Product (GDP) per capita, measured at purchasing power parity, between the EU and the United States. For 2002, EU GDP per capita was estimated to be 71% of US GDP per capita, which translates into a gap of 29 percent of US GDP per capita. A basis for understanding the reasons behind this competitiveness gap is offered in Figure 1, which shows the contribution to this gap of the different components that underlie the computation of GDP per capita. In this figure, each successive bar indicates, in a sequential way, the subtractions from the value of U.S. GDP per capita that are required to arrive at the value of EU GDP per capita in 2002. A negative component therefore indicates the additional loss in EU GDP per capita as a result of its poorer performance relative to the US on that component.

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Insert Figure 1 About Here

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As indicated in Figure 1, the EU scores negatively on all components except “working age population.” While a high rate of EU unemployment is often cited as an important aspect of Europe’s problems, as a factor widening the gap between EU and US GDP per capita it plays a much smaller role that might have been expected. Instead, much more important is the lower participation of eligible workers in the workforce. In 2002 the EU rate of labor force participation was only 62% compared to 73% in the US. Another important negative for the EU is lower hourly labor productivity. However, the most important factor contributing to lower EU GDP per capita is fewer hours worked per worker. Recent data show that average hours worked per person in the EU was 14% less than in the US (Timmer, et. al. 2003).

According to Blanchard (2004), the downward trend in hours worked reflects a deliberate choice of Europeans for more leisure time. But this choice need not indicate a simple life-style preference for leisure over work. In particular, the European Commission (2003) regards institutional factors that constrain people’s choice of working time as an equal if not more important factor behind the differences in hours worked: “Labour market regulations that effectively restrict part-time work, norms on holidays and on standard working week, and cultural factors that constrain the participation of certain groups e.g. married women, may all lead to a sub-optimal leisure-work pattern” (European Commission, 2003). Removing such restrictions would not only permit greater overall output but would also reduce the social burden of unemployment to the extent that employment is increased among the long-term unemployed. However, such an expansion of employment may actually reduce measured productivity if the new labor market participants have productivity lower than the average productivity of current workers. Hence, while the negative contribution of hours worked may fall, the negative contribution of productivity per hour may increase, with no net gain in EU GDP per capita. In this sense, the gap between EU and US productivity may be wider than indicated by the numbers.

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Insert Figure 2 About Here

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The gap in hours worked per person is part of a longer-term negative trend in working hours in the EU. In this context, FIGURE 2 shows EU GDP per hour worked relative to the US GDP per hour worked, rather than GDP per capita, over the period from 1980 to 2001. Also shown are the trends in the two components of GDP per hour: relative GDP per worker and relative hours worked per worker. By definition, GDP per hour is the ratio of GDP per worker and hours worked per worker. Hence, an increase in GDP per worker or a fall in hours worked per worker, other things constant, would raise GDP per hour. In 1980, EU GDP per hour worked was about 83% the US level of GDP per hour. After rising steadily from 1980, EU GDP per hour reached a peak in 1995 of about 96.5% of the US level and then declined to about 93% of US GDP per hour in 2001. As for the two components, EU hours worked per worker relative to that for the US declined over the entire period, but in particular during the period from 1987 to 1993. However, after 1995, relative hours worked per worker declined only modestly while relative GDP per worker declined appreciably, resulting in a decline in EU relative to US GDP per hour. Hence, the relative decline in EU GDP per hour reflects primarily a relative decline in EU output per worker since the mid-1990.

To examine further the unfavorable movements in EU hourly labor productivity relative to the US we can consider the behavior of the two components that underlie labor productivity: the amount of capital (machinery, buildings, computers, etc.) that workers have at their disposal and technological change (Total Factor Productivity). FIGURE 3 illustrates the contribution of these two components to the growth in hourly labor productivity for the EU and the US over the periods 1990-95 and 1995-2001. During the 1990-95 period EU hourly labor productivity grew at almost twice the rate of US productivity (2.42% versus 1.13% per year). For both regions, the major contributor to the growth in hourly labor productivity was an increase in capital per worker. However, during the 1990-95 period, technological progress was a relatively small component of the growth in US labor productivity but a much larger contributor to the growth in EU labor productivity. We conjecture that the relatively large contribution of general technological progress to EU productivity growth in the 1990-95 period reflects the benefits of restructuring and a more efficient allocation of resources consequent to the internal integration of the EU market. If so, then we would expect this to be a one-time effect rather than a sustainable source of benefit.

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Insert Figure 3 About Here

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Over the 1995-2001 period the growth in EU productivity was below that for the US (1.39% versus 1.69%). Capital deepening remained the major driver of productivity growth in both regions. However, unlike the 1990-95 period, technological progress contributed much less to the growth in EU productivity in the 1995-2001 period, consistent with our view that the earlier contribution of this component was a one-time benefit due to efficiency gains arising from internal market restructuring. In contrast, technological progress contributed much more to the growth in US labor productivity in the 1995-2001 period. Unlike the one-time benefit to the EU associated with internal market integration, the contribution of general technological progress to US productivity growth reflects continuing innovation, partly due to increased adoption of information and communications technology (ICT). As indicated in FIGURE 3, the contribution of ICT in US capital per worker spending was about 31% during the 1990-95 period and almost 45% in the 1995-2001 period. This contrasts with the much lower contribution of ICT spending in the EU: 12% in 1990-2005 and 29% in 1995-2001.

Capital deepening contributes to increases in labor productivity but it also implies potentially less demand for workers who must then seek alternative employment. But EU product and labor markets have not been flexible enough to absorb either the excess labor flowing from EU manufacturing or the growing EU labor force over the last three decades. As the manufacturing sectors shed workers, what was needed was stronger growth in output and employment in services sectors. However, labor market restrictions in areas such as wholesale and retail trade, and in construction, have blocked the absorption of workers into services. As shown in FIGURE 4, the EU has lagged the US, and even Japan, in creating service sector employment and has therefore been unable to gain the productivity benefits that can come from an expanding services sector.

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Insert Figure 4 About Here

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Relatively lower investment spending on ICT, excessive state controls and regulations of product, labor, and service markets are, without little debate, key reasons behind the less favorable EU growth performance, particularly in services (European Commission, 2003). Especially in the commercial trade sectors, productivity gains through greater flexibility as well as technological improvements are needed. A recent analysis of productivity issues for many industries and for many countries (Lewis, 2004) concluded that European governments have restrained income expansion by incorrectly using policies that distort and block



economic incentives in an attempt to achieve ambitions of social equity. The study argues that Europe's economic policies should instead focus on fostering maximal income gains by reducing the web of excessive product and labor market restrictions. By allowing for the achievement of maximal income, matters of social equity can then be pursued using income transfers, such as the earned income credit in the US, rather than distortive product and labor market restrictions.

While acknowledging that reforms appear needed, why have the EU's distortive labor and product market practices now become frontline issues in the debate on EU competitiveness? The answer is that the EU now faces a competitive challenge far bigger than the US, namely, the world economy.

## GLOBALIZATION AND THE EU

### The Rise of External Competition

Surprisingly, growing international competition is a relatively recent phenomenon for the EU. In this respect, it is instructive to contrast the long-term trends in import competition in the EU and the US as shown in FIGURE 5. While the EU's ratio of imports to GDP has historically been larger than the US ratio, the annual growth in the EU ratio was, until the mid-1990s, much smaller than the growth in the US ratio. Notable in FIGURE 5 is that both the EU and the US experienced a sharp rise in their import to GDP ratio over the short period from 1970 to 1974. However, from 1974 to 1994 there was virtually *no growth* in the EU ratio (in fact a decline during the period 1989-94) while the US ratio increased. Table 1 gives rates of growth in the import to GDP ratio of the EU and the US over selected periods. Not until 1995 did the EU ratio of imports to GDP begin to rise at a rate commensurate with that of the US. Hence, on this broad measure of import competition, only since the mid-1990s has the EU felt growing pressure from imports at rates faced by the US. This suggests the EU is now undergoing a phase of increased international competition like that faced by the US starting in the 1980s.

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Insert Table 1 and Figure 5 About Here

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Additional evidence of the growing competitive pressure from external EU sources is given in FIGURE 6 which shows the distribution of EU imports from *internal* sources (EU

countries) and *external* sources (non-EU countries) as a share of total EU consumption for broad groupings of manufacturing industries based on their degree of technological orientation.<sup>ii</sup> High-technology industries have the highest fraction of imports in total consumption: the import share rose from 52% in 1991 to 69% in 1999. The source of these imports was about equally split between internal EU and external EU sources. In contrast, internal sourcing is the larger source of imports for the remaining three groupings of industries. This seems at odds with the fact that the EU's relative disadvantage would be expected to be in the Low and Medium-low technology sectors. Hence, that a relatively larger fraction of imports in these sectors is still sourced internally suggest barriers to external imports in these sectors.

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Insert Figure 6 & 7 About Here

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FIGURE 7 shows the rate of increase in each source of imports for each technology grouping. This indicates that while imports from internal EU sources are a larger fraction of total EU imports, imports from external sources grew faster than internal EU sources in all groupings except High-Technology (likely reflecting the activities of high-technology multinational firms within the EU). The growth in external sourcing was highest for Medium High-Technology sectors indicating declining EU competitiveness in these sectors. Such a decline is also evident in the Medium-low and Low-technology sectors.

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Insert Figure 8 About Here

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FIGURE 8 gives more detailed information on the two sources of external competition by showing the difference in the rate of growth of external versus internal import shares for the individual sectors within each technology grouping. The key sector driving the increased competition from internal EU sources in the High-Technology group was Pharmaceuticals, reflecting consolidation and restructuring in this sector to compete on an EU-wide basis. Among the Medium-High Technology sectors, significant increases in competition from external sources appear in "Machinery" and "Motor Vehicles" sectors. The trend toward greater external sourcing in "Motor Vehicles" reflects increased worldwide sourcing of components by this sector. Among the Medium Low-Technology sectors, "Ships and Boats" experienced a marked increase in competition from external sources and a

significant decline in competition from internal sources. Each of the other sectors in the Medium Low-Technology group also experienced significant increases in externally based competition. Lastly, among Low-Technology sectors, only “Food Beverages and Tobacco” shows a higher increase in competition from internal compared to external sources.

Overall, the data indicate that, starting from the mid-1990s, competition from imports has increasingly shifted from internal-EU to external-EU sources. This shift reflects both a loss of domestic market competitiveness and a process of global restructuring in which EU firms relocate production activities abroad to create “export platforms” that produce both intermediate and final goods that are then imported back into the EU.

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Insert Figure 9 About Here

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FIGURE 9 offers further analysis of such shifts by showing EU net exports in broad product groupings and with respect to seven regional trading partners in 2002. A positive balance is indicative of a relative trade advantage while a negative balance is indicative of a relative trade disadvantage. The commodity groups listed in FIGURE 9 are rank ordered on the basis of EU net exports to all regions. This ranking of net exports indicates the product groupings in which the EU has its largest relative advantages (disadvantages). For example, in 2002, the EU’s largest (net) trade advantage was in “Non-electrical machinery” and its greatest disadvantage was in “Fuels.” For the two product groups where the EU has its largest advantages (“Non-electrical machinery” and “Chemicals”) its net exports to each region are also positive. However, in “Automotive products” the EU is a net exporter with respect to all regions except Asia. Such differences among the regional balances that make up the overall balance for this product group is also evident for other product groups. For example, the EU’s overall disadvantage in “Office and telecoms equipment” is due mostly to its large negative balance with Asia. The negative balances with Asia in sectors in which the EU is otherwise a net exporter is indicative of EU firms using Asia as an export platform for serving both the EU and third country markets.

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Insert Table 2 About Here

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For multinational firms, production and sourcing of intermediate goods from countries outside their home market gives rise to intra-firm trade. While statistics on intra-firm trade for EU firms is sparse, one proxy for such trade is the extent of intra-industry trade. In this regard, Table 2 shows the fraction of EU trade that is intra-industry trade. A high share of intra-industry trade indicates two-way exchange in similar products and reflects both horizontal and vertical differentiation among goods within a particular traded goods classification.<sup>iii</sup> While intra-EU trade is mostly intra-industry trade, the fraction of EU trade that is intra-industry trade declined (slightly) with respect to intra-EU trade but increased markedly with respect to other trading partners, notably a large increase in intra-industry trade with “rest of world” countries. Since Asian countries dominate this “rest of world” group in terms of trade volumes, the indicated rise in intra-industry trade likely reflects increased out-sourcing of production to these countries, as was suggested by FIGURE 9. Viewed from the perspective of Asian countries, recent figures (Ng and Yeats, 2003) indicate that the fraction of East Asian countries’ trade with the EU that is intra-industry trade rose from 30.5 percent 1985 to 46.5 percent in 2001. Sectors showing the largest increases in intra-industry trade include “Chemicals,” “Machinery,” and “Transport.”

The EU pattern of trade both with itself and with non-EU countries indicates that a rising portion of imports is sourced externally. This implies increased competition from other countries as well as a shift in the operations of EU multinationals to locate production abroad. The shift of production to non-EU based countries and the rising share of imports from non-EU countries reflect both factor cost advantages of some non-EU countries vis-à-vis the EU as well as the globalization of industry. In an attempt to operate on a global scale, and in the face of the growing international competition to EU markets, EU firms are being compelled to offset location disadvantages of operating in the EU market by shifting production abroad. These disadvantages include restrictive and inflexible labor market practices as well as regulatory and other restrictions that impede the ability of EU firms to maintain production in the EU.

As mentioned when discussing the factors limiting overall growth of EU GDP per capita, a declining share of goods production within the EU should have been offset by increasing output and employment in services. However, this shift is not been happening in Europe to the extent needed. A similar picture emerges when viewed from an international trade perspective. In this regard, FIGURE 10 shows that the nominal value of EU exports of commercial services both to itself (intra-EU) and to the rest of the world (extra-EU) has risen over time. However, as shown in FIGURE 11, the *share* of intra-EU exports of commercial

services in total EU exports of commercial services has been relatively constant: in 1991 the share of intra-EU services was 55.4%, it rose to a peak of 59.8% in 1997 but then fell back to its 1991 value of 55.4% percent in 2002. This negative trend in intra-EU exports of commercial services is disheartening since ongoing liberalization and integration of EU markets should have shown evidence of a rising share of such services in intra-EU cross-border exchange. This further underscores the need to quickly implement reforms that can energize the services sector.

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Insert Figure 10 & 11 About Here

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### **Cross-Border Investment, Mergers and Acquisitions**

In addition to growing competition to EU firms from external sources in terms of imports from non-EU countries, competition has also come from foreign firms operating in the EU market. Inflows of Foreign Direct Investment (FDI) to the EU are one measure of this activity whereas EU outflows of FDI are a measure of the presence of EU based firms in non-EU markets. Inflows of FDI indicate the actions of foreign firms to establish or extend their presence in the receiving country, or to establish a base in that country to serve a wider regional market or even the global market (i.e., export platforms). FDI outflows indicate similar actions by home firms to establish or extend their presence in foreign markets.

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Insert Figure 12 About Here

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FIGURE 12 shows the evolution of FDI inflows into the EU as a percentage of EU Gross Fixed Capital Formation. Also shown is the logarithm of this EU ratio relative to world FDI inflows as a percentage of world Gross Fixed Capital Formation; the slope of this line indicates the growth in the EU ratio versus the growth in the world ratio. If this line is flat it indicates that the EU ratio of FDI to Gross Fixed Capital Formation grew at the same rate as the world ratio. As seen in FIGURE 12, the fraction of EU gross investment coming from firms outside the EU generally followed the overall pattern of world FDI flows until 1987. The period from 1987 to 1991 saw an appreciable increase reflecting the Step 2 period of internal integration. By 1994, the FDI flows into the EU returned to a normal level but then

rose significantly between 1997 and 2000,<sup>iv</sup> only to fall after 2000. The movements in the 1987-91 period clearly reveal the restructuring of the Step 2 internal integration which also saw an increased presence of non-EU firms. The rise from 1997 to 2000 may reflect actions by foreign firms to increase their presence in the EU prior to adoption of the single currency.

A large fraction of measured FDI is merger and acquisition (M&A) activity. Such activity is a mode for expanding into a foreign market or for consolidation in an industry undergoing rationalization. FIGURE 13 indicates the trend in net M&A outflows (purchases minus sales) with respect to EU firms as acquirers (purchases) and as targets (sales) between 1987 and 2001. Since the FDI data on purchases by, and sales of, EU firms include intra-EU M&A, FIGURE 13 also shows the share of intra-EU cross-border M&A activity as a percentage of the total value of all purchases by EU based firms.

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Insert Figure 13 About Here

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Looking first at the net outflow of M&A activity, FIGURE 13 shows that the net outflow of M&A FDI declined between 1987 and 1992, indicating that sales of EU based firms rose relative to purchases by EU based firms. This trend in net sales of EU based firms was reversed in 1992 as EU firms increasingly became acquirers of other firms. Looking at the fraction of M&A that was intra-EU, it is clear that the increase in net sales of EU firms between 1987 and 1992 reflects Step 2 internal market integration. The movements in the net outflow after 1992 indicates more a process of global restructuring as EU based firms expand their presence into non-EU markets. In this context, the share of EU M&A activity directed toward Developing Countries rose from about 20% in 1987 to about 50% in 1992 and thereafter remained relatively constant (UNCTAD, 2000, p. 114). The shift in the geographic concentration of EU M&A activity toward non-EU countries after 1992 was also found by Ietto-Gillies, et. al. (1999) who analyzed similar data on EU M&A activity, but only through 1997. Our results therefore update and confirm their finding that EU firms entered a period of “globalizing” M&A activity after 1992, and in particular after 1995. This change in the pattern of M&A activity reflects the need by EU firms to respond to global competitors on a global basis.

A similar picture of Step 2 versus Step 3 M&A activity, and the implication of a more global orientation of such activity, emerges when movements in internal EU M&A activity are considered. As shown in FIGURE 13, the share of Intra-EU M&A rose from a starting

value of about 22% in 1987 to a peak of about 70% in 1992 but then returned to about 32% by 1996. These movements indicate that the intra-EU M&A activity reflecting Step 2 consolidations and restructurings was largely concluded by the mid-1990s.

### **THE STRATEGIC RESPONSES OF EU FIRMS**

For a long period the industrial policies of Europe's national governments aimed at reinforcing the position of leading firms within their country in an effort to respond to growing global competition (Cox and Watson, 1996). The privileged position enjoyed by "national champions" offered them substantial monopoly power within their markets, and often resulted in many X-inefficient practices. National champions were therefore sheltered from increases in both internal and external sources of foreign competition. Some recognition that these inward looking policies were unsustainable came during the Step 2 period of internal market integration. However, as the EU moves into Step 3 - the globally integrated market - these industrial policies are an anachronism that restrains the ability of EU firms to compete successfully in the global economy.

The reaction of US firms to the wake-up call of increased foreign competition during the 1980s was accompanied by protectionist reactions, but for the most part US policy permitted competitive forces to operate. The result was a significant restructuring of US industries to meet the new global competitive challenge; in some cases this meant the loss of entire sectors (e.g. televisions). While not without pain, the needed internal adjustments were facilitated by a flexible US labor market as well as concerted efforts by US firms to create and adopt innovations to offset factor cost disadvantages and to establish technology based leadership advantages. Recent research (e.g., Bowen and Wiersema (2003)) indicates that from the mid-1980s to the mid-1990s, a surge of import competition in the US market pressured US firms then active in several lines of business to reduce the scope of their activities, partly to gain scale and partly to offset the higher costs of managing diverse multi-business enterprises in an increasingly hostile and turbulent market environment. By consolidating and refocusing, US firms sought sustainable competitive advantages by concentrating on linking their business activities in terms of core resources and capabilities. The experiences of US firms offer some guidance to EU firms on the actions needed to enhance their competitiveness in Step 3. The need for EU firms to effect these changes makes current calls for the EU to increase labor market flexibility, eliminate product market regulations, and reduce burdensome administrative procedures even more pressing. Below we

examine evidence on how leading EU firms have been changing their strategy and structure to meet the global competitive challenges of Step 3.

To examine some of the changes in the international strategy and structure of EU firms we compiled some descriptive statistics from a unique database (Sleuwaegen, et. al., 2003) covering the product and geographical scope of leading EU firms in the manufacturing sectors. The data are examined in four different years that encompass the Step 2 and Step 3 periods of EU integration: 1987 (start of Step 2), 1993 (end of Step 2), 1997 (beginnings of Step 3) and 2000 (present).

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Insert Figure 14 About Here

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FIGURE 14 indicates the evolution of the geographical and product market focus of leading EU firms between 1987 and 2000. The trends clearly reveal that EU firms have expanded their operations across a wider number of countries and that this geographical widening of activities has been accompanied by increased product market focus: the average number of countries in which leading EU firms operated grew from about 3 to 6 and the average number of business segments in which leading EU firms operated declined from about 5 to 3 between 1987 and 2000. Notable is that while the geographical widening of activities grew at a constant rate over the entire period, the rate of product market focus grew most rapidly in the 1993-1997 period, reflecting a greater pressure to refocus in response to rising global competition. FIGURE 15 indicates that the nature of this restructuring has involved, for both leading and non-leading EU firms, significant divestiture of non-core activities.

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Insert Figure 15 About Here

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The increased focus by leading EU firms reflects the need to obtain efficiencies from economies of scale while at the same time trying to minimize the problems of coordinating across multiple, and often unrelated, lines of business activity and a larger number of, often less familiar, geographic markets. As noted previously, such rationalization of activities was the response taken by US firms when faced with increasing international competition during the 1980s and early 1990s. However, unlike US firms, the initial restructuring by leading EU firms was driven largely by the *internal* opportunities and competitive pressures of Step 2



internal market integration, not by the need to face, more broadly, global competition. In Step 3 the challenge is to instead respond to increasing *global* competition.

Global competition to EU firms has come from sources external to the EU, in the form of imports, as well from sources internal to the EU in the form of global competitors operating within the EU market. FIGURE 16 shows that the average annual rate of growth in the share of non-EU firms in total EU production rose in each successive sub-period, with growth in the post-Step 2 periods 1993-97 and 1997-2000 exceeding that in the Step 2 period 1987-93.<sup>v</sup>

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Insert Figure 16 About Here

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The preceding indicates that increased competition from foreign firms located both outside and within the EU is pushing leading EU firms, like US firms were pushed a decade earlier, to focus on fewer activities and to expand their presence abroad. To examine how these restructurings may have changed the competitive position of European firms we examine two indexes of the relative advantage of EU based firms in a given industry. The first index is the share of EU production held by leading EU firms relative to the production share held by non-EU firms who occupy a top five position in a given industry. This index of *revealed internal advantage* (RIA) measures the extent of competitive dominance by EU firms in a given industry. Values of RIA above 1 indicate a relative dominance by EU firms. Such dominance can be thought to reflect comparative technological or other firm-specific advantages of EU firms compared to foreign rivals.<sup>vi</sup> The second index is the ratio of extra-EU exports to EU imports in a given industry. This index of *revealed external advantage* (REA) captures the extent of a sector's global or external advantage. Values of REA above one indicate an external advantage.

Following Sleuwaegen, et. al. (1998), we can cross-classify industries according to their revealed internal and external advantage to obtain insight into the nature of EU *firm-specific* factors versus EU *region-specific* factors in favoring or disfavoring the development, over time, of various industries within the EU. Specifically, a sector having both an external and internal advantage suggests that, for that sector, the EU is a favorable location and that EU firms enjoy specific advantages relative to their rivals. Conversely, having both an external and internal disadvantage is indicative of the EU being an unfavorable location and

that EU firms lack firm-specific advantages. A sector evidencing an external advantage but an internal disadvantage suggests the EU is a favorable location but that EU firms lack specific advantages in that sector. Finally, a sector that evidences an external disadvantage but an internal advantage suggests the EU is an unfavorable location and that EU firms, since they possess firm-specific advantages, are likely to relocate their activities outside of the EU.

TABLE 3 shows the results of performing such a cross-tabulation for both 1987 and 2000. Each column lists those industries that fall into one of the four “cells” that arise from the cross-classification of the two indicators in the indicated year. For example, “Aerospace” evidences both an external advantage ( $REA > 1$ ) and an internal advantage ( $RIA > 1$ ) in both 1987 and 2000. Conversely, “Computers” evidences both an external and internal disadvantage ( $REA < 1$  and  $RIA < 1$ ) in both years.

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Insert Table 3 About Here

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Industries printed in boldface in TABLE 3 are new to the indicated cell in 2000 whereas industries shown in italics are those who will have moved out of the indicated cell by 2000. Industries printed in boldface in 2000, but marked with an asterisk, moved into the indicated cell during 1987-92, the Step 2 period of internal market integration (e.g. Leather). Those industries printed in boldface in 2000, but not marked with an asterisk, instead changed their position between 1992 and 1997. Finally, the number shown next to the name of each industry in 2000 is the percentage of total production by EU firms that occurs outside the EU. For example, in 2000, 42% of the production of “Alcohol” by EU firms took place outside the EU.

Examination of TABLE 3 indicates that nineteen sectors changed their position (cell) between 1987 and 2000. Of these nineteen sectors, only three changed their position during the Step 2 period from 1987 to 1992. Hence, most of the changes evident in TABLE 3 occurred during Step 3, consistent with our theme of the growing impact of global competition since the mid-1990s. Of the nineteen sectors that changed position, eight evidenced an internal and external advantage in 1987, three evidenced an external advantage but an internal disadvantage in 1987, and seven evidenced an external disadvantage but an internal advantage in 1987.

Of the three sectors evidencing an external advantage but an internal disadvantage in 1987, two gained also an internal advantage by 2000 (Agricultural Machinery and Measuring

Instruments) and one (Confectionaries) moved to having both an external and internal disadvantage. Evidently, EU firms in the two sectors that gained an internal advantage were able to leverage technological or other firm-specific advantages. However, note that these two sectors are also characterized by high shares of foreign production, suggesting that a global spreading of production and possibly also a narrower product focus permitted EU firms to more effectively compete against foreign rivals in these sectors.

Of the eight sectors that evidenced both an internal and external advantage in 1987, five maintained an internal advantage but lost an external advantage (Batteries, Footwear, Furniture, Insulated Wires and ICT (Information and Communications Technology)). This shift suggests that, for these sectors, the EU became a less favorable location and that many firms now prefer to produce outside the EU (i.e., export platforms), as evidenced by the relatively high share of foreign production in each of these sectors. The remaining three sectors (Metal Products, Soft Drinks and Grain Milling) maintained an external advantage but lost an internal advantage, suggesting that these sectors experienced increased competition from, and possibly takeover by, foreign multinationals. In this regard, data from UNCTAD (2003) indicates that M&A in the “Food, Beverage and Tobacco” sector accounted for almost 60% of worldwide M&A activity in manufacturing sectors in the period 1995-2001 but only 8% during the period 1987-1994. The share of the “Metal and Metal Products” sector in worldwide M&A was 3.1% in the 1987-1994 period but 1.3% in the 1995-2001 period, indicating that consolidations in this sector took place mainly in Step 2.

Finally, of the seven industries that evidenced an external disadvantage but an internal advantage in 1987, three (Paper and Pulp, Leather, Sugar) maintained their internal advantage and also gained an external advantage, three lost their internal advantage but gained an external advantage (Oils and Fats, Pasta, Tobacco), and two lost their internal advantage (Animal Feed, Clocks and Watches). The diverse pattern of shifts among these sectors reflects that EU firms in some of these sectors may have been previously sheltered from external (global) competitive forces or, if initial internal advantages were based on innovative capacity then EU firms failed to sustain this capacity in the face of growing international competition in the post-1992 period. In addition, consideration of the sectors that gained an external advantage but lost an internal advantage suggests a shakeout that involved the exit of EU firms as well as takeovers by foreign multinationals. Consistent with this view is the fact reported above that “Food, Beverage and Tobacco,” which includes the “Sugar,” “Oils and Fats,” “Pasta,” and “Tobacco” sectors considered here, accounted for 60% of worldwide M&A activity in manufacturing over the period 1995-2001. For “Leather,” the UNCTAD

(2003) data indicate that the share of “Textile, Clothing, and Leather” in worldwide M&A activity was 3.4% in the 1987-1994 period but 0.8% in the 1995-2001 period, indicating consolidations mostly during Step 2. This is consistent with the fact that “Leather” moved its position within Step 2. For the “Pulp and Paper” sector, the UNCTAD (2003) data indicate that the share of “Wood and Wood Products” in worldwide M&A activity in manufacturing was 4.9% in the 1987-1994 period and 0.1% in the 1995-2001 period.

## SUMMARY

This paper has argued that the process of EU integration over the past 50 years can be characterized in terms of three steps: trade integration, internal market integration, and global market integration. The data suggest that the EU entered Step 3 – global market integration – around 1993; a time which then also marks the end of the Step 2 period of internal market integration that began in 1987. Our analysis indicates that the changed competitive environment engendered by Step 2, and the growing global competition evident in Step 3, has pressured leading EU firms to change importantly the structure of their operations. During Step 2, leading EU firms shifted their focus toward core activities and generally divested themselves of activities in which they no longer occupied a leading position in an industry. Together with concentrating their resources in core industries, leading EU firms also spread their production activities European-wide. Different from the dynamic processes that arose during the customs union integration of Step 1, where greater intra-EU trade was the primary outcome, the internal market integration of Step 2 led firms to increasingly regard the EU as one single market, and to therefore behave as a firm that operates in one single market. During Step 2, the competitiveness of firms within the EU was no longer based solely on country specific factors, but also on the ability to optimally spread and link activities across EU member states.

As EU firms now evolve through Step 3 the strategies adopted to respond to an emerging single EU market, in which restrictive EU labor and product market policies were largely *internal* constraints that affected all EU based firms more or less equally, are now being altered to respond to global competitors unencumbered by such policies. In Step 3, the internal political solutions previously used to balance competitive challenges from other EU countries are no longer viable as EU firms face the benchmark of global competition. Adherence to the multilateral principles of the WTO, the stronger thrust of EU competition

policy, and the continuing dismantling of state aids are forcing EU countries (and their firms) to face the realities of operating in the global economy.

The evidence presented here indicates that many leading EU firms have rationalized their activities and moved beyond their traditional home country base to establish production and related activities in locations that allow them to compete on a global scale. While such changes reflect the necessity to adapt and respond to changing global competitive conditions, for many EU firms these movements are also being driven by their inability to reap the benefits of flexible labor and product markets available to competitors in other countries.

Whereas the internal market integration of Step 2 can in many respects be called a success, in that it helped prepare many EU firms for the competitive pressures of Step 3, a remaining labyrinth of protective measures and labor market practices continue to place considerable burdens on EU firms as they attempt to meet the global competitive challenges of Step 3. Higher costs due to restrictive labor market practices, weak entrepreneurial incentives, and a throttled services sector are inhibiting EU firms as they attempt to fully meet the challenges of a globally integrated market.

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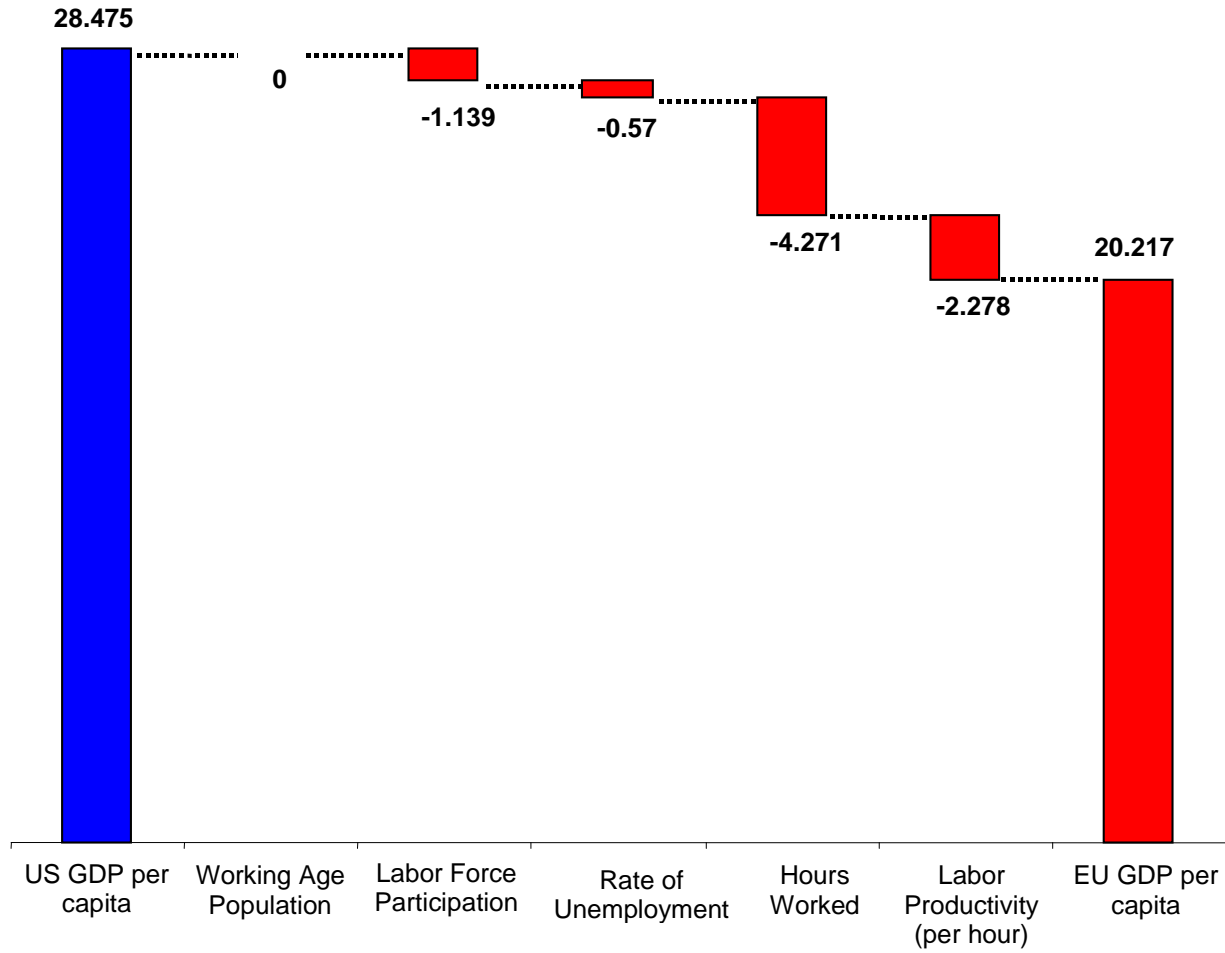
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**FIGURE 1**

**Contributions to gap in EU versus US GDP per capita**

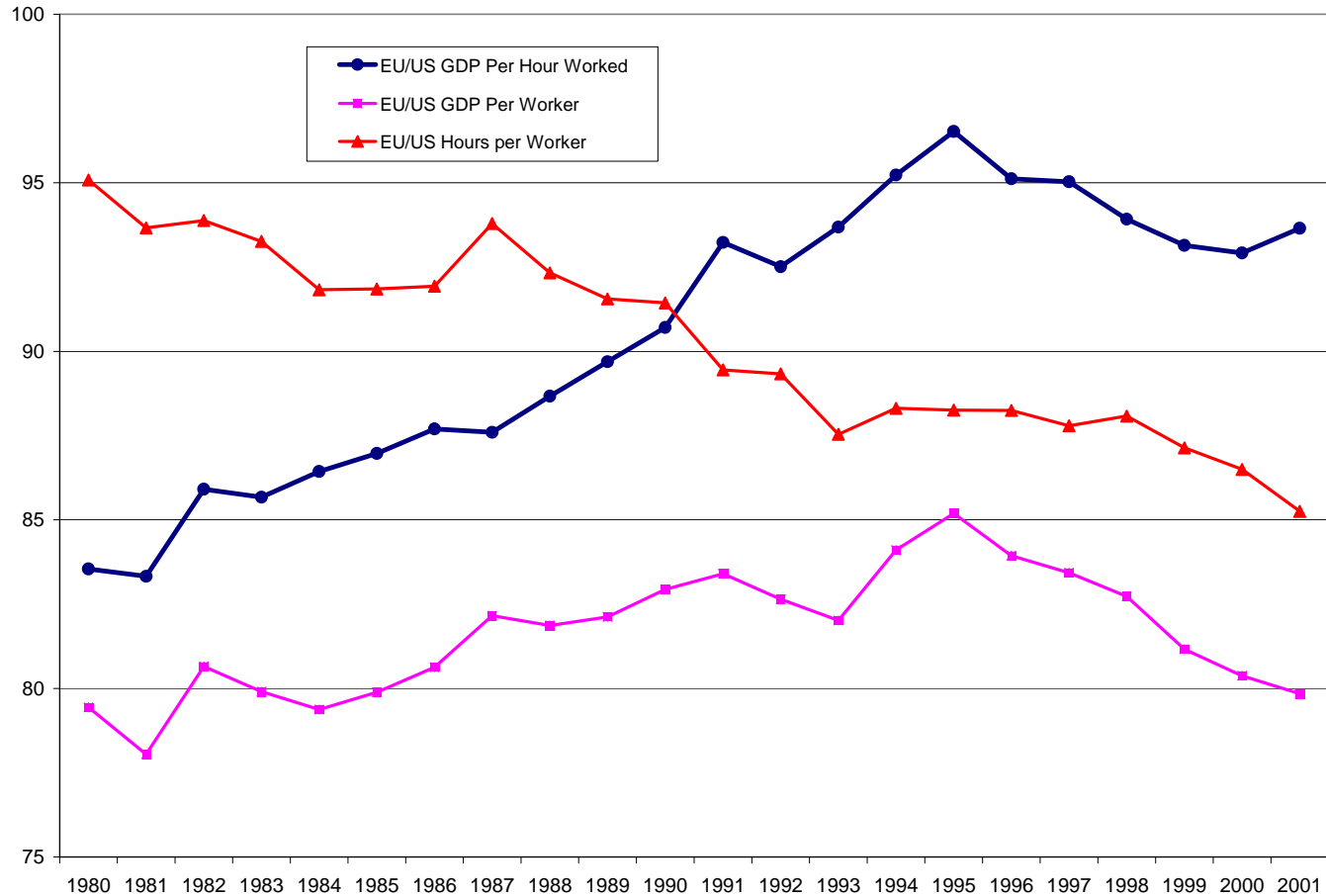


Source: derived from Groningen Growth and Development Center (2004) database.



FIGURE 2

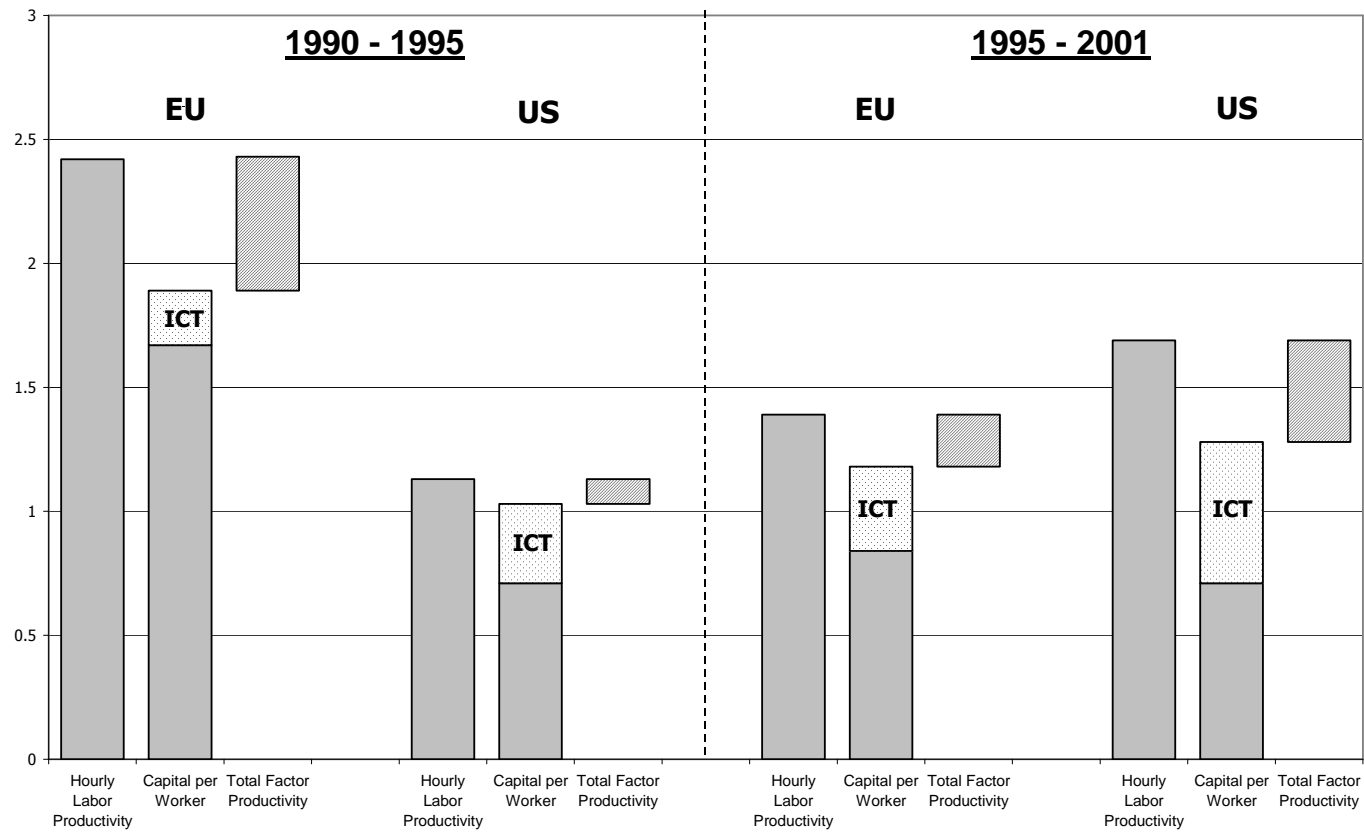
Trends in EU relative to US GDP per hour worked, 1980-2001



Source: derived from Timmer, Ypma and van Ark (2003)

**FIGURE 3**

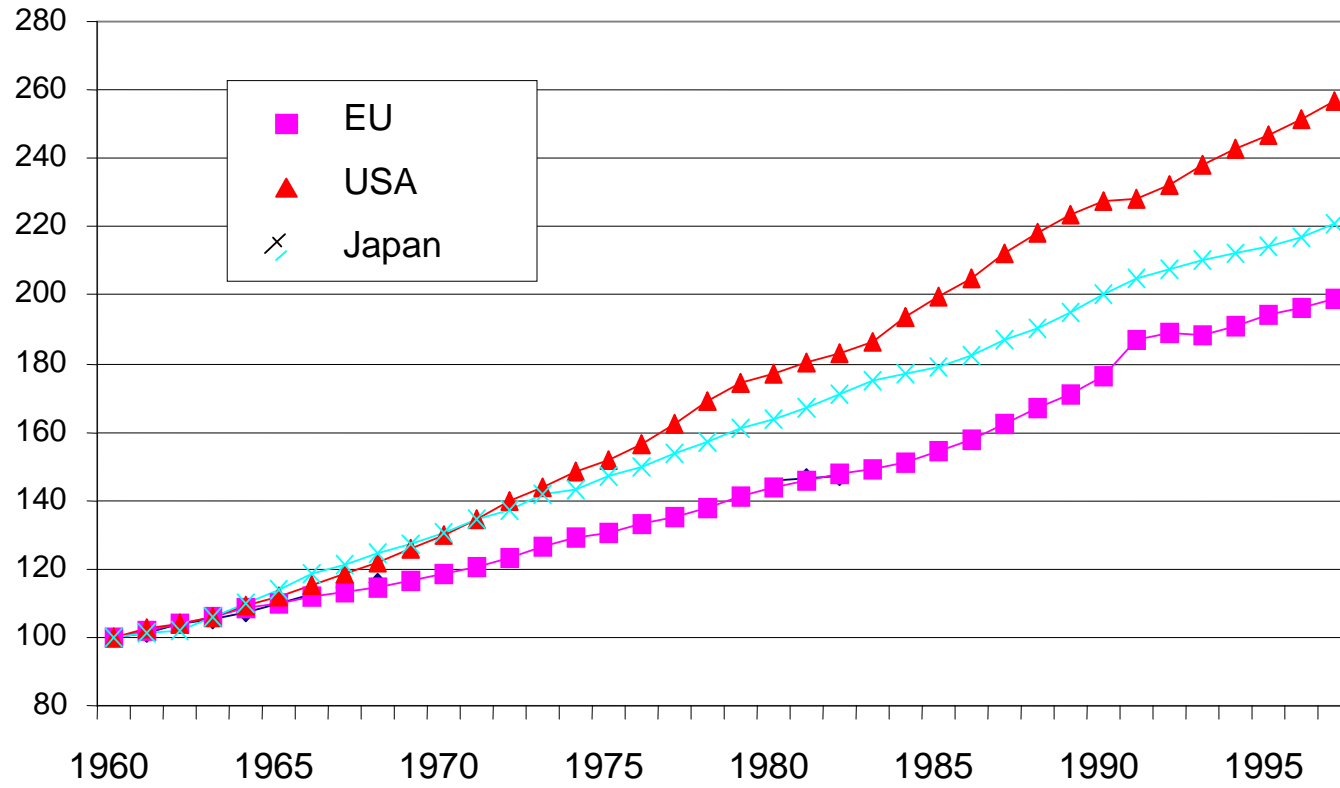
**Growth in EU and US hourly labor productivity, 1990-2001**



Source: derived from Timmer, Ypma and van Ark (2003)

FIGURE 4

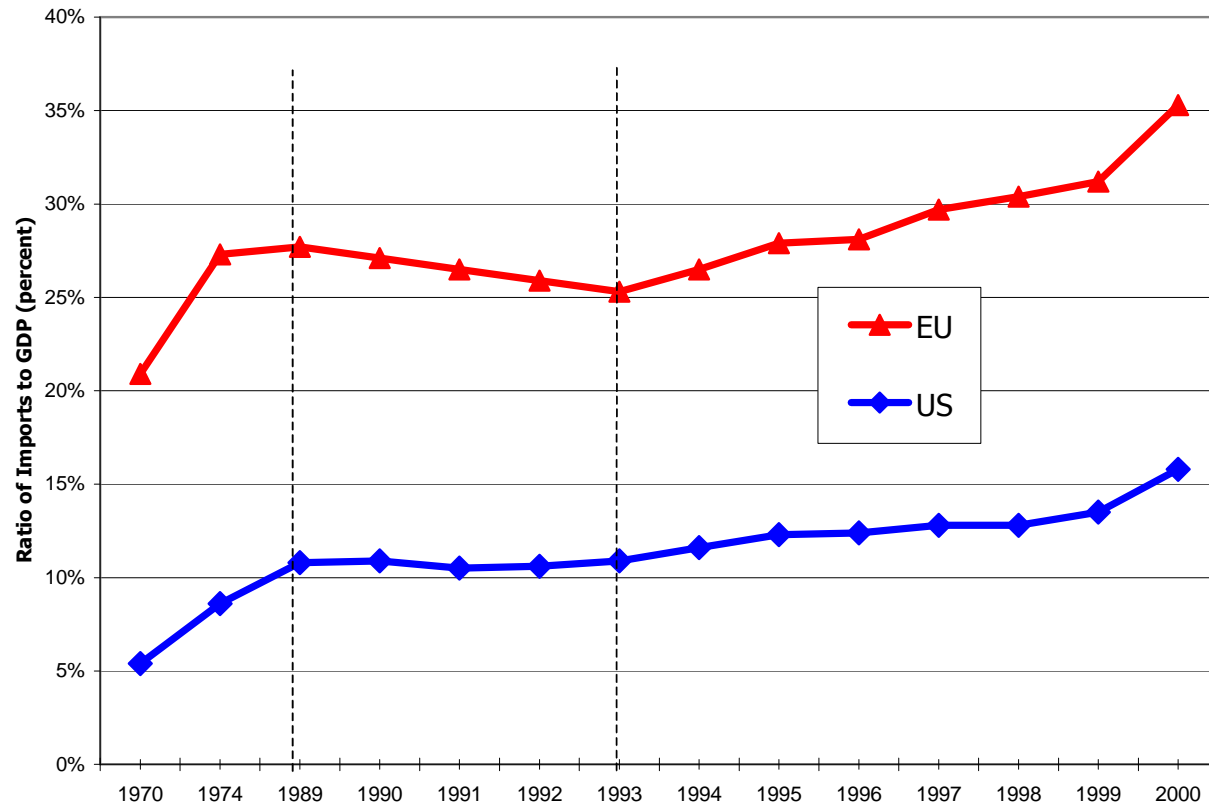
Employment growth in services



Source: derived from OECD (2001)

**FIGURE 5**

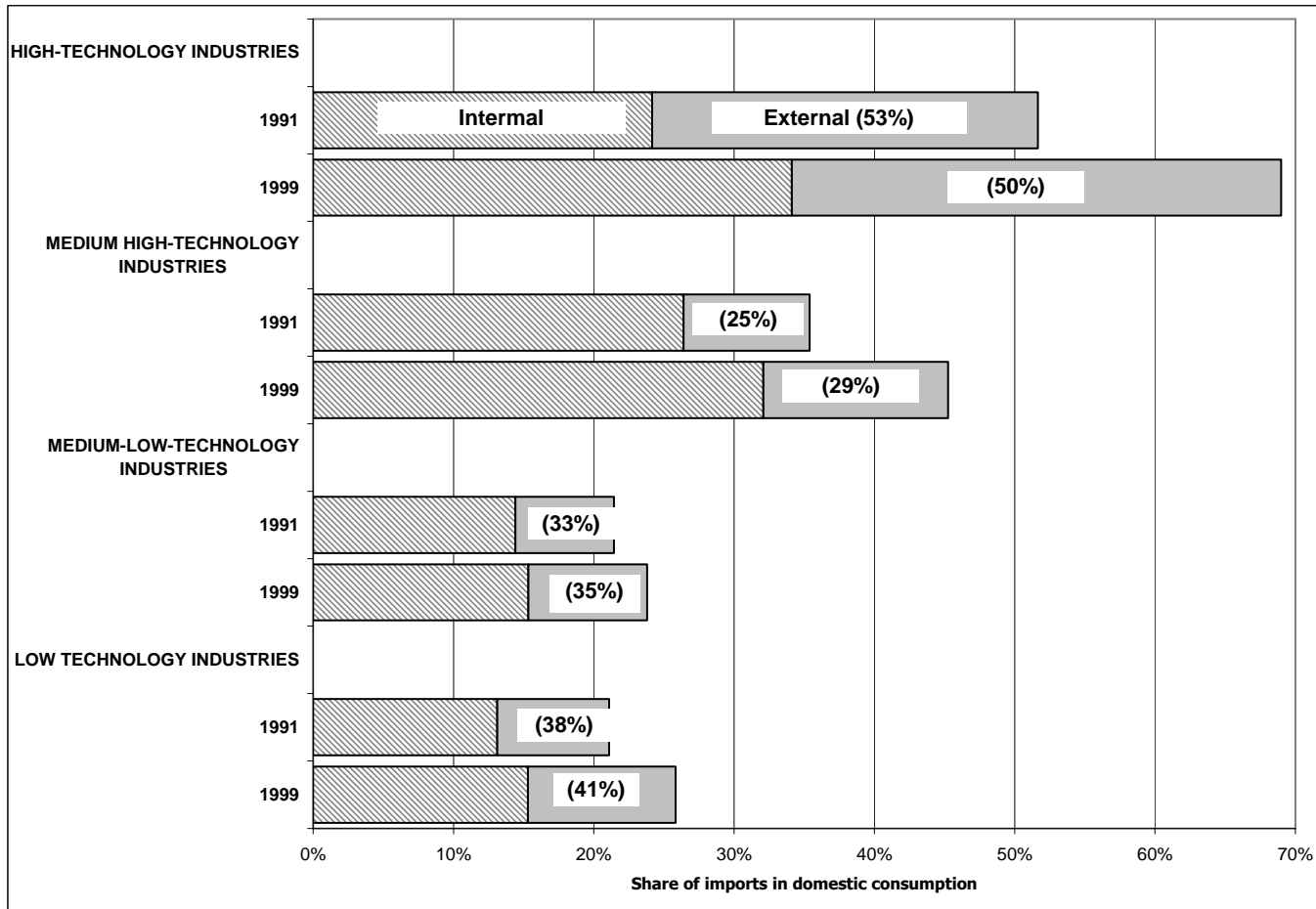
**Imports as a percent of GDP for the EU and US, 1970, 1974 and 1989-2000**



Source: OECD (2003, Table 6.12, pp. 71)

**FIGURE 6 – Shares of external, internal and total imports in EU consumption by technology related sector, 1991 and 1999.**

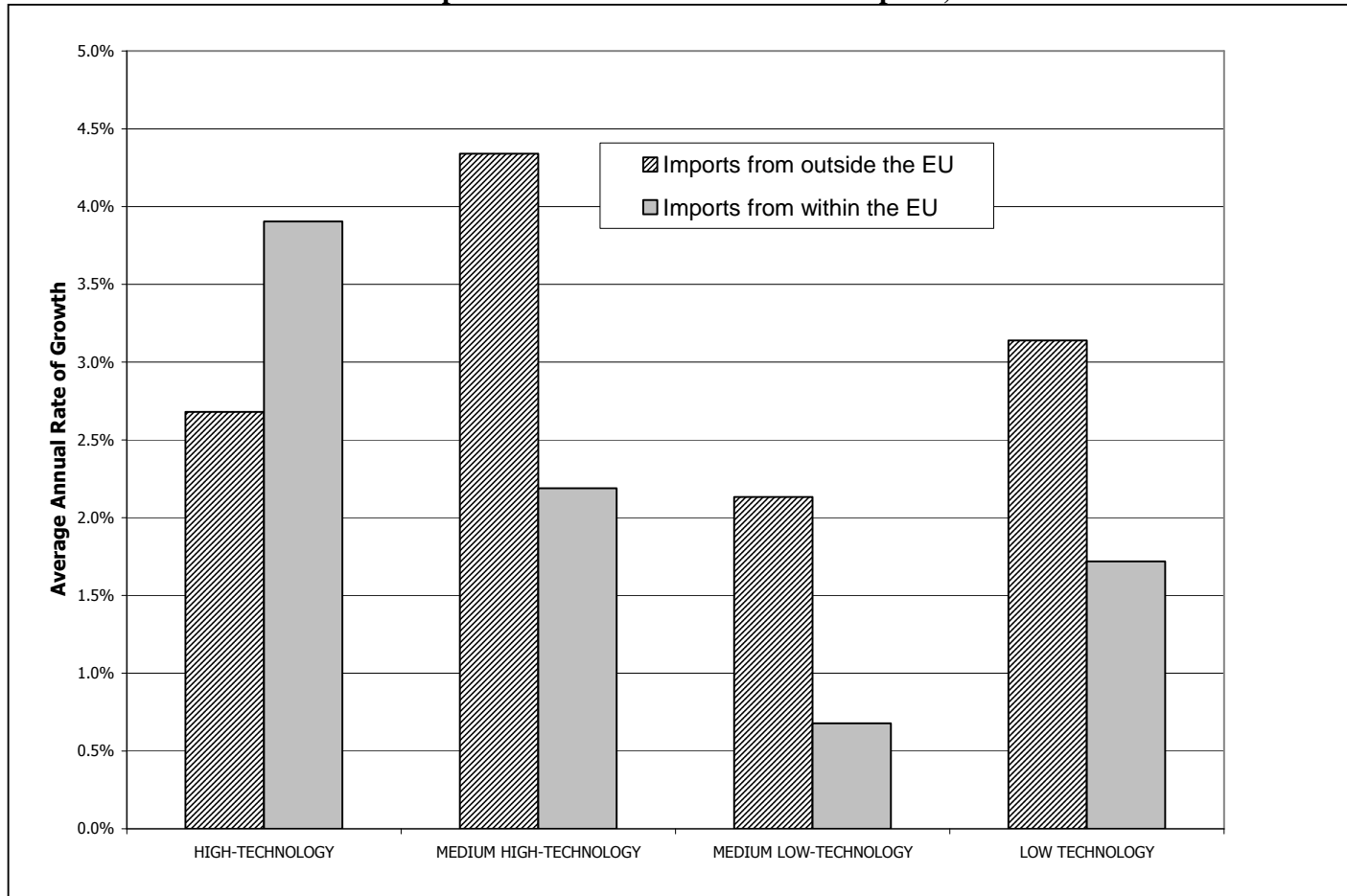
Note: Figures in parenthesis are the fraction of imports coming from outside the EU (external imports).



Source: derived from OECD (2001)

**FIGURE 7**

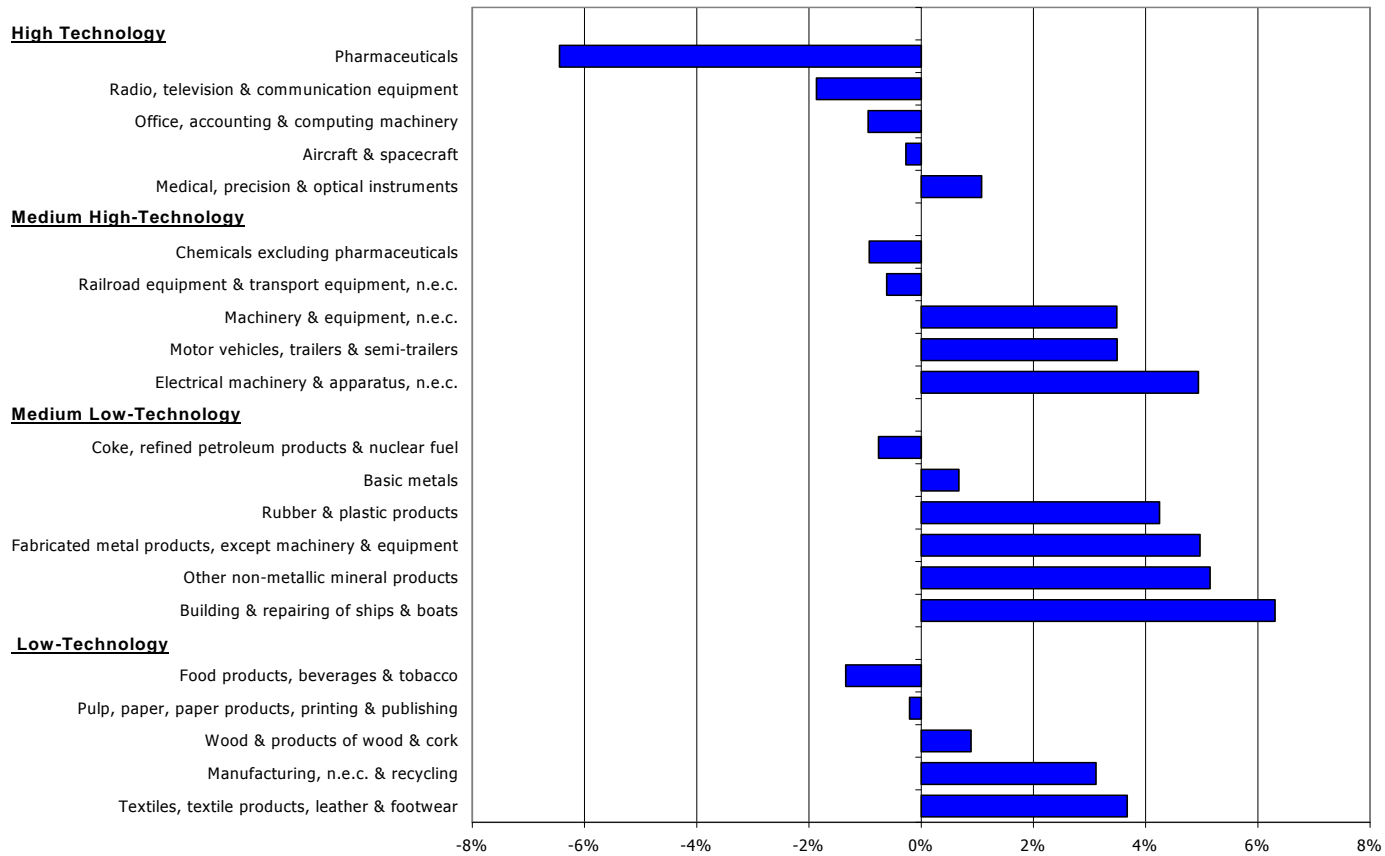
**Growth in external and internal imports as a share of total EU consumption, 1991-99**



Source: derived from OECD (2001)

**FIGURE 8**

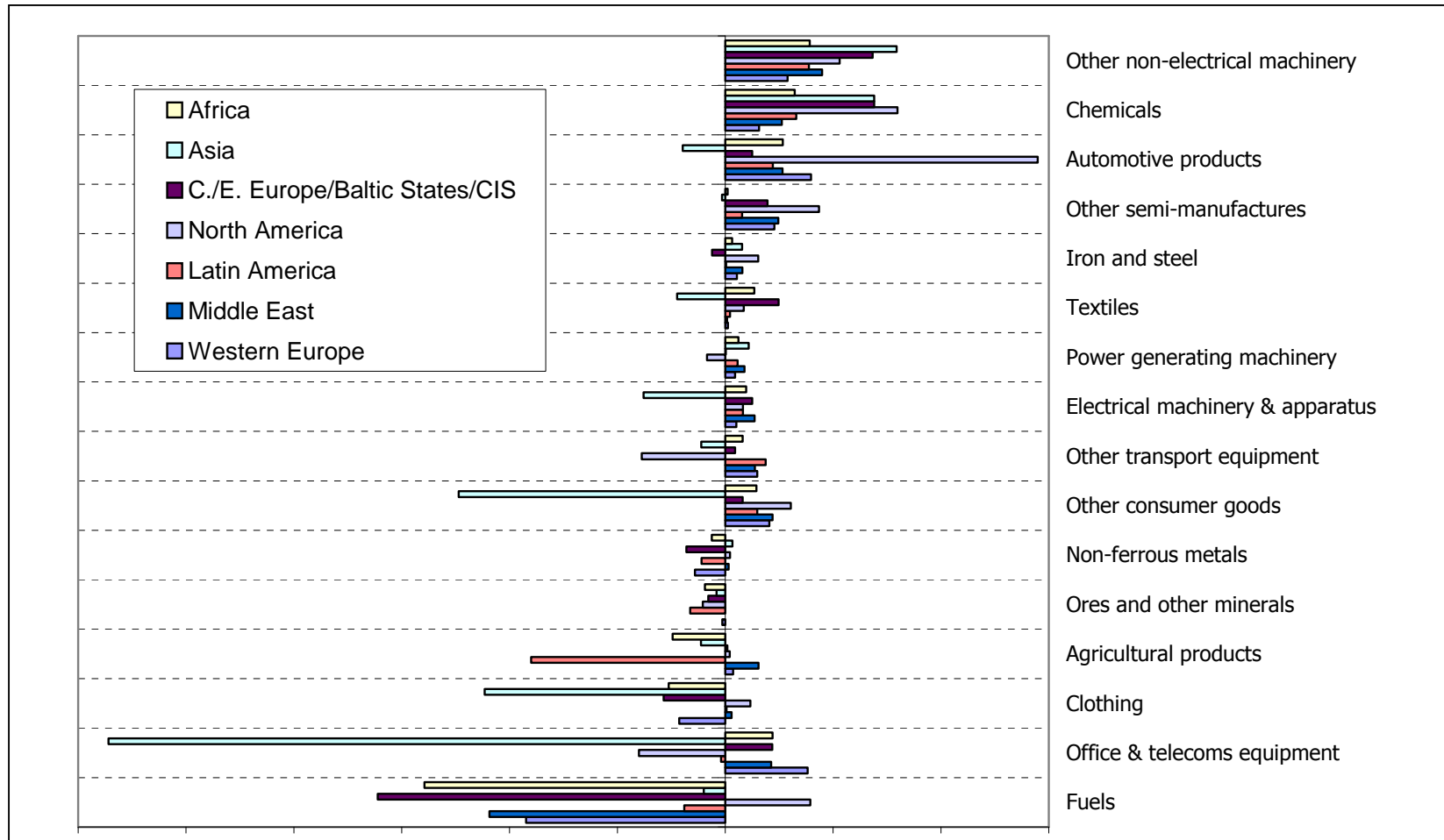
**Difference in growth rate of external versus internal imports as a share of total EU consumption, major sectors, 1991-99**



Source: derived from OECD (2001)

**FIGURE 9**

**Distribution of EU trade balances by select region and industry, 2002 (sorted by descending net trade to world)**

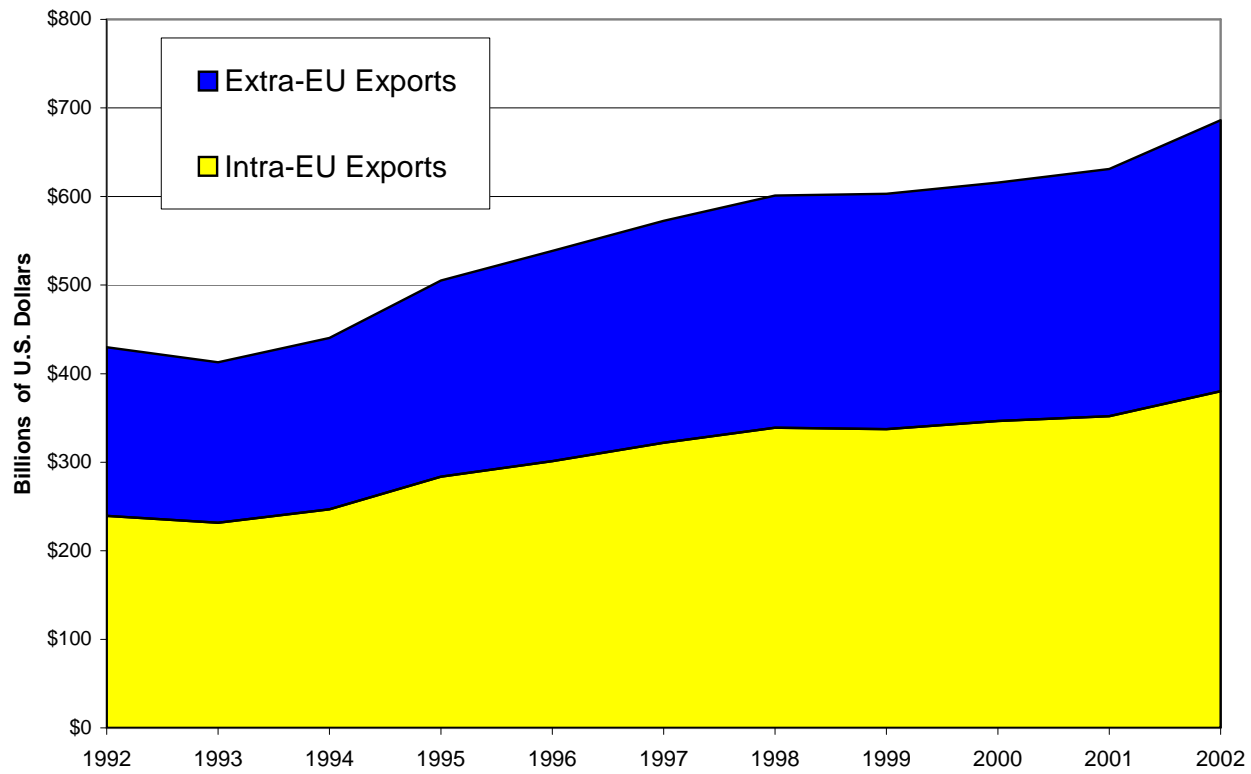


Source: derived from World Trade Organization (2003)



**FIGURE 10**

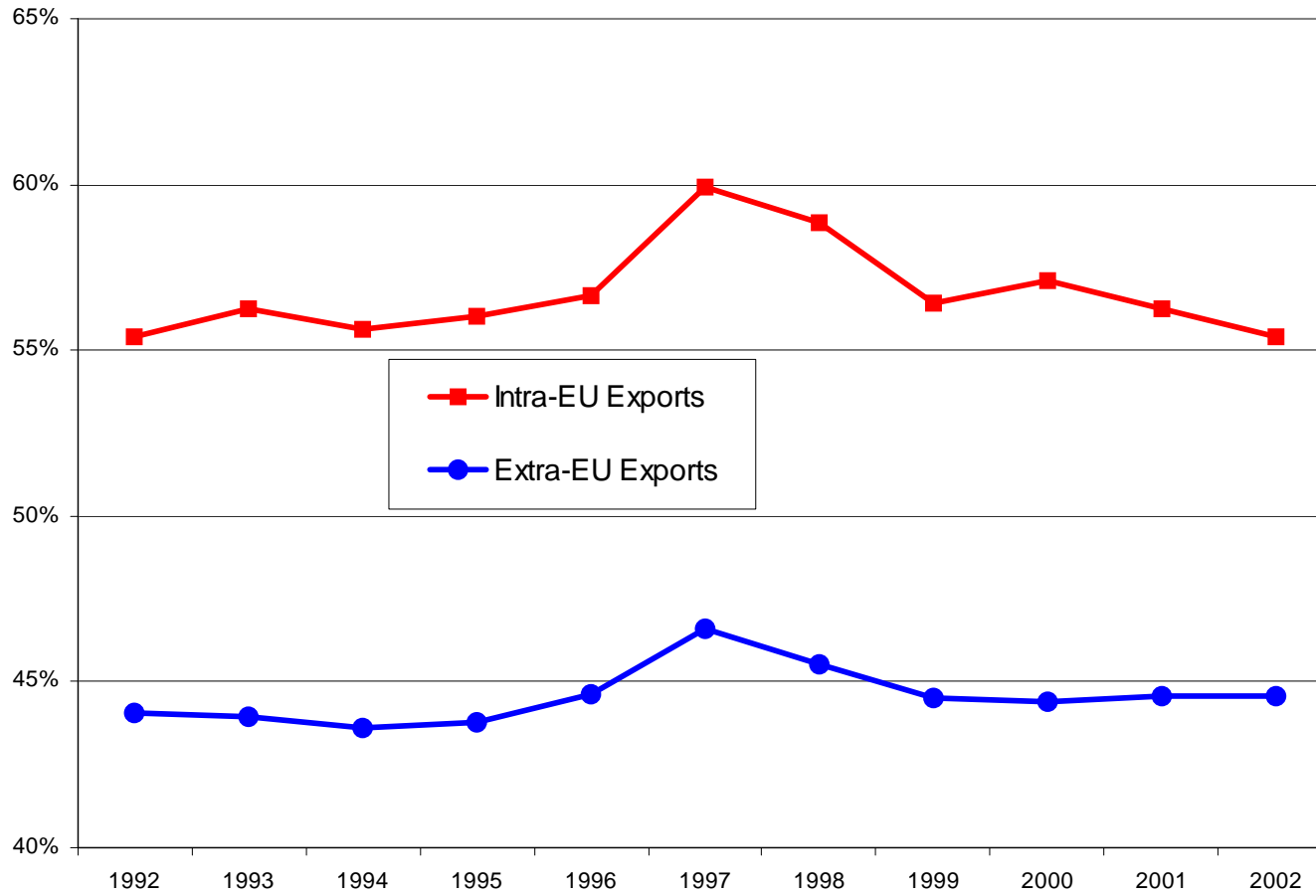
**Value of intra-EU and extra-EU exports of commercial services, 1991-2001**



Source: derived from World Trade Organization (2003)

**FIGURE 11**

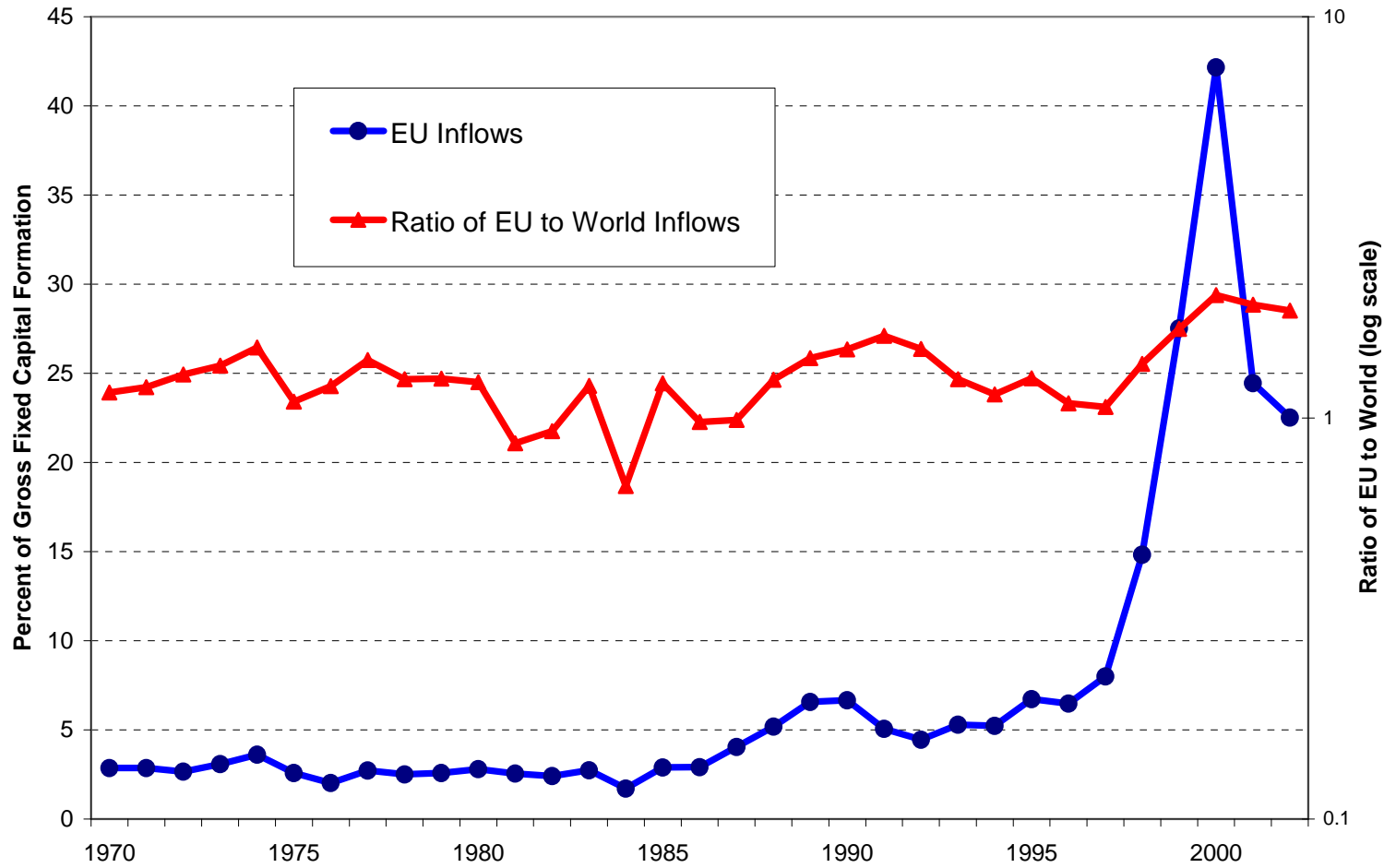
**Intra-EU and extra-EU shares of total EU exports of commercial services, 1992-2001**



Source: derived from World Trade Organization (2003)

FIGURE 12

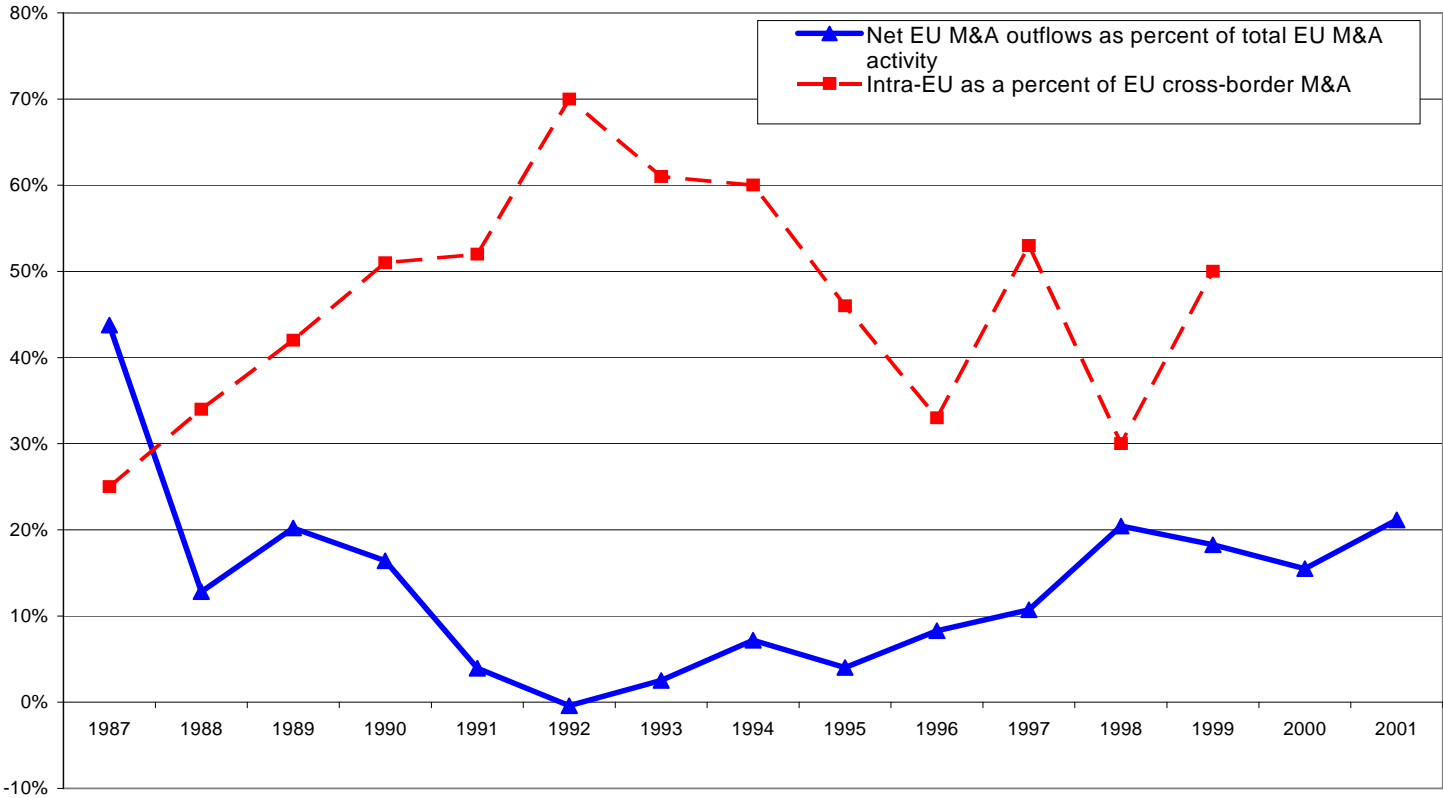
EU inflows of foreign direct investment as a percent of gross fixed capital formation, 1970-2002



Source: derived from UNCTAD (2003)

**FIGURE 13 – Net outflow of EU M&A investment and intra-EU cross-border M&A as percent of total EU M&A, 1987-2001**

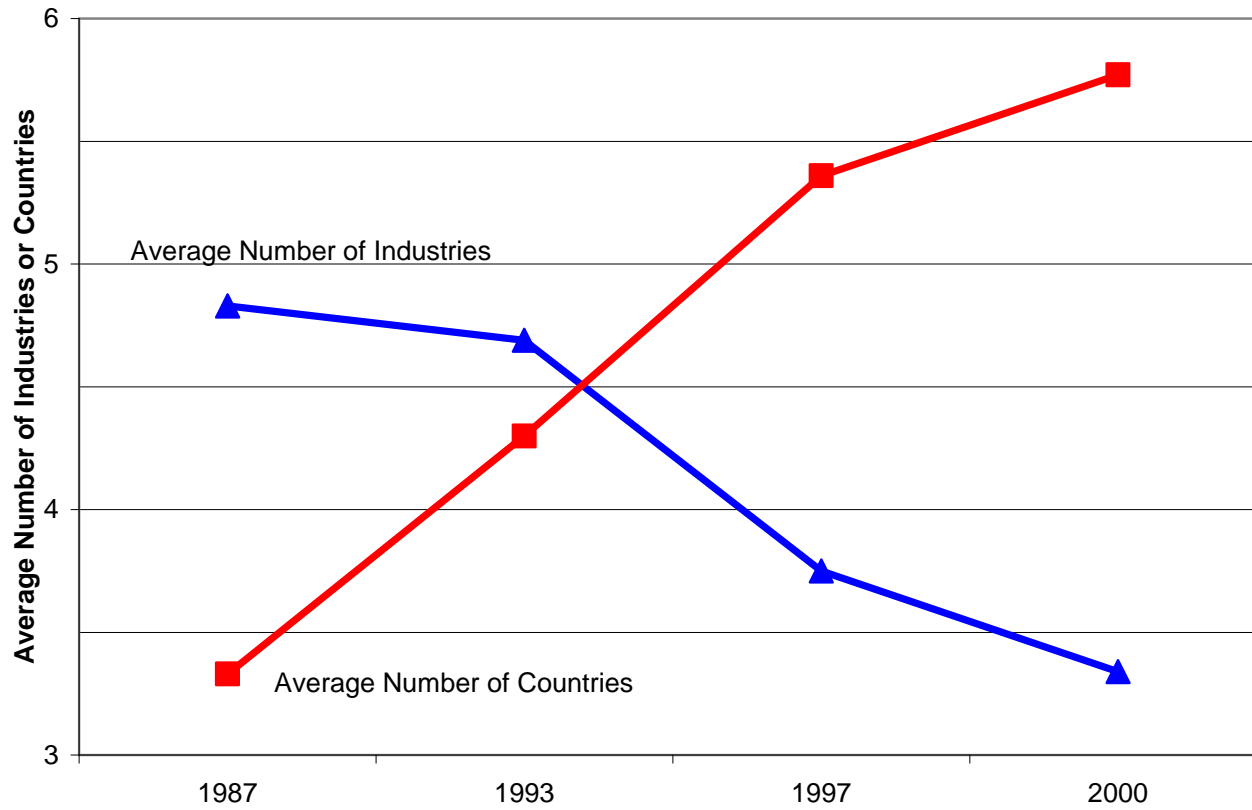
Note: Net outflow is purchases by EU based firms minus sales of EU based firms



Source: Derived from UNCTAD (2003). For intra-EU M&A: UNCTAD (2000, Figure IV.11).

FIGURE 14

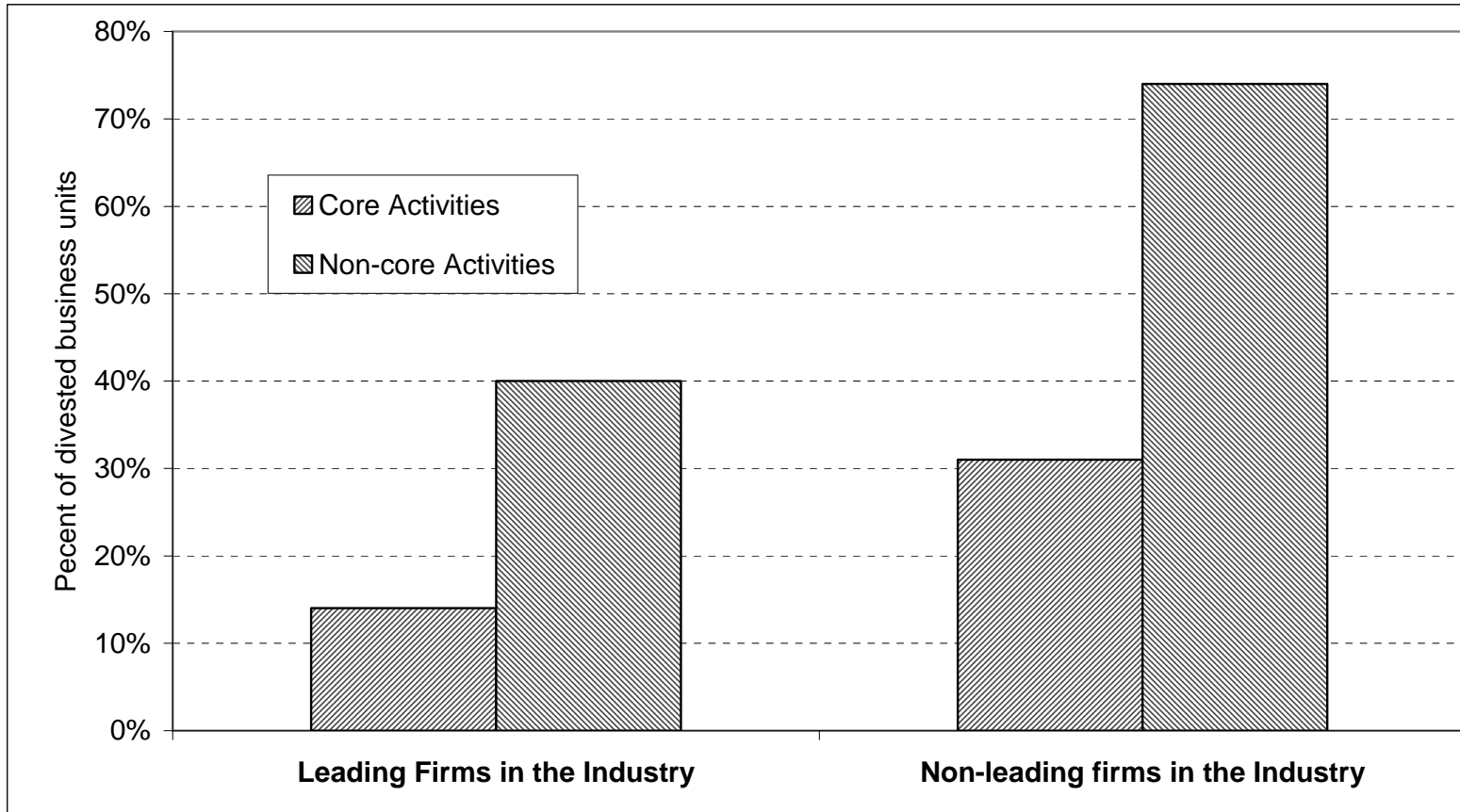
Trends in geographic and product segment diversification of leading EU firms, 1987-2000



Note: EU defined as EU12 in 1987 and 1993 and EU15 in 1997 and 2000.  
Source: derived from De Voldere et. al. (2004)

**FIGURE 15**

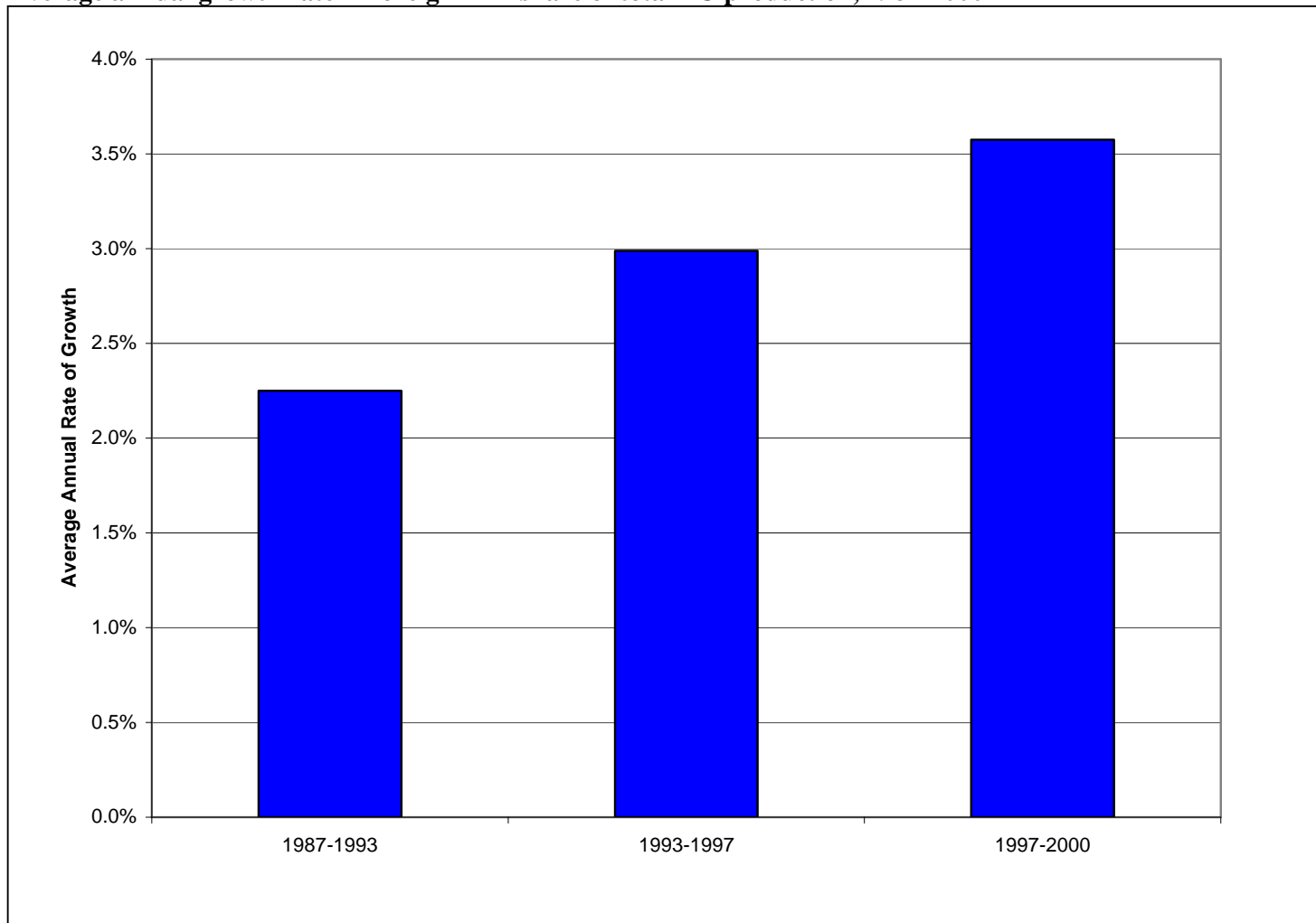
**Refocusing: divested business units by leading and non-leading EU firms, 1987-2000**



Source: derived from De Voldere et. al. (2004)

**FIGURE 16**

**Average annual growth rate in foreign firm share of total EU production, 1987-2000**



Source: derived from De Voldere et. al. (2004)

**TABLE 1**

**Growth in EU and US ratio of imports to GDP over selected sub-periods**

<b>Time Period</b>	<b>Average Annual Rate of Growth</b>	
	<b>EU</b>	<b>US</b>
1970-74	6.9%	12.3%
1974-89	0.1%	1.5%
1989-94	-0.9%	1.4%
1994-2000	4.9%	5.3%

Source: derived from OECD (2001)



**TABLE 2****Grubel-Lloyd index of intra-industry trade for the EU**

	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
Intra-EU	0.981	0.981	0.980	0.956	0.957	0.949
CEEC(5)	0.487	0.571	0.554	0.589	0.598	0.621
other OECD	0.696	0.679	0.733	0.757	0.763	0.772
Rest of world	0.280	0.331	0.441	0.523	0.520	0.535

*Note:* CEEC(5) includes Hungary, Poland, Romania, the Czech Republic and Slovakia. "Other OECD" includes Australia, Canada, Iceland, Japan, Korea, Mexico, New Zealand, Norway, Switzerland, Turkey and the United States. The "Rest of the world" mainly consists of developing countries and transitional economies other than the CEEC(5).

Source: Jansen (2000, Table 2)

**TABLE 3 – Cross-classification of EU industries based on revealed external (REA) and internal (RIA) comparative advantages, 1987 and 2000**

	External Advantage (REA > 1)				External Disadvantage (REA < 1)			
	Internal Advantage (RIA > 1)		Internal Disadvantage (RIA < 1)		Internal Advantage (RIA > 1)		Internal Disadvantage (RIA < 1)	
	1987	2000	1987	2000	1987	2000	1987	2000
	Aerospace	Aerospace	<i>Agricultural machinery</i>	<b>Grain milling (20)</b>	Clothing	Clothing (04)	Computers	Computers (0)
	Alcohol	Alcohol (42)	<i>Confectionaries</i>	<b>Metal products (23)</b>	Fish	Fish (26)	Other foods	Other foods (56)
	Beer	Beer (31)	<i>Measuring instruments</i>	<b>Oils &amp; fats (43)</b>	Fruit & vegetables	Fruit & vegetables (31)		
	Bread & biscuits	Bread & biscuits (30)		<b>Pasta (19)</b>	Man-made fibers	Man-made fibers (35)		<b>Animal feed (34)</b>
	Cars	Cars (39)		<b>Soft drinks (50)</b>	Motorcycles	Motorcycles (0)		<b>Clocks &amp; watches (51)</b>
	Cement	Cement (60)		<b>Tobacco (30)</b>	Non-ferrous metals	Non-ferrous metals (22)		<b>Confectionaries (44)</b>
	Ceramics	Ceramics (34)			Optical instruments	Optical instruments (46)		
	Chemicals	Chemicals (54)			Wood boards	Wood boards (11)		
	Clay	Clay (45)			Wood sawing	Wood sawing (08)		
	Concrete	Concrete (47)			Wood manufactures	Wood manufactures (45)		
	Dairy	Dairy (22)			<i>Animal feed</i>			
	Domestic appliances	Domestic appliances (32)			<i>Clocks &amp; watches</i>			
	Electrical machinery	Electrical machinery (37)			<i>Leather</i>			
	General machinery	General machinery (28)			<i>Oils &amp; fats</i>			
	Glass	Glass (37)			<i>Paper &amp; pulp</i>			
	Lighting	Lighting (55)			<i>Pasta</i>			
	Machine tools	Machine tools (23)			<i>Sugar</i>			
	Meat	Meat (12)			<i>Tobacco</i>			
	Medical instruments	Medical instruments (51)				<b>Batteries (38)</b>		
	Motor vehicle parts	Motor vehicle parts (21)				<b>Footwear (33)</b>		
	Paint & ink	Paint & ink (50)				<b>*Furniture (05)</b>		
	Paper products	Paper products (07)				<b>ICT (47)</b>		
	Pharmaceuticals	Pharmaceuticals (54)				<b>Insulated wires (46)</b>		
	Plastics	Plastics (29)						
	Railway	Railway (39)						
	Rubber	Rubber (49)						
	Shipbuilding	Shipbuilding						
	Soaps & toiletries	Soaps & toiletries (54)						
	Steel	Steel (11)						
	Steel casting & forging	Steel casting & forging (20)						
	Steel tubes	Steel tubes (09)						
	Textiles	Textiles (43)						
	<i>Batteries</i>							
	<i>Footwear</i>							
	<i>Furniture</i>	<b>*Agricultural machinery (43)</b>						
	<i>Grain milling</i>	<b>*Leather (30)</b>						
	<i>ICT</i>	<b>Measuring instruments (41)</b>						
	<i>Insulated wires</i>	<b>Paper &amp; pulp (14)</b>						
	<i>Metal products</i>	<b>Sugar (41)</b>						
	<i>Soft drinks</i>							
% of production (% of industries)	79% (63%)	69% (59%)	2% (5%)	7% (10%)	13% (29%)	17% (24%)	6% (3%)	6% (8%)

Note: For 2000, the numbers in parentheses next to the name of each industry is the percentage of production conducted outside the EU

Source: derived from De Voldere et. al. (2004)

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<sup>i</sup> For example, see International Monetary Fund (2004a).

<sup>ii</sup> These groupings are based on a ranking of industries according to their R&D intensity (OECD, 2003).

<sup>iii</sup> Horizontal differentiation reflects mainly different varieties of a product (e.g., French versus Italian wine) while vertical differentiation reflects mainly different quality levels of the same product (e.g., Italian fashion shirt versus a standard shirt).

<sup>iv</sup> The spike in 2000 is mostly reflects Vodafone's takeover of Mannesmen.

<sup>v</sup> The production share of non-EU firms was 0.14 in 1987 and 0.20 in 2000.

<sup>vi</sup> A high value of RIA may also indicate protection and other institutional barriers to entry, or it may reflect that an industry is "local" in that the costs of trade or investment are too high relative to the value of the product for foreign firms to produce within the EU. For such sectors, one would expect an internal advantage to be associated with an external disadvantage.