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OFFENSIVE AND DEFENSIVE RESPONSES  
BY EUROPEAN MULTINATIONALS  
TO A WORLD OF TRADE BLOCS

by

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Research programme on:  
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**Technical Paper No. 64,  
"Offensive and Defensive Responses by European Multinationals to a World of  
Trade Blocs",**

**by John M. Stopford, under the direction of Charles Oman, produced as part of  
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## RÉSUMÉ

Face à la constitution des blocs d'échanges régionaux, les multinationales européennes font preuve de réactions de plus en plus divergentes selon les tendances apparentes dans sept industries. Les firmes européennes qui ont un fort niveau de compétitivité mondiale s'adaptent agressivement aux changements qui se produisent à l'intérieur même de l'Europe sans que cela ne modifie leur stratégie globale. Les firmes les moins compétitives vont davantage centrer leurs activités sur le marché européen et leur compétitivité mondiale en sera affectée. Le contraste est particulièrement frappant dans des secteurs industriels comme ceux de la chimie et des produits de consommation qui donnent la priorité aux exportations sur le marché international et ces firmes moins compétitives solliciteront l'intervention protectionniste de Bruxelles pour des produits manufacturés à forte intensité commerciale comme les vêtements. Alors que l'action des groupes de pression sur les institutions nationales et européennes diffère selon la puissance compétitive mondiale des firmes dans certaines industries, l'effet est unilatéral : la demande de protectionnisme ou de support est intense dans les industries où les firmes les plus compétitives restent néanmoins peu compétitives à l'échelle mondiale, alors que dans les industries fortes la voix des firmes très compétitives se fait à peine entendre.

Ce document démontre aussi de quelle manière les innovations incluses dans les stratégies des firmes et les attitudes liées à une mondialisation de la concurrence affectent l'importance relative des exportations et de l'investissement direct étranger sur les marchés étrangers. Du fait que les stratégies fondées uniquement sur l'exportation produisent un mélange exportations-investissements, des pratiques nationales antérieures distinctes telles que celles utilisées entre les sociétés anglaises et allemandes par exemple, tendent à s'estomper avec la recherche de nouvelles formes d'avantages concurrentiels mondiaux. Mais il faut également dire que peu de stratégies sont entièrement globales et que les firmes multinationales européennes les plus compétitives associent les réseaux, régionaux où les échanges de produits manufacturés sont considérables, à des systèmes de gestion d'information globale qui relient leurs réseaux régionaux et impliquent de plus en plus des échanges inter-régionaux d'actifs incorporels. L'attitude des firmes face à l'évolution de la législation commerciale reflète la dualité de ces réseaux : les sociétés restent relativement indifférentes si leur niveau élevé de compétitivité dans le domaine de la connaissance ainsi que leurs échanges inter-régionaux d'actifs incorporels ne sont pas menacés par ces changements.

Apparemment, il semble que la régionalisation, en particulier dans le cadre du marché unique européen ("CE 1992"), a des conséquences très limitées sur la compétitivité des pays en développement. Cependant les conclusions de ce document suggèrent que les pays en développement devraient étudier avec attention le mécanisme de la régionalisation qui pousse les multinationales à mettre en place ce double système de réseaux. Les pays en développement ne parviendront pas à augmenter leurs exportations de produits manufacturés s'ils limitent trop les échanges dans le secteur des actifs incorporels. De plus, à cause des réactions différentes des firmes européennes les plus et les moins compétitives face au marché unique européen, les pays en développement devraient également améliorer leurs informations relatives aux capacités internationales des firmes. Les sociétés

européennes dont la puissance compétitive est faible ne seront pas en mesure de maintenir leurs engagements si les prochains changements dans le domaine de la concurrence les conduit vers d'autres régions du monde, particulièrement en Europe et y compris parfois en Europe de l'Est.

## SUMMARY

European multinationals show a growing divergence in their response to the formation of regional trade blocs, according to evidence from seven industries. European firms that are strong competitors at the world level are able to adjust aggressively to changes within Europe without disturbing their global strategies. Weaker firms are prone to becoming more inward-looking in Europe, and to risk further loss of global competitive position. The contrast is particularly marked in industries like chemicals and consumer products, which emphasize exports as a means to serve international markets, and the weaker firms are especially prone to call for protectionist help from Brussels in trade-intensive industries, like apparel. While the lobbying pressures on national and European institutions differ according to the global competitive strength of the leading European firms in a particular industry, the effect is one-sided: the pressure for protection or support is strong in industries where the leading firms are relatively weak, while in the strong industries the leading firms are relatively silent.

The paper also shows how innovations in corporate strategies and behaviour associated with the globalisation of competition are changing the relative importance of exports and foreign direct investment as vehicles for serving foreign markets. As export-only strategies give way to a mix of exports and investment, previously distinct national practices (say between British and German firms) tend to blur as firms seek new forms of global competitive advantage. But it is also true that few strategies are wholly global, as many leading European multinationals combine regional networks, within which there is extensive merchandise trade, and global intelligence systems that link-up their regional networks and increasingly involve inter-regional trade in 'intangibles'. Firms' responses to changes in trade regulations reflect the dual structure of these networks: firms can be relatively indifferent insofar as their knowledge-intensive competitive strengths and inter-regional trade in 'intangibles' are not critically affected by such changes.

On the surface, it seems that regionalisation, in particular the Single European Market programme ("EC 1992"), is of relatively little consequence for the competitiveness of developing countries. Yet, the findings of this paper suggest that developing countries should watch carefully how regionalisation helps spur multinational corporations to build their new dual supply networks. Developing countries are unlikely to succeed in increasing their manufactured exports if they unduly restrict trade in 'intangibles'. Moreover, because of the divergent response by strong and weak European firms to the Single Market programme, developing countries should also increase their investments in knowledge about the international capabilities of firms. Weak European firms will be unable to honour pledges if future shifts in competition lead them to divert resources to other parts of the world, notably to Europe, in some cases including Eastern Europe.

## PREFACE

The Development Centre is carrying out a major research project on Globalisation and Regionalisation as part of its 1990-1992 Work Programme. The Project aims to provide a better understanding of the economic and political forces that are working for, and against, the formation of regional economic groupings in Europe, the Western Hemisphere and Pacific Asia, and how those forces interact with the forces (essentially microeconomic) that are driving globalisation. The purpose is to assess their implications for the strategies and policies of various categories of developing countries.

Current concern with the issue of regionalisation first emerged with the 1985 launching of the European Community's Single Market programme ("EC 1992") and subsequent fears that a "fortress Europe" would disrupt the multilateral trading system. The proliferation of non-tariff barriers to trade since the early 1980s, notably in Europe and the United States, and more recently the inability to conclude the Uruguay Round of GATT negotiations successfully, have undoubtedly heightened that concern. The creation of a North American Free Trade Agreement (NAFTA) and movement towards greater *de facto* integration in Pacific Asia can be seen, in part, as responses in those regions to the renewed acceleration of European integration.

This paper sheds important light on the current dynamics of European integration by examining the strategies and behaviour of a key group of economic and political actors which are driving and shaping that process: European multinational manufacturing companies. It focuses on the considerable, and growing, divergence in the positions taken by EC multinationals in response to shifts in global competition, and the asymmetrical impact these positions have through corporate lobbying on both national EC governments and on Brussels.

In shedding light on one of the most powerful forces that will ultimately determine EC external policy, in showing why the new economics of global competition make trade policy a regulatory weapon of decreasing power in many sectors, and in providing useful insight into the critical issues of investment diversion and developing-country competitiveness in relation to European integration, this paper -- written by a leading British business analyst -- constitutes an important contribution to the Centre's research on Globalisation and Regionalisation.

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President of the OECD Development Centre  
May 1992

## INTRODUCTION\*

Of the many developments in the world economy that can affect the extent and form of multinational firms' involvement in developing countries, two stand out as being of particular salience. One is the changing nature of global competition. The other is the creation of regional trading blocs. The integration of EC markets in the 1992 campaign is a step beyond the original customs union and has raised fears in many quarters that a 'Fortress Europe' is emerging to distort current trading arrangements. In the aftermath of the failure to complete the Uruguay Round of GATT negotiations, the talks to enlarge the US-Canada free trade agreement to include Mexico raise similar fears across the Atlantic. The possibilities of a Pacific equivalent add further impetus to consider the implications of a world dominated by three major blocs, each guarded by enhanced protective barriers.

This paper reviews how European manufacturing multinationals have been responding to the combined dynamics of competitive and regional adjustment. Are they taking an offensive, leadership role in changing the 'rules' of global competition and thereby accelerating integration within Europe while continuing to expand worldwide? Alternatively, are they reacting defensively and diverting resources from other areas to become more inward-looking within Europe? Further, the paper explores the form in which their international networks of supply are being organised. Is supply being managed on a globally integrated basis, or are intra-regional networks of trade becoming more important? The answers to these questions are used to indicate how relationships with national governments and Brussels are being affected and to speculate about the implications for trade and investment conditions in the newly opening markets of Eastern Europe as well as developing countries more generally.

In the past, there has been no single European approach to internationalisation. Nationality seems to have been a strong influence on managers' earlier perceptions of the options available for business development<sup>1</sup>. Though national differences still exist, especially with respect to firms' bargaining with national government and with Brussels, that influence now seems to be waning. Instead, a combination of firms' relative competitive positions in the new global competition and sectoral effects is acting to push European industrial responses in two, opposite directions. The central argument in this paper is that the seeming inconsistency of some firms favouring a 'Fortress Europe' while others are opposed can largely be explained by managers' choices between offensive and defensive policies that reflect these two factors.

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## PROPOSITIONS AND METHOD

The central argument has two parts. The first is that strong competitors are themselves part of the causal forces for change in the structure of an industry. They can adjust to environmental changes with offensive, additive policies that preserve areas of existing strength. It is these firms that Panić (1991) must have had in mind when he observed that multinationals were acting to integrate Europe faster than could adequately be accommodated by matching changes in national attitudes and economic institutions. By contrast, weaker competitors are forced to be more defensively reactive to external change; they are likely to be forced to adopt substitutive policies that concentrate resources within the most threatened. The second part concerns sectoral effects. Where foreign direct investment (FDI) is more important than trade, as in many chemicals and consumer goods, firms can serve their foreign markets from behind trade barriers, thus limiting the impact of regional trade protectionism. These are the industries where the leading firms are likely to greet the question of the implied threat to their global systems of regional protectionism with the 'big yawn' described by Lou Wells (1992) for the Americans.

The two parts of the argument are related: shifts in the structure of oligopolistic competition change the balance of relative importance of FDI and trade over time. Because there is considerable debate about the extent and generality of the shifts now visible in some industries, the argument is made as a series of propositions for test<sup>2</sup>. Data drawn from seven manufacturing industries are used to show that Europe is well endowed with strong firms in industries where FDI is of predominant importance. By contrast, leading European firms are weaker, relative to world competitors, in industries, such as electronics, where trade is more important. These weaker firms are also much more focused within Europe and therefore likely to be more prone to lobby Brussels for protection in all kinds of areas to gain as much delay in adjustment as possible. (Prahalad and Doz, 1987; Hamel and Prahalad, 1985). Given the trends, illustrated later, that the non-EC proportion of sales has fallen for many of these weaker firms during the 1980s, but grown for the stronger ones, the differences are being magnified over time.

Measures of competitive position can be considered as reflecting the sum of all a firm's resources, among which management can be seen to play a crucial role. A firm needs to accumulate resources of all kinds -- financial, human, and physical -- to keep up with the pace of change. Relative strength needs to be measured at the global level, for being strong within Europe is seldom sufficient to create and maintain strength elsewhere. For some of the threatened firms, the new opportunities in Eastern Europe look relatively attractive where they can be captured within integrated continent-wide systems of supply, thus intensifying the sense of a continental perspective.

The changing economics of supply affect firms' choices about where to source their goods. Despite much rhetoric about globalisation, very few multinationals appear to have succeeded in achieving worldwide integration of their supply systems. Instead, most emphasize the development of regional networks (Morrison *et al*, 1990). Within regional blocs, where there are already the advantages of both proximity and

unrestricted, cheap transfer, they are creating networks of trade in physical goods to increase the gains from specialisation.

Leading multinationals are also building a parallel network of inter-regional trade in the 'intangibles' of knowledge, engineering, design, brand management, and the like. The combined effects of technical change and complexity have spurred many to invest in advanced and costly systems of control that link the factories closely to the market. These systems can increasingly be transferred across national borders to change the basis on which competitiveness is established. This paper argues that the greater is the 'system pressure', the greater are the barriers to entry and the less the impact of inter-regional trade barriers. In particular, as is shown later for automobiles, some have begun to construct supply networks whose costs are increasingly divorced from national factor costs.

The generality of the argument must necessarily be speculative because neither trade statistics nor FDI measures take account of the growing trade in 'intangibles' that is tied to FDI. Yet there are good reasons to suppose that greater attention must be paid to such changes, for there is accumulating evidence that a growing number of firms -- often Japanese -- that have succeeded in gaining leadership in a global industry have the characteristics suggested above (see, for example, Womack *et al*, 1990; Hamel and Prahalad, 1989).

This paper focuses on the position of leading firms in three of the 'sensitive' industries -- automobiles, some sectors of electronics and textiles -- for which Brussels has considered the difficulties of adjustment to new global competition to be the greatest. Limited data on four other industries, in which Europe possesses many of the world leaders, are added to indicate how sharp are the contrasts in the international position of European industries. The four 'strong' industries are chemicals, consumer products, petroleum and pharmaceuticals.

Exhibit 1 provides a snapshot of the extent of the differences for European firms in these seven industries in terms of three basic variables. First, the industries are ranked in terms of the proportion of the sales of leading firms outside Europe, an indication of the priority accorded to the region. The second is a measure of the relative importance of FDI as a means of serving non-EC markets<sup>3</sup>. The export/foreign production ratio shown is merely indicative of the relative ordering of priorities; the absolute numbers are of little importance. The third variable, the sales of EC firms as a proportion of the sales of the twelve largest world competitors, is a measure of relative strength. All three variables can be seen to be closely connected.

The extent of the sectoral differences should not, however, be exaggerated. Within a 'weak' industry, there is a wide range of firms' positions and a consequent divergence of response. As the text below shows, those European automobile firms with the least degree of extra-EC internationalisation are the most threatened by Japanese competition and the most vociferous for extreme degrees of protectionism; the stronger ones favour transitional arrangements that will eventually liberalise the European market. Peugeot has more to lose than VW, because of its far greater reliance on a high share of a protected home market.

## GENERAL CONSIDERATIONS

Before examining the sectors, some consideration of the historical context is needed. Past national preferences have affected firms' choices of where to do business and the priorities given to FDI and exports from the home country. The forces of changing global competition have affected the extent of the shifts that have led to today's position.

National difference in the location of FDI is measured in Exhibit 2 by the accumulated stock of FDI in the late 1980s. Taken together, European investors were the most highly concentrated in OECD markets, but Britain had far less proportionally invested within Europe than France and Germany. Perhaps surprisingly, the proportion of intra-European FDI during the 1980s was roughly the same as in earlier years. There had been some real growth of intra-Europe FDI in the run-up to 1992, but it was not as strong as many had earlier predicted<sup>4</sup>. The data for all three European countries are the result of their large investments in the United States during the 1980s. For example, over half of the UK flows went to the United States, moving the share of the total stock there from below 30 per cent in the mid-1970s to 44 per cent by 1989.

Mergers and acquisitions have been a significant part of the investment activity within the EC during the 1980s. Yet, it is not clear that this activity has had much to do with integrating the regional market. In a careful review of the evidence, Geroski and Vlassopoulos (1990) concluded that mergers had relatively little to do with 1992 *per se*. Much of the growth had been within nations to form defensive positions. Cross-border activity had been uneven among sectors and had involved more investment from outside the Community (including notably Swedish and Swiss firms) than from EC firms. Moreover, France continued to oppose foreign takeovers on the grounds of national interest. For example, the proposal by the Japanese firm, NEC, to take a 5 per cent holding in the French computer firm, Bull, was long resisted.

The second aspect of historical preference concerns the choices firms make between exports and foreign production to serve foreign markets<sup>5</sup>. Conventional explanations emphasize the importance of industry-level scale, costs and transaction costs in determining the configuration of a firm's foreign assets<sup>6</sup>. That sense of industry determinism has, however, been modified recently to show that firms within an industry have wide degrees of latitude in their specific choices. Porter (1986), Prahalad and Doz (1987), Bartlett and Ghoshal (1989) and others have shown the importance of balancing the drive for scale by integrating activities across national boundaries with policies that allow for greater responsiveness to differences in national conditions of demand. Rather than being solely a matter of industry economics, these more recent analyses have shown that the choices are equally affected by **firm-specific** factors and that they change over time.

Historically, one can depict US and British multinationals as having initially expanded abroad by emphasising responsiveness in their preference for FDI over exports. Later on, the Japanese expanded in the same industries by emphasising integration and exporting, thereby changing many of the 'rules' of competition.

Exhibit 3 shows the export/foreign production ratio for a large sample of industrial firms in 1977, 1981 and 1988. In 1981, the European **average** was closer to the American than the Japanese position. This average, to be sure, obscured the wide difference among national positions: the United Kingdom was akin to the United States, whereas Germany emphasized exports to a much greater degree and France was somewhere in between. Furthermore, these national differences were also apparent within industries, albeit to a lesser extent (Stopford and Dunning, 1983). By 1988, whereas the earlier position of US and British firms had been maintained, despite changes in global competition, that of Japanese firms had moved significantly as they stepped up the pace of FDI. There is some evidence that French and German exporters have also moved closer to the US and British position, but the evidence is only anecdotal<sup>7</sup>.

That convergence has, however, been uneven, as Exhibit 4 indicates. The US/European balance has remained dominated by FDI, whereas elsewhere exports are of roughly similar or greater importance in the balance. The ratios shown in Exhibit 4 are, to be sure, artificial in that they compare a book-value stock figure for FDI with an annual flow figure for exports: they are merely indicators of the relative ordering of importance.

Exhibit 4 also shows the dominant importance of trade within Europe. Intra-EC integration has, so far, been driven much more by trade expansion than by cross-border investment. A measure of the change is shown by UK data. While British FDI in the region has remained almost static (expansion by some firms being offset by disinvestment by others), the share of British exports going to the EC has risen from 32 per cent in 1972, the year of accession, to over 50 per cent in 1990. Data from other EC members show the same trends (Fouquin, 1991).

Firms' supply networks are influencing the form of trade integration. As Fouquin shows, intra-industry trade is growing among northern European countries, where the multinationals' moves to specialise their operations are most pronounced. Simultaneously, trade from Spain, Portugal and to a lesser extent, Greece, is becoming more specialised. The recent investments by leading multinationals in these latter countries as they joined the Market have produced new sources of supply within the EC. Both developments are reflected in trade indices that show Europe becoming more self-sufficient in its external trade with developed countries. Trade relations with developing countries have not, however, been equally affected. Page (1992) and Langhammer (1990) provide data to indicate that 1992 is unlikely to disturb existing patterns significantly. Yet, there are some signs, illustrated later for textiles, that supply networks around the Mediterranean basin are being enhanced.

### **The `New' Globalisation**

In the post-war era, the multinationals grew in a steady progression in real terms until the 1980s, when there was an explosion of growth. While world trade volumes grew at a compound annual rate of 5 per cent between 1983 and 1988, FDI grew at 20 per cent annually in real terms. Why this occurred has much to do with the structural changes in the global political economy (Stopford and Strange, 1991). In particular, many of the developments in global competition could probably have become feasible only as the real costs of information declined and the efficiency of

the, increasingly de-regulated, international financial markets grew. A milestone was reached in the mid-1980s, when the volume of international production for the first time exceeded the volume of international trade<sup>8</sup>.

The growth has been uneven: major industries have been affected by the globalisation trend at different times and for different reasons. Exhibit 5 is a gross simplification of reality, but it indicates that the process has been going on for many decades, involving progressively more sectors. Indeed, it is becoming difficult to identify a major industry where a purely national position is defensible any longer. Moreover, the form of global competition for those industries that were affected earliest has continued to shift. Changes in the impact of labour costs and the other factors identified in Exhibit 5 can act together to alter the relative importance of trade and FDI in any one sector. In electronics, for example, a good deal of the early internationalisation by US and European firms, such as Philips, emphasized FDI. Later on, the then-new Japanese entrants changed the 'rules' to emphasize trade for as long as possible. Today, the threat of protectionism, combined with further technical advance, has begun to swing the pendulum back towards FDI.

Three critical developments were needed to spur these innovations. One was the impact of information and transport technologies on lowering the real costs -- and risks -- of managing at a distance. A second has been the creation of new technologies that have altered the scale needed for efficient operation. Yet another has been the fragmentation of demand as customers and consumers in industrial and consumer markets have demanded an ever greater variety of products and services. Though it is possible that demand for variety was always present, such demand can now be supplied by those firms that have invested in supply 'systems' and the accompanying managerial processes that reduce the cost of supplying variety. Failure to invest in the new systems, as can be seen in many European firms, has been one of the prime causes of erstwhile industry leaders losing competitive position.

Critical in the current **dynamic** of change is the role of technology in shortening lead times for new product introduction and altering the scale needed for efficient operation. For example, some models of hand calculators are on the market today for six months or less, whereas a life of several years or more was common during the early 1970s. Siemens-Nixdorf has succeeded in cutting the development time for a software project from one year to seven weeks, thus enabling the firm to regain some of the ground lost earlier to the more fleet-of-foot Japanese. Shrinking lead times and the possibilities of widening the product range made by flexible manufacturing systems adds considerable complexity to the operation.

Even though new technology has lowered the minimum-efficient scale in many factories, it has usually increased the need for large scale elsewhere in the firm. Smaller plants can be geographically dispersed, but they need to be linked together by costly systems of information and control. The factories have to be linked more closely to the markets, otherwise the advantages of better factory management would be eroded by inefficiencies in the total supply system. For example, Ford of Europe spent over \$1.5 billion during the early 1980s to improve its European network.

Exhibit 6 sketches the concept of the two parallel supply networks being developed. Where global scale in knowledge systems has advantage, resources are created as a corporate good and managed on an integrated inter-regional basis. Simultaneously, where national or regional differences in demand or factor costs make global integration costly and inflexible, other networks are managed on a national or intra-regional basis. These concern production, selling and service operations. Exhibit 6 is merely notional; in practice the distinctions are not so clear. Where demand is homogeneous at the global level, as for many automobile and electronic components, corporate resources and supply facilities are managed on an integrated basis. Thus some inter-regional trade in goods is possible. The evidence, however, suggests that the differences between the two types of network are becoming more pronounced.

Taken together, firms' innovations in strategy and organisation suggest strongly that globalisation no longer means standardisation of products; no longer means solely the integration of trading systems; and no longer means centralisation. Different strategic approaches are employed in different countries, reflecting different factor costs, competitive structures, demand and distribution patterns, and so on. Firms like Motorola of the USA and International Paint of the UK can **simultaneously** pursue strategies of low-cost penetration in some countries; premium positions in others; and technology alliances in yet others. Increasingly, global competition can be regarded as a race to develop organisational competence, to capture the available technical possibilities and to accumulate skill-based resources faster than others so as to manage the ensuing complexities effectively. Many European firms, long reliant on strong, autonomous national subsidiaries even within Europe, are finding themselves disadvantaged in this race: before creating the required networks of control they first have to overcome severe internal resistance from managers who fear a loss of autonomy and power.

## Trade policy

The new economics of global competition make trade policy a regulatory weapon of decreasing power in many sectors. The impact of the emerging parallel supply networks in altering the basis of oligopolistic competition is such that they even call into question conventional balance-of-payments measures of national competitiveness (Julius, 1990). Further, there is evidence that much of the trade in manufactured goods has long been internal to the multinationals in the form of inter-affiliate trade<sup>9</sup>. These internal transfers are less sensitive to exchange rate shifts than third-party transfers, though they are exposed to the risks and costs of tariff and non-tariff obstacles, plus changes in competition. Adjustments during the 1980s, though not fully understood in their generality, indicate that such 'captive' trade has been increasing<sup>10</sup>.

A further consideration is the extent to which management reacts to trade protection. There is evidence that many European firms, especially the British, have responded by increasing dividends, not by making the needed long-term investments (see, for example, Sharp, 1986). The experience of European electronics shows how protectionism has alleviated, but not cured the problem of loss of competitiveness in trade-sensitive industries. European prices for computers and workstations are 40-

50 per cent above world prices, a difference far greater than what might be expected from the external tariff. Protection may keep European firms in business, but may also reduce their ability to export outside the region. Europe has a declining index of trade specialisation, whereas the USA and Japan are becoming more specialised (Fouquin, 1991). One possible explanation is that Europe's previously strong exporting sectors are becoming weaker and no newcomers are emerging to offset the decline.

Under these circumstances, the effectiveness of Brussels' concentration on developing an EC-wide approach to commercial policy, for which the main instrument of control is trade policy, is questionable. There are two issues. First is whether the EC Commission can use its exclusive powers, under Article 113 of the Treaty of Rome, to develop an effective policy at all. Member states maintain over 1000 national, quantitative import restrictions. Most of these are aimed at state-trading countries and Asian exporters, including specific restrictions on the Japanese. Eliminating national restrictions will be difficult: some preceded accession to the Community and are subject to grandfather clauses; others are part of more general agreements such as the Multifiber Arrangement (MFA); yet others affect issues of national political salience that make Brussels' demands difficult to accommodate.

Most experts agree that a trade regime, by itself, will not be sufficient to promote a greater European presence in the most globally competitive industries. Lawrence (1991) suggests that GATT-type negotiations are no more than efforts to solve problems at the border; 1992 concerns issues of 'deep integration' that go beyond border problems. Thus, the second issue concerns the nature and extent of all the other possible changes needed to build a continent-wide climate of competitiveness. Continuing state intervention on such matters as pricing (as for semi-conductor memories), state subsidies for loss-making enterprises (as the French support for its computer firm, Bull) and the interpretation of the 'local content' and anti-dumping rules all impede price competition. The related agendas of harmonising technical standards and of dealing with the TRIPS and TRIMS debates are also important. Furthermore, adjustment within the firm is vital. Here, government can help only indirectly, by the provision of such benefits as education, efficient infrastructure and the like; fundamentally it is up to managers to lead the way.

The 1992 programme and associated policy shifts have two quite different effects on firms and industries; one concerns the extent of the adjustment within the Community; the other affects the 'external' relationships with non-EC competitors. Exhibit 7 illustrates the extent of the differences for some industries. The diagram is purely notional, even though it is based in part on many careful attempts systematically to measure the differences and on the EC Commission's identification of particularly threatened sectors<sup>11</sup>. Some industries like chemicals and ball-bearings had adjusted both to regional economics and global competition well before the 1992 programme was launched in 1985. Others, like retail banking, long affected by national regulation, have substantial internal adjustments to make, but relatively little external adjustment. Yet others, like telecommunications and most segments of electronics, are affected both externally and internally.

Perhaps of even greater concern for trade policy analysis is the emergence of 'transplants' in multinationals' supply systems. In the automobile and computer

industries, for example, these have unit costs noticeably below the local producers' and can be managed to respond to trade policy shifts in ways that are simply not open to those who operate only within Europe, or even a single nation. The options opened up by these new systems suggest that attention needs to be focused on the relative position of firms and how managers are exploiting strength to choose where in the world they add value in their systems.



## ASSESSING THE STRENGTH OF EUROPEAN INDUSTRIES

It might be inferred from these general arguments that the new globalisation always heightens the advantages of the leaders by raising the resource costs. Global competition typically means that only a few players can hope to remain profitable and thus able to finance the needed offensive, resource-building investments. Yet it is not always today's leaders that win the competitive battles. The ability of many Japanese to come from behind in so many industries and assume leadership by changing the 'rules' shows that it is possible to overcome initial resource disadvantages. So too, for Europeans, though fewer have so far succeeded in the major industries. Michelin (in tyres) and Bekaert (in steel cord for radial tyres) are notable exceptions; both have emphasized FDI and global networks of intelligence.

The experience of one small European firm makes the point. Over a fifteen-year period, the Edwards High Vacuum company in Britain emerged from relative obscurity in the vacuum equipment business to assume one of the leading global positions (ahead of the Japanese, but behind Leybold in Germany). In so doing, the company claims to have spent just as much on managerial recruitment and training for all employees as it has on plant and equipment, as well as multiplying its (continuing) conventionally-defined capital budget several times in real terms over its 1970s levels. Weaker firms that have failed to make equivalent investments have been driven from the industry. Edwards also illustrates how the development of a global position has required a shift away from earlier reliance on exporting from the home base and the creation of intra-regional supply networks, linked together by inter-regional systems. European demand is supplied from the UK and Italy; the USA is now served locally (replacing earlier exports from the UK); and the Japanese and far eastern markets are being served increasingly from a combination of local and US sources<sup>12</sup>.

Weak European firms can attempt to emulate such success. To do so, most will have to make far-reaching internal adjustments, not least in their attitudes to risk and the extent of their ambition. Purely defensive responses, dependent upon indefinitely continuing protection, will not be enough. Moreover, defensive, resource-sparing alliances may also, by themselves, be insufficient to stave off eventual eclipse<sup>13</sup>. It is not certain, for example, that the Rover Group can survive without a further deepening of its dependence on Honda, despite the financial resources of its parent, British Aerospace. Chrysler in the USA also looks vulnerable and a candidate to follow the fate of many erstwhile industry leaders who could not stand the pace and the cost of change brought about by the erosion of previously 'protected' national or regional positions.

Though a high share of the world market is no guarantee of continuing leadership, it is a great help in providing the potential for future gain. Lacking reliable data for world market shares, a rough proxy is the relative shares held by the twelve largest firms. Franko (1989, 1991) has provided such data on the 30-year trend up to 1990 for various industries, some of which are shown in Exhibit 8<sup>14</sup>. The growing European leadership in chemicals contrasts starkly with losses of share elsewhere. In automobiles, the gains achieved during the 1960s and 1970s could not be sustained

during the 1980s. The figures shown in Exhibit 8 for automobiles understate the problem, for they do not take into account the fact that much of the European firms' volume lies within Europe and that their share of non-EC markets has been declining. In textiles, the decline has been modest. If, however, apparel were to be included, the decline would resemble a collapse in the face of new competitors, not only from the Far East but also from Turkey and neighbouring countries. Though the figures do not capture the difference in the performance of growth companies like Benetton from Italy from the experience of erstwhile leaders like Courtaulds in the UK, they are quite consistent with the sense of threat that pervades the European textile industry (Cline, 1987).

The data in Exhibit 8 indicate no more than the position of the leading firms; they do not indicate the totality of the industry, nor the competitiveness of firms in individual segments, nor yet the location of the output. Nonetheless they suggest the trend in the fortunes of the leaders, classified by the location of the parent company. To explore the issues further, a more detailed look at these industries is needed.

## **Automobiles**

The mass-market automobile industry is a classic case of where the development of global systems has fundamentally altered the rules of competition. Not only has demand for variety increased sharply around the world but also advances in production technology have transformed production possibilities profitably to supply variety and to accelerate the pace of new model introduction. The Japanese leaders in the new systems have gained market share at the expense of the earlier leaders in the USA and Europe. The average model-life of a European car is now 12 years, while that of a Japanese one is 4½ years and falling.

Just how great are the changes is shown clearly by Womack *et al.* (1990). Exhibit 9 provides some measures of how costs have been reduced and time-scales collapsed in the new Japanese 'lean' system of production. The effect of these advantages in terms of productivity and quality is shown in Exhibit 10. Most revealing, for the purposes of indicating the possibilities of divorcing the costs of operation from national factor costs, is the advantage of the Japanese transplants in the USA over Ford and GM in their own backyard, and, to a lesser degree, of the transplants operating in Europe. Womack *et al.* provide convincing data to indicate that the success of the Japanese 'lean' system has depended critically on shifts in managerial attitudes and practices to make it transferrable across borders.

The European industry developed under conditions of high national protection that created many barriers across Europe and inhibited the attainment of continental-scale efficiencies (Pearce and Sutton, 1985). The 1992 developments are, to be sure, designed to remove such barriers, but the consequences are likely to add pressures for more mergers and consolidation of the industry and to decrease trading margins at the very time that greater capital spending is needed (Waverman, 1991). These internal adjustments exacerbate the sense of external threat and appear to be making the European industry more inward-looking and prone to divert resources away from other territories.

Consider first the issue of trade regulation. Official EC policy has been to stabilise imports from Japan until 1992 and to moderate imports thereafter in a period of transition during which pressure will be applied to gain reciprocal access to the Japanese market<sup>15</sup>. Under Article 115 of the Treaty of Rome, EC countries have been permitted to limit imports from Japan. In 1988, Japan's voluntary export restraint of automobiles into the EC was 1.21 million cars. Italy's quota, approved by the GATT, limits imports to 3300 units. In France, the quota is less than 3 per cent of total sales, while in the UK imports are limited to about 11 per cent of the market. There are also bilateral controls operating in Portugal and Spain. Elsewhere in Europe, where there are no such restraints, the Japanese now command market shares as high as 40 per cent. Protectionism, it would seem, has served merely to preserve some national shares but failed to provide the spur for the protected firms to hold on to share even in neighbouring EC countries.

National policy responses have also varied with respect to local-content regulations and the duration of transitional arrangements needed to allow EC producers to become more competitive<sup>16</sup>. At the heart of the local-content debate is a dispute about the application of the previously informal 60 per cent guideline to the Japanese 'transplants', mainly located in the UK. Even though Article 5 of the 802/68 EC regulation applies to automobiles<sup>17</sup>, the French have argued for at least an 80 per cent local content before free EC-wide circulation can be permitted. The UK has also favoured an 80 per cent level, but has argued that a period of transition should be used to allow the new Japanese facilities to work up to that level.

Though all European producers -- whether indigenous or US transplants -- feel threatened by the Japanese, there has been much debate about the form and duration of any transitional arrangements that would eventually abolish the present protective trade barriers. The industry's lobby body was effectively disbanded in November, 1990, when M. Calvet, the chairman of Peugeot, remained implacably opposed to any reduction of the trade barriers and to a proposal that the CCMC move from unanimity to majority voting for proposals submitted to the Commission. He took the position that 'no group chairman should have the right to take part in a majority vote on matters that could jeopardise the life of his company'<sup>18</sup>. A new body, the Association des Constructeurs Européens d'Automobiles (ACEA), was created in 1991. It is noticeable that the US producers, GM and Ford, are included in the ACEA. Perhaps by virtue of their extensive European networks and their long-standing presence, they are regarded as insiders. Only the Japanese newcomers are excluded.

By the end of July, 1991, the ACEA and the Commission agreed on a plan that would allow Japan's share of the EC market for cars and light vans to rise from 11 per cent to 16 per cent by 1999. Direct imports from Japan were to be frozen; any expansion was to be supplied by the transplants. Even though many technical issues remained unclear -- how, for example, to treat imports from Japan's transplants in the USA -- ACEA members seemed prepared to take the gamble that they could catch up sufficiently within the eight years to take on the Japanese without further protection. By mid-September, 1991, however, the Japanese remained opposed to any such binding arrangement.

One particularly interesting aspect of the plan is that it has changed the nature of the debate by explicitly raising the issue of ownership. Why should European authorities be concerned with nationality rather than the location of value-added? This question is reviewed later in the discussion of the electronics industry, where the definition of what constitutes a 'national' player is even more troublesome than it is for automobiles.

The 'transplants' in the European industry demonstrate how both regional and global networks of supply confuse the issue of 'nationality'. Ford and GM have built up extensive networks for intra-regional supply. They have also developed some inter-regional supply. For example, GM's UK-assembled Vauxhall Cavalier had only 56.5 per cent of its manufacturing cost in the UK in 1986: the rest came from Germany (28.5 per cent), Australia (10 per cent, engine) and Japan (5 per cent, gear box) (Page, 1986). A related issue is that the success of transferring 'system' approaches across regions is critically dependent on local collaboration. To that extent, the relative inefficiencies of European parts suppliers can be seen as drag against the emergence of greater export competitiveness outside Europe (Boston Consulting Group, 1991).

All the European mass-market producers (Mercedes-Benz, for example, is excluded) appear to be concentrating on a Europe-first strategy. They have emphasized system developments within the continent and, recently, an extension of that system to Eastern Europe. Exhibit 11 shows the extent of the concentration of their sales within Europe. In terms of the locus of production, the concentration is even greater. For example, Peugeot had only about 1 per cent of its production outside Europe. That tendency to look inwards has been increasing in recent years.

The recent actions of VW, the volume leader within Europe and the most territorially diversified firm outside Europe, illustrate the nature of the challenge. Up to the mid-1980s, VW had been building an elaborate system of linked supply across regional boundaries (though remaining insignificant in Asia). An indication of the extent of the network is shown in Exhibit 12.

Despite, or perhaps because of its growing European leadership, VW has been slowly reducing the relative importance of its non-European investments. Their major operation in Brazil was merged with Ford's in 1986 to form AutoLatina. In 1988, VW disbanded its US assembly facilities and transferred much of the supply to cheaper sources in Mexico. Though VW announced plans to spend DM 1.5 billion in Mexico during 1990-95, various investment projects there are reported to have been cancelled.

These partial disengagements happened during a period when VW was spending heavily in Europe. SEAT in Spain was bought in 1986. More recently, VW outbid Renault to buy a majority stake in Skoda in Czechoslovakia and has spent about \$500 million in eastern Germany. VW's European investment 'offensive' has been reported as a DM 50 billion plan to create a production capacity of 4 million cars/year by 1995. This plan includes a DM 10 billion expansion and model development programme in Spain, the establishment of a new \$2.8 billion export source in Portugal (jointly with Ford), as well as heavy investment in Czechoslovakia,

where export-oriented production of the Passat model is scheduled for 1993, together with production of about 10 per cent of VW's worldwide gearbox requirements.

Judged from the outside, it cannot be 'proved' that VW has rationed capital to divert resources to Europe. VW has argued publicly that its internal cash flow is sufficient to finance all planned expansions. Others, like Nomura, have estimated that borrowings of up to \$15 billion will be needed. Whatever the real financial position will turn out to be, all of the recent actions strongly suggest that VW sees its future more as a regional, not a global, assembler.

Fiat is even more strongly a Europe-first player in the industry. Though it holds about 14 per cent of the European market, Fiat relies heavily on its protected position as the dominant producer in Italy. Fiat has sharply reduced its non-European sales during the 1980s. It withdrew from the USA in 1983 (and sells there through Chrysler) and has reduced its operations in Argentina and Brazil. Fiat's European presence was expanded when it bought Alfa-Romeo in 1986<sup>19</sup>. Even so, there have remained questions about its continued independence: it has sought but failed to merge its automobile operations with Ford of Europe. More recently, Fiat has announced plans to spend more than \$7 billion in the Soviet Union and Poland (and an equal amount in the south of Italy). The eastern plant expansions represent a deepening of relationships that started with licensing agreements, first signed in Poland in 1948; now they involve equity capital and greater financial exposure. The Eastern investments are unlikely to produce cash flow and profits for some years, raising some speculation in the industry that Fiat and Peugeot might feel impelled to reopen the talks they have had earlier about joint ventures. But, in an industry where global scale in knowledge and 'systems' seem so important, such a merger merely combines relative global weakness -- just as the failed Dunlop-Pirelli did in tyres.

Noticeable within the industry is the movement of resources to Spain. Not only has VW increased its involvement there, but also Ford and GM have built large billion-dollar assembly plants to supply the rest of Europe. In addition, the Japanese presence has been increased. These investments were made either in anticipation of Spain's accession to the EC or shortly thereafter. Low labour costs and adequate levels of skill, combined with ready access to the wider market have made Spain (and more recently Portugal) a newly important magnet pulling the centre of gravity of the industry southwards. In this shift, the role of local suppliers to support the efficiency of the transplants will be critical for the maintenance of the present momentum. Precisely the same question affects the development of regional networks in developing countries.

## **Electronics**

Despite the fact that almost all segments of electronics are global in scope, most of Europe's leading players remain predominantly oriented to their own backyard, as Exhibit 13 shows. Furthermore, most producers emphasize their home markets; only a few firms like Bang and Olufsen in Denmark and Amstrad in the UK have managed to create specialist, continental niches. Few have captured extensive volumes outside Europe, though Thomson of France is a notable exception in consumer electronics. Moreover, in many cases, such as GEC, much of the non-

European volume is in electrical equipment rather than electronics. Even Philips, the largest firm and one of the most territorially spread, suffers from persistent lack of profitability and is currently undergoing massive surgery to cut costs. This is a European industry under threat, on the defensive and populated with a shoal of minnows competing with the global whales. One consequence has been the creation of large Euro trade deficits: \$17 billion in consumer electronics and \$10 billion in computers.

The globalisation of the industry is well known and need not be described in detail here<sup>20</sup>. It has happened rapidly, fuelled by advances in technology, the adoption of open systems and the proliferation of alliances. For instance, when the 256K chip was introduced in 1986, many thought this would be the lasting standard, only to find that Fujitsu and Toshiba introduced a 1MB chip in 1988. As so often, Europe has been left behind: the JESSI project for technical co-operation is still working on trial production of its own 1MB chip, though Philips announced in early 1991 that it was pulling out of the venture. Europe's share of world semi-conductor production has fallen from 22 per cent in 1978 to about 10 per cent in 1990 and much of that production was unprofitable.

The extent of protection, direct or indirect, is considerable. Just as Porter (1990) could argue the general case for abandoning government subsidies and national champions, so the European electronics industry seems to provide case evidence for the proposition that the cushioning effect of protection blunts the drive for competitiveness. Despite high European prices, as noted earlier, most European producers are in financial difficulty and France has provided Bull with a massive subsidy to keep it in business after huge losses in 1990. Only the non-European suppliers seem to be able to benefit from the price umbrella. IBM, for example, earned two-thirds of its total 1989 net income in Europe, benefitting considerably from its well-developed world system that has lowered its European costs below that of the locals<sup>21</sup>.

Government purchases from favoured local suppliers is one cause for the blunted response to world competition. Another is the extensive government support for collaborative research in a proliferation of programmes like ESPRIT (information technology), RACE (broadband communications) and JESSI (micro-chips). Even with a budget of Ecu 5.7 billion for the period 1990-1994, little has been achieved to catch up with the leaders. The issue now seems to be less that of throwing money at the problem, but of getting proven technologies into operation more quickly and with fewer resource costs.

These circumstances have bred great dissent among producers, within government and between industry and government. Consider, for example, the issue of setting a common standard for the continental telecommunications system. To help realise greater internal efficiencies from 1993 onwards, the Brussels Commissioner for Research called for a 'European nervous system' to permit the inter-operability of the national communications systems. But free-traders, such as the Commissioner for Competition Policy, objected to the protectionist overtones of the proposals. Moreover, opponents of centrally controlled development have pointed to the effect of high prices in slowing down the rate at which demand can grow to fuel further innovation. UNICE,

the industry lobby, is opposed to a single system, arguing the need for flexibility to allow everyone a chance to benefit.

Simultaneously, there have been moves to shift the priorities for Information Technology from control to support. Without additional funding, the Commission proposed in 1991 a five-point action plan: member states are encouraged to improve their connections in public data bases (e.g. tax); second-generation R&D projects; multi-disciplinary training; equal access to be sought by multi- and bi-lateral agreement; and accelerated harmonisation of technical standards. Many in the industry, however, have considered the plan to be too weak to do much.

Dissent is further confused by arguments about the extent to which ownership of Europe-based assets now matters. In the wake of Fujitsu's purchase of ICL, there are Japanophobe voices raised to warn against the possibilities of further purchases that would reinforce Japan's already dominant positions. ICL has been ejected from the European IT Roundtable and its membership of JESSI, even though it seems as "European" as the remaining members both in strategic terms and in terms of where it adds value.

Competitive imperatives have made it increasingly difficult to define what constitutes a European firm. Almost all of the largest European electronic firms are dependent in one way or another on alliances with non-EC competitors. Siemens buys its mainframes from Fujitsu and is developing its D-ram chips with IBM. Olivetti has had numerous alliances with AT&T and Japanese producers such as Hitachi. Thomson is reliant on JVC for many of the critical technologies in consumer electronics. As one senior official in Olivetti put it:

"In the 1990s, competition will no longer be between individual companies but between new, complex corporate groupings. A company's competitive position no longer (solely) depends on its internal capabilities; it also depends on the type of relationships it has been able to establish with other firms and the scope of those relationships"<sup>22</sup>.

The implication is that the electronics industry in Europe is not the same thing as the European electronics industry and that the focus of the debate should be on creating conditions that enhance Europe's value-adding capability, regardless of ownership. Proponents of such an argument point to the fact that, for example, IBM's added value within Europe (both absolutely and proportionately) has long been greater than that of national champions. Yet, many in industry and government would disagree. Ownership matters, they maintain, because it shapes future prospects in any one region: firms give preference to the home territory, making the burden of adjustment to adverse trading conditions fall at the periphery of the system. And where there is weakness, the effect of inter-regional trading networks in the alliances adds to Europe's trade deficit.

The weakness of the industry as a whole creates a dilemma that seems incapable of solution by rationality alone. None of the obvious options is wholly satisfactory. Further protection shows no sign of arresting the decline and would

merely maintain higher prices. Forced inward investment by the importers would threaten the incumbents more directly and heighten the debate about the consequences of a collapse of a European player. A measure of the dilemma is provided by the Commission regulation [No. 288/89, OJL 33, of 4.2.89] that requires the diffusion process for semi-conductor manufacture to be located in a member state to guarantee free EC circulation of the output. Many regard this as unduly restrictive and likely to lead to inefficiency. Selective encouragement for some segments does not appear to have helped in the past, because of technical changes that erode the protectability of the segment 'boundaries'. Moreover, merging disparate European units into a single entity to gain greater scale does not provide a clear solution. For example, Thomson's proposal to merge much of the chip-making capability was opposed by Siemens and Philips on the grounds that such integration would merely serve to reduce the impetus for further development. Besides, Siemens announced in July, 1991 that it was merging its interests in next-generation chip development with those of IBM. This move underscores the fact that attempts to create a centrally planned future will be overtaken by events: it is a case of *saive qui peut*.

The sense of dilemma can cause leading industrialists to make inconsistent statements. For example, one top official in Philips, the troubled leader at the centre of the storm, re-affirmed his support for free trade, but then went on to argue for policies that would 'oblige governments to buy European' (van der Klugt, 1986). Moreover, Philips successfully argued for European price protection for video tape recorders to maintain inefficient local production. The extra margins awarded to the Japanese had the perverse effect of adding to their cash-flow capability to fund the development of next-generation products. With a \$50 premium on each of over 10 million units, the windfall gain has been of great benefit to the Japanese.

Though the threat to European electronics is great, the position is not unremittingly bleak. Some, like Thomson of France and Racal in Britain, are clearly determined to maintain an aggressive stance outside Europe. As shown earlier in Exhibit 13, both are highly diversified by territory and have escaped much of the European 'trap'. For Racal, much of the growth has been an organic development of their cellular telecoms technology. For Thomson, the story is more complicated.

For consumer electronics, one of the hardest-hit segments, Thomson's divisional chief executive could say of their recent acquisitive growth "the advantage is that we are a real multinational, with 40 plants in 17 countries ... The major strategic issue for me is (now) to develop a corporate spirit throughout the company, in order to integrate so many different corporate and national cultures". The purchase of the RCA and GE assets in the USA added vital scale for the development of 'system' resources. Even so, Thomson's production has developed on a regional basis in a form resembling that shown earlier in Exhibit 6. The output of four highly specialised plants is cross-shipped within Europe. A separate organisation serves North America, where Thomson has established a network of local suppliers and sub-assemblers, mainly in Mexico. Both regions are supplied with key components from an expanding supply base in Singapore, where Thomson has invested heavily to bring in-house the benefits of its technology alliance with JVC and to escape from indefinite reliance on JVC.



Thomson's pattern of regional concentration has adjusted, as has VW's, to permit the growth of inter-regional trade in key components for which the benefits of global specialisation still outweigh the costs. Those benefits are reputedly augmented by Thomson being tacitly permitted to count some of its component imports into Europe as part of its local added value and so escape import restrictions. Thomson's position is so different from, say, Philip's, that it can negotiate from greater strength. Small wonder that where European fortunes are so divergent within an industry the lobby pressure in Brussels seems so inconsistent.

## Textiles

The textile industry is already heavily protected under the provisions of MFA IV<sup>23</sup>, which were extended to the end of 1992 from the original expiry date in July 1991. In part, this extension reflects the difficulty of reaching international agreement while the GATT arrangements remain unclear. In this fragmented industry there seems little chance that the current protectionist sentiments among developed-country producers, who greeted the extension with relief, will be eased. Yet, even under the most favourable assumptions for both the GATT and the future of the MFA, analysts seem agreed that developing country textile suppliers will gain relatively little from liberalisation alone (Davenport, 1990). As in many other industries, the significant gains will accrue only to those firms that invest in building firm-specific resources.

Though only the synthetic fibre segment of the industry has become global in the normal meaning of the term, many of the garment segments exhibit the characteristics of a global industry in terms of the development of systems that can handle the simultaneous challenges of consumer demands for variety and technological change in weaving and knitting. These developments have acted to change the barriers that have previously separated different segments and to alter the effect of trade protection on production possibility. One study of the knitwear segment has shown that the threat to UK and German producers has not come principally from low-wage countries but from Italy (Stopford and Baden-Fuller, 1990b). In many instances, managers failed to recognise the sources of the changed economics and therefore blamed the wrong causes of their difficulties. The implication is that policy makers should not necessarily believe what the industry tells them.

For much of the garment industry, the sustained success of Italian producers cannot wholly be explained by the protection afforded by the MFA and other policies. These producers are, however, unusual in the sense that much of Italy's exports come from constellations of small producers, linked together in cooperatives of varying degrees of formality<sup>24</sup>. Individually, the firms cannot command the system scale needed for success, but combined they gain scale without losing flexibility. Only a few large competitors like Benetton, GPT and Stephanel have developed their systems to emulate the cooperatives. But, they too are having continuously to upgrade their systems in the face of growing competition from the Far East.

The garment industry is one where external trade protection has **not** stultified innovative competition within Europe. Yet the source of innovation among small firms may limit its further development to take advantage of international opportunities. Most of the firms depend upon the close proximity of others to gain competitiveness;

they cannot extend far afield independently. Only a few command sufficient corporate resources to act independently.

The configuration of the garment industry and the effectiveness of local networks are such that out-sourcing arrangements in developing countries are both practical and already widely employed. Virtually all the major European producers have years of experience with contract suppliers around the Mediterranean basin and elsewhere<sup>25</sup>. The growing importance of proximity is underscored in data about the exports to Europe from what the World Bank calls the EMENA countries -- developing countries around the Mediterranean, plus a few others. Balassa (1989) assembled data to show that textiles, apparel and leather products accounted for nearly \$9 billion, about half of the exports from these countries to the EC in 1987. Their share of total EC imports in the industry had risen from 8.1 per cent in 1981 to 11.6 per cent in 1987, largely at the expense of imports from the far east, whose share had dropped to 9.9 per cent. In addition, EMENA exports to the EC of these products were twice as large as exports to all other countries. The significance of such data should not be overstated, for much of the increase has been from a few countries like Turkey, while trade with the former socialist countries had declined. Nonetheless, the trends are consistent with the general hypotheses of this paper.

There are no indications, however, that the current structures and practices would be significantly affected by greater regionalisation -- unless, that is, the MFA is finally abolished when the current arrangements expire at the end of 1992. Not surprisingly, the industry is opposed to such an outcome: ELTAC, the association of Europe's largest producers has proposed a gradual phasing out of MFA IV over fifteen years so as to allow sufficient time for the extensive internal adjustments to be made. As Turkish and other newly entering firms gains the skills required to compete on design as much as on cost, European incumbents need equivalent investment to stay ahead and to exploit their even greater proximity to consumers.

### **The stronger sectors**

Earlier on, the data indicated Europe's rich endowment of strong competitors in chemicals, consumer goods, petroleum and pharmaceuticals. All four sectors emphasize FDI, though trade is also important. All four are also where European firms have maintained or built up positions of technological or brand leadership. Though 1992 requires considerable adjustment, especially in pharmaceuticals, leading firms are financially capable of pressing ahead with regional change and simultaneously continuing to expand elsewhere in the world. Their policies of adjustment, therefore appear to be broadly additive, not substitutive. Perhaps reflecting the confidence that is bred of strength, they have mostly been absent from the public debate over European protectionism.

In view of the limited scope of the paper, the discussion is restricted to only a few issues that these sectors (excluding petroleum) have in common and that bear on the themes of the analysis: the wide differences of circumstance are ignored. The first is that present strength does not guarantee future success: global competition is forcing the pace of further adjustment by requiring ever-greater corporate-wide scale. In pharmaceuticals, for example, mergers have been important in recent years, though

relatively few have occurred within Europe. In order to gain both scale and scope advantages, as in electronics, leading Europeans have been merging with or buying US competitors. The difference is that European pharmaceutical firms have typically been the stronger of the partners. Exhibit 14 shows just how wide has been the spread of sales outside Europe for the leaders. In recent years, Beecham has merged with SmithKline, Roche bought Genentech and Rhône-Poulenc merged its pharmaceutical division with Rorer to form a 68 per cent-owned, free-standing world-class player. In addition, there has been a proliferation of alliances to allow access to a range of technologies that even the largest firms cannot afford alone. Scale and scope requirements have also led to mergers among consumer goods firms, for which many brand and distribution advantages can come from combination<sup>26</sup>.

The European chemical industry has had to weather a series of crises during the 1980s<sup>27</sup>. Persistent overcapacity, depressed margins -- even to the extent that during the recession of the early 1980s, the entire sector in France and Italy traded at a loss (Albert and Ball, 1984, ch. 1) -- and the internal fragmentation of the European market initially placed European firms at a disadvantage in the worldwide restructuring that ensued (Bower, 1986). There had to be a series of, often painful, rationalisations, mergers and product swaps that pushed out many of the weaker players. Though Brussels played a role in affecting how these moves were accomplished, one can surmise that, because European firms were so internationally strong, the crisis could be weathered successfully and the international position actually increased during the industry recovery at the end of the decade. The data shown earlier in Exhibit 8 and amplified in Exhibit 15 provide some indicators of that strength. Managerial and technological strengths allowed the adjustments to be accommodated without the penalty of engendering inward-looking protectionism.

That strength has also affected how the European industry has adjusted to the possibilities that non-traditional producers, such as Saudi Arabia, would be able to use their oil resources as a lever to change the existing structure. Vertical integration has permitted the chemical divisions of many of the oil majors, such as Shell, to enjoy the advantages of secure feedstock supplies, to draw on the financial resources of their parents during periods of adverse cyclicalities and to gain share in many of the segments of OECD markets. As it has turned out, however, developing countries as a whole could only increase their share of exports from 4.6 per cent in 1970 to 7.1 per cent in 1983 (UNIDO, 1985), with little growth thereafter. Rather than Europe becoming the dumping ground for surplus capacity in the oil states, the oil states have remained liable to be used as dumping grounds for the excess capacity in OECD countries. Growth has been inhibited by a lack of access to critical processing technologies, even though plant construction firms have long acted as agents for technical transfer.

## IMPLICATIONS FOR DEVELOPING COUNTRIES

The preceding analysis suggests that developing countries have only a minor strategic role in these industries, apart from sourcing issues in electronics and apparel (and natural resource supplies for petroleum). Global competition has concentrated attention on the richer markets of the so-called 'triad' countries. Yet, the emergence of regional networks linked together by systems of knowledge holds out promise that some European multinationals may play an enhanced role in the development of local resources. This possibility can be illustrated by the attitudes and practices affecting the off-shore procurement policies of both offensive and defensive competitors. The sections that follow examine these implications both generally and in the more specific setting of Eastern Europe.

### Offshore Processing

Early analysis of offshore processing for US multinationals typically concluded that such behaviour was purely defensive and a sign of weakness among firms that lacked innovative capability. But the focus of such analyses was typically restricted to the use of offshore processing to serve the US market<sup>28</sup>. Questions of the development of regional networks were largely ignored. Only more recently have observers considered the offensive use of such sourcing behaviour as part of the response to the new conditions of global competition. As Ohmae (1985) observed, the effect of speeding up development cycles has been fundamentally to alter the trickle-down effects defined in Vernon's now-revised product cycle model (Vernon, 1979): firms can no longer afford to wait for their original innovations to be diffused around the world by market forces. Thus even leading US multinationals are using offshore processing as part of their innovative global strategies (Kotabe, 1990).

European firms, like the Japanese, have used offshore processing offensively in this latter mode for much longer than the Americans (Kotabe and Omura, 1989), even though the available but scanty data suggest that 'captive' imports to serve the home market have been used less extensively. The difference is, in part, related to the wider phenomenon of the use of the so-called New Forms of Investment (NFI). As Oman (1989) has shown so vividly, firms in less technically advanced sectors or firms that are followers in their industries are more prone to use NFI arrangements as one means of sharing the resource requirements with others. In these respects, European practice seems no different to that among many US multinationals (Stopford and Strange, 1991, ch. 5).

The offensive uses of off-shore processing include those of deepening the sense of being an 'insider' in key territories and thus gaining all available political benefits, just as the US automobile producers have achieved within the EC. They are also important in keeping options open for future competitiveness by gaining access to more locations and more partners. The defensive uses are those of seeking to reduce costs and to let others spend money on research, even at the risk of creating future supply dependency, as is the case for Rover and ICL in the UK.

How these two alternatives affect developing countries is illustrated by the automobile industry in Brazil, where assembly is almost exclusively in the hands of the multinationals. Parts suppliers are, by contrast, predominantly local. The difference can be explained only in part by regulation and Brazil's use of the Law of Similar to develop this industry. Equally important has been the ability of major firms like GM efficiently to transfer technology to independent suppliers and to gain cost savings that might not otherwise have been obtainable<sup>29</sup>. In addition, the development of the knowledge network within multinationals can be extended to include external suppliers. In developed countries, Ford requires many of its components suppliers to be linked into its computer-controlled control and information. In developing countries that practice is less exploited, but is increasingly feasible. In Brazil, such intimacy in operations has been constrained by the Informatics Law. Now that the Law is being liberalised, new horizons to expand the export flows already achieved by Autolatina and others are being opened up. Such possibilities are, however, much lesser for those suppliers reliant on weaker players like Fiat that have been reducing their investments in the country. Moreover, as the data shown earlier in Exhibit 10 indicated, progress in the assembly stage will depend critically on how fast local producers can upgrade their technological investments and managerial practices.

The implication is that developing countries would do well to consider the relative competitive strength of those with whom they do business. They should be looking for multinationals that are both innovative and capable of staying the course in the global race for position. They should also be aware of the effects of the growing use of alliances and the consequent difficulties of determining strength solely by inspecting the resources of one legal entity. The key is to find partners in production that, regardless of national origin, can singly or in combination, accumulate the resources needed to sustain policies of offence rather than defence.

## **Eastern Europe**

Whether Eastern Europe will become an extension of European multinationals' 'home' network cannot be answered with any certainty at this stage. It is too early to gauge the full extent of firms' reactions, for many are holding back to wait and see how the political uncertainties might be resolved. Even the investments in the automobile industry do not constitute a trend, though they suggest that 'eastern' investment by globally weak firms can divert resources from the rest of the world.

Theory would suggest that the question of investment diversion should be answered in terms of capital rationing. Subject to the borrowing limits of the corporate entity, all projects expected to earn a risk-adjusted return greater than the cost of capital will attract funding even if the firm has to borrow. The issue, then, is whether European firms can find sufficiently attractive projects. In many cases, it seems clear that the sense of risk outweighs any expectation of return. Where there are attractive projects, theory suggests that they will not divert funds.

There are some grounds for supporting the theory in this application. Many European firms, even some of the now-threatened ones, have accumulated massive 'cash mountains' during the 1980s; a sure sign that management has had either a shortage of attractive investment opportunities or a shortage of ideas. Rather than

pass these funds back to shareholders, many directors are on record as saying that these balances provide a war chest that can be used rapidly when opportunities emerge. Siemens is a good example. Not only is it cash-rich, but it is also an active participant in the industrial reconstruction of eastern Germany. In a recent interview, a senior manager stated that events in the east had not altered the firm's westward-looking strategy of becoming a global company with its core in Europe and a second leg in the USA. Though Siemens has identified the basis for some eastern joint-ventures in core products like telecommunications equipment and power plant (but not electronics), the prevailing sentiment seems to rate the chances of serious profitability as slim. `The Soviet Union will be an interesting market in the long-run. But in the next 10-15 years it won't be much of a market for exports, because of the shortage of hard currency'<sup>30</sup>. Even though Siemens is threatened in many of its core, electronic sectors, it can afford to take such an `additive' view of the eastern possibilities.

In oil, Shell recently stated about Russia that "there is absolutely no doubt that hundreds of billions of dollars will need to be invested in upstream oil and gas development during the coming decade. These major new investments will be required throughout the industry ... to bring them up to the new standards that will be demanded by an increasingly environmentally sensitive and safety conscious world. This will stretch both the available management capability and the contracting and services sector to the limit". There seems equally little doubt that Shell can fund huge eastern projects, but will not do so at the expense of its existing strengths in the West. Shell has recently made significant investments in Asia, not least in Singapore where it is now the largest foreign investor. TOTAL and other oil firms have made similar statements<sup>31</sup>.

For relatively weak or cash-constrained firms, however, the opposite conditions of capital rationing apply. The implied substitution of VW's and Fiat's projects are examples. But for them, other attractions may also have tipped the balance. Both talk of developing more closely integrated networks of flexible supply on the larger scale that an enlarged Europe will support. The carrot of the market opportunity, combined with the possibilities of creating enhanced efficiencies for the whole of the European network, is so large a prize that an inward-looking geographical focus on Europe is, perhaps temporarily, more important than global positioning.

The Eastern markets may also affect the policies and attitudes of those European firms that have yet to extend their reach beyond the continent. They may take the view that expanding eastward to build strong networks in a relatively restricted geographical space makes more sense than expanding into more far-flung areas. Talk has, however, exceeded action. According to the International Chamber of Commerce, of the more than 2000 investment agreements signed in the USSR by late 1990, only 150 or so had led to any action. Most of these were in projects that were small in relation to the investors' total capital budgets. Small investments provide a toe-hold that can, among other benefits, provide some learning about local conditions that can be exploited as opportunities arise. For most, however, the possibilities remain just that -- possibilities.

A spur to greater action may come from changes in the trade relations between the EC and its eastern neighbours. In the aftermath of the failed coup in the USSR

during the summer of 1991, the Commission has proposed that many of the restrictions be removed. Specific proposals include removing all curbs on imports of textiles from Czechoslovakia, Poland and Hungary (excluded from the earlier trade deals, because of the sensitivities of adjustment) and greatly reducing the tariffs on many agricultural products. Declining trade barriers and a growing sense of official support for an 'eastern' strategy, might encourage more firms to build stronger supply links.

It is perhaps no accident that developments in the service sectors seem to be ahead of manufacturing in many Eastern European countries. These often, but not always, require lesser resources and can be seen as part of the necessary precondition for building value-adding capability in a backward region. Moreover, investments seldom affect cross-border trade. Are there implications for the development of EC-centred networks of supply that many non-EC firms are leading the way? Such competition might spur some Europeans to take greater risks, as the auto producers have done. Yet, even if this were to happen, few investors seem likely to divert significant resources from the rest of the world.

## CONCLUSIONS

The evidence from seven industries points clearly to a growing divergence in the positions taken by leading EC multinationals in response to shifts in global competition and regionalisation. Where competitive strength is measured at the world level, the strong are able to adjust aggressively to changes within Europe without disturbing their global strategies. The weaker are prone to become more inward-looking and to run the risk that they will continue to lose position relative to more globally oriented competitors. The difference between the strong and the weak is accentuated in those industries that emphasize exports as a means of serving international markets; the weak are especially prone to call for protectionist help from Brussels.

Sectoral imperatives, measured in terms of the relative strategic importance of trade and FDI, appear to have become much more pronounced as the pace of global competitive change has accelerated. Consequently, the impact of nationality on how managers react to change has declined. Though the convergence of policy within sectors is by no means complete, the trend seems strong. One, perhaps symbolic, indicator is Thomson's decision to reflect its recently acquired global status by requiring English to be the language of management, even at home in France.

The impact of these two sides of industry's 'voice' in Brussels is likely, however, to be one-sided. The weak, and particularly weak French firms, are much more vociferous in lobbying both their national governments and Brussels than are most of the strong players. Especially in investment-led industries, the leaders have been relatively silent, reflecting perhaps their confidence and sense of indifference to changes in trade policy. Few have gone as far as British Petroleum, which stated in 1990 that "as an international company, BP's commercial success is crucially dependent on ... the maintenance and enhancement of the GATT-based multilateral trading system". Such asymmetry complicates the lobby position of those industries where both strong and weak firms co-exist and can lead to undue emphasis on trade protection.

Three other factors need to be added to the concern about an asymmetric balance of lobby pressure in Brussels. One is the position of the smaller firms that have been omitted from the discussion. In industries where scale in knowledge-intensive systems has become increasingly important, these smaller firms may feel particularly threatened both by the global changes and by integration within Europe.

A second factor is the stance of national governments on these issues. The British have emphasized the need to attract value-adding investments, as seen in their policies towards the automobile and electronic industries. One observer in Britain could recently predict "that by the year 2000, one in six people in the UK manufacturing sector will work for Japanese firms, while one in four will be employed by EEC firms based outside of the UK"<sup>32</sup>. By contrast, the French and Italians have emphasized the continuing importance of national ownership.



The third factor is the divergence of national response to internal integration. Where the drift to the South has been important, as in automobiles and textiles, Northern labour interests have raised fears about loss of employment; employers in the South have been concerned about the loss of competitiveness. The issues of 'Social Europe' are an inescapable part of the political response to the changing fortunes of the major firms.

So much depends on the managerial abilities of the leading firms to accumulate the needed competitive resources, and it is, therefore, possible to speculate about how sectoral imperatives might influence the evolution of EC and national policies. Liberal trade policies for some sectors, such as consumer goods, can co-exist with more protectionist policies for automobiles and electronics. The difficulty is that such policy responses merely emphasize the negative powers of government to regulate the trade agenda in a world where such powers can be seen of declining importance. More positive responses, such as the putative 'support' policies in electronics, have yet to be determined with any force so far as firms are concerned. Thus, though the responses and the needs of each industry to build world strength may be calculated with some confidence, the eventual actions taken in Brussels seem most likely to be those of compromise.

As for developing countries, it seems on the surface that regionalisation, in particular the 1992 programme, is of relatively little consequence. Nevertheless, the evidence points to two issues that are likely to be of growing salience. One is the impact of the changing economics of global competition on the form of multinationals' dual networks of supply. Heightened attention needs to be paid to the differences between intra-regional networks for the supply of physical goods and the inter-regional networks of knowledge and control. Developing countries are unlikely to succeed in their ambitions to increase trade in the former if they unduly restrict the latter.

The other implication is that in calculating their priorities, developing countries need to adopt policies and practices that make the shifts in global competition work for rather than against their interests. Thus, in seeking to attract foreign direct investment or pursuing other forms of foreign collaboration, developing-country firms and governments need to look at firm-specific capabilities as much as at industries. As Stopford and Strange (1991) demonstrate, developing countries can seek to collaborate actively with firms that are sufficiently strong and durable to continue delivering the desired additions to local resources over long periods.

Moreover, strength and durability do not necessarily mean today's leading firms. Many erstwhile leaders have fallen by the wayside as competition has changed. Developing countries should look for adaptability and willingness to accommodate change at both local and international levels. Deals with weak and inflexible firms, even if they seem to meet short-term national goals, are likely to lead to disappointment. When threatened by global competition, weaker firms divert resources to cope with the most pressing competitive agendas. If they are diverting resources towards Europe, they are diverting resources away from developing countries. Only the stronger and more self-confident firms are likely to adopt the additive policies needed to advance in developed and developing countries simultaneously.

## NOTES

1. For some data on the earlier European preferences, see Franko (1976), Savary (1984), Stopford and Turner (1985) and Onida and Viesti (1988).
2. The extent to which this is possible and how changes occur over time has been the subject of much controversy. For reviews of the alternative interpretations of the data, see, for example, Dunning (1988), Kojima (1990) and Vernon (1979).
3. The export/foreign production ratios shown in Exhibit 1 are estimates based on data from annual reports. The export data refer to exports from the home country. The ratios are thus only a proxy for the balance of effect for serving non-EC markets. Where partial data on the non-EC markets are available, they show a similar ordering of relative importance.
4. For a discussion of the contrasts and some future speculations, see Julius (1990).
5. Given the limitations of space, the other alternatives of licensing, franchising and contractual arrangements are ignored.
6. For good summaries of the economic literature, see Buckley and Casson (1985), Caves (1982), Dunning (1988), Rugman (1986) and Teece (1985).
7. No comparable surveys exist to show how the earlier indices of firm-level behaviour have changed during the 1980s. Official reporting requirements have changed. For example, the UK has eliminated its requirement that firms report their exports publicly and the USA has reduced the extent of the foreign data required in the 10K disclosures.
8. For an exploration of how such calculations are made, see Robock and Simmonds (1989).
9. For early evidence, see Helleiner (1981). More recent data are available from national statistics collected in the UK and USA.
10. For example, Urata (1991, Table 11) shows that the inter-affiliate exports of Japanese electronics firms doubled between 1983 and 1988, but that the share of 'captive' imports to Japan declined slightly as more third-party supply deals were made.
11. In 1988, the Commission considered automobiles, shoes and consumer electronics as needing an EC-wide approach ('La Dimension Exterieur du Marche Unique, Annexe 111, Regime à l'importation Article 115 du Traite CEE: état des travaux, SEC (88) 1493/2, Oct. 18, 1988). It also identified twelve other sectors that were under member-state restrictions, but with trade problems that were not EC-wide in scope. These included toys; float glass;

- tires, tubes and hoses; measuring instruments; roller bearings; and various small sectors.
12. Interview data. For a more detailed description of these developments, see Stopford and Baden-Fuller (1990a).
  13. For an illuminating assessment of the limitations of alliances for European partners, see Hamel (1991).
  14. The classifications of firms to sectors ignore many of the effects of firms' diversification across sectors. Thus, in electronics, the US position is understated by being limited only to GE. Even so, the figures give a rough guide to relative strength.
  15. See also A. Mitsotaki Gourdain (1992).
  16. For one argument for an extended transitional period, see Cesare Romiti of Fiat, in a paper presented at a European Parliament Conference, *A Strong Europe - A Competitive Industry*, March 7, 1989. Similar considerations were reviewed earlier in EC Commission, *The Future of the European Automobile Industry*, Brussels, November, 1987 and 'A Competitive Assessment of the European Automobile Industry in View of 1992', Brussels, October, 1988.
  17. This Article states that a product is considered to have originated in the country where the last substantial transformation of the product occurred. There is much argument about how to measure 'substantial'.
  18. Cited in the *Financial Times*, February 14, 1991.
  19. Fiat also tried, unsuccessfully, to beat GM in its bid for Saab in Sweden.
  20. For general background see, for example, Soete (1985) and Booz, Allen and Hamilton (1985a and b). For a summary of European business-government responses, see Cawson *et al.* (1986). For an analysis of world trends and British weakness, see Electronics Industry Sector Group (1988).
  21. Even IBM, however, was threatened by the Asian invasion and was forced to announce large-scale cost-cutting moves in 1991.
  22. Cited in the *Financial Times*, 29 May 1990.
  23. For careful analyses of MFA as it applies in Europe, see Cline (1987), Davenport (1990) and Dicken (1987, ch. 7).
  24. For data and analysis of these arrangements in textiles and other industries, see Bursi (1989) and Lorenzoni and Ornati (1988).
  25. For a detailed examination of European practice and the contrasts with US investors, see Oman (1989, ch. 5).

26. For an illuminating assessment of the impact of 1992 on the processed food industry, see Gogel and Larréché (1989).
27. For an excellent summary of the many different sectors of the petrochemical industry, each with its own economic and competitive dynamic, see Vergara and Brown (1988).
28. For an useful summary of the literature, see Kotabe (1990). See also Moxon (1975).
29. For a summary of the development of the Brazilian industry, see Stopford and Strange (1991). For developments in Malaysia and ASEAN, see Doner (1987).
30. Mr. Andreas Zimmerman, a Siemens vice-president, quoted in the *Financial Times*, December 24, 1990.
31. See for example, a review in TOTAL's company magazine, *Energies*, No. 4, May/June, 1991.
32. Douglas McWilliam, of the Confederation of British Industry, cited in *Siemens Review*, June, 1991.

Exhibit 1

**THE 'GLOBAL' POSITION OF EUROPEAN FIRMS, SELECTED INDUSTRIES, 1988**

	<u>Number of Firms</u>	<u>% sales outside Europe</u>	<u>Export/ For. Prod. Ratio</u>	<u>% sales in top twelve <sup>(1)</sup></u>
[emphasis on FDI]				
Pharmaceuticals	6	50	0.27	51
Consumer Goods	10	40	0.07	52
Petroleum	6	37	n/a	45
Chemicals	10	27	0.67	73
[emphasis on trade]				
Electronics and Computers	10	24	0.92	19
Textiles	5	15	n/a	26
Volume Autos	5	14	2.84	39

*Note:* (1) The share of European firms' sales in the world's twelve largest firms. For details, see Exhibit 8.

*Source:* see text

Exhibit 2

**GEOGRAPHIC DISTRIBUTION OF OUTWARD FDI  
(PERCENT OF TOTAL STOCK)**

<u>Source of Investment</u>	<u>Host Region</u>			
	<u>Europe</u>	<u>USA</u>	<u>Japan</u>	<u>Other</u>
UK	23	44	1	32
France	38	38	1	23
Germany	48	28	2	22
USA	47	-	5	48
Japan	16	40	-	44

*Notes:*

USA: position, end 1989  
 UK: position, end 1984, plus cumulative outflows 1988  
 Germany: position, end 1986  
 France: cumulative outflows, 1976-86  
 Japan: cumulative outflows, FY 1951-1989

Exhibit 3

**CHANGING BALANCE BETWEEN OVERSEAS PRODUCTION AND EXPORTS FROM HOME COUNTRY, 1977-81**

	<u>Exports/Overseas Production Ratio</u>		
	<u>1988</u>	<u>1981</u>	<u>1977</u>
USA	0.15	0.16	0.17
Europe		0.44	0.50
UK	0.20	0.24	0.32
France		0.63	0.58
Germany		1.38	1.76
Japan	1.64	3.76	4.30

'Europe' includes Austria, Belgium, Finland, France, Germany, Italy, Netherlands, Sweden, Switzerland, and UK.

*Sources:* for 1977 and 1981, Stopford and Dunning (1983), Table 4.4, based on data for 500 industrial multinationals. For 1990, Wells (1991) for USA using 1988 data; author's calculations for a sample of 50 leading UK exporters of manufactures; the figure for Japan was calculated by Professor Urata from MITI data [Wagakuni Kigyo no Kaigai Jigyo Katsudo, No. 19] for all Japanese manufacturing firms.

Exhibit 4

**REGIONAL BALANCE OF TRADE AND FDI, 1989**

<u>Region</u>	<u>Export/FDI Ratio</u>
North America	
to Western Europe	0.6
to Japan	2.6
to rest of Asia	1.6
intra-regional	1.8
Western Europe	
to North America	0.4
to Japan	5.6
to rest of Asia	1.5
intra-regional	4.8
Japan	
to North America	1.4
to Western Europe	2.1
to rest of Asia	2.8

Author's calculations based on OECD export data (fob values for intra-OECD trade, otherwise cif values) and estimates of stocks of FDI drawn from national sources.

Exhibit 5

**THE CHANGING NATURE OF GLOBAL COMPETITION**

<u>Decade</u>	<u>Factor</u>	<u>Threatened National Industries</u>
Pre-1960	Natural resources	Oil, aluminium
1960s	Labour-intensity	Textiles, shoes, simple assembly
1970s	Capital-intensity	Automobiles, machinery, chemicals
1980s	Technology	Consumer electronics, telecoms
1990s	Information	Financial services, media

Exhibit 6

**THE DIFFERENTIATED GLOBAL NETWORK**

Benefits  
from  
global  
scale

**CORPORATE  
RESOURCES**

Technology  
Information  
Brands  
Finance

Inter-regional trade  
in "intangibles"

**REGIONAL  
RESOURCES**

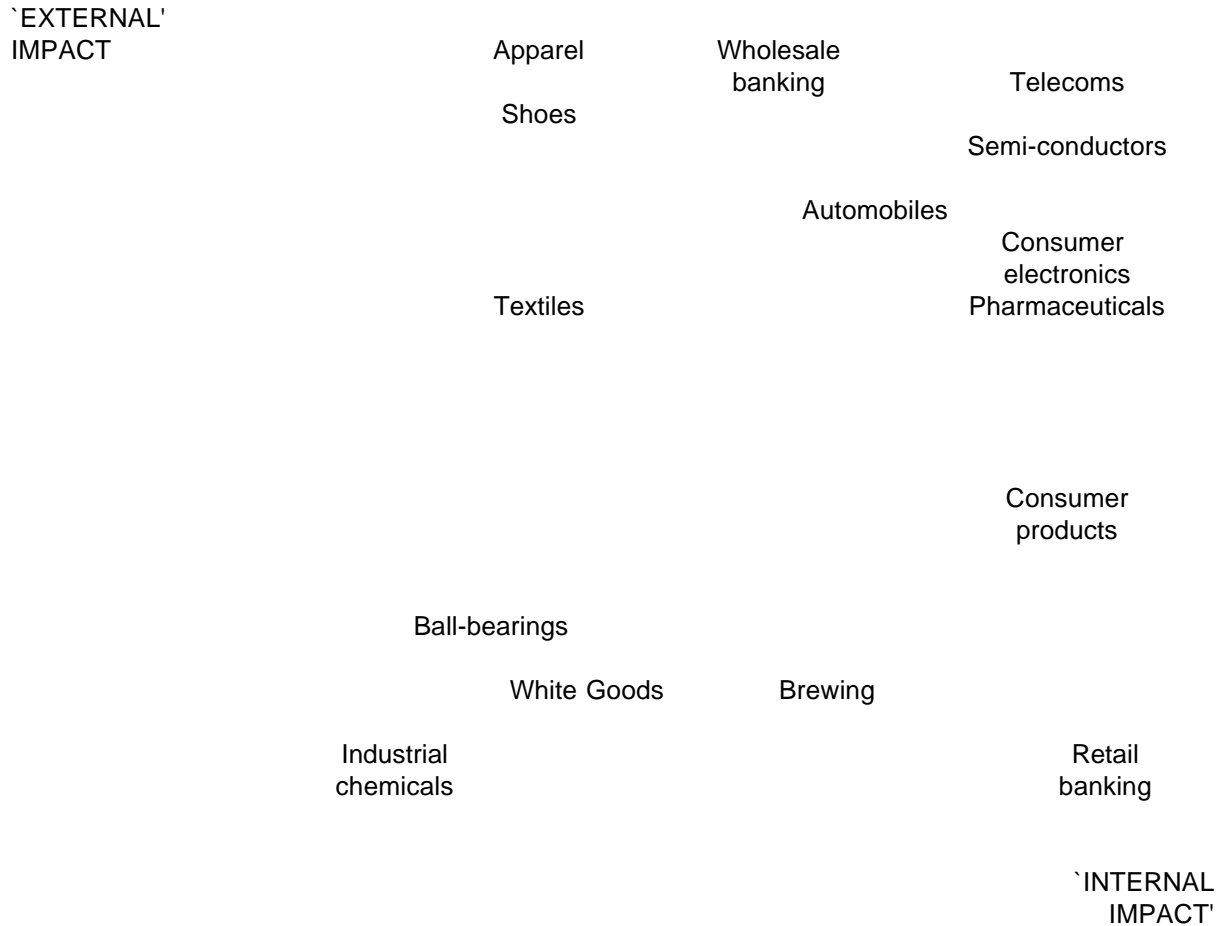
Manufacturing network  
Subcontractors  
Access to  
markets

Benefits from responsiveness  
to national/regional  
differences



Exhibit 7

**1992 AFFECTS INDUSTRIES UNEVENLY**  
(selected industries)



Adapted from Calori and Lawrence (1991), Table 7.1.

*Note:* The axes are notional. The positioning of each industry indicates the author's assessment of relative impact, based on numerous industry studies.

Exhibit 8

**SHARES OF WORLD INDUSTRIES, 1960-1989**  
(percent of sales of top twelve firms)

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>
<u>Chemicals</u>				
Europe	32	60	69	73
USA <sup>(1)</sup>	68	40	31	23
Japan	0	0	0	4
<u>Consumer goods (Food and Beverages)</u>				
Europe	34	33	50	52
USA	62	67	50	48
<u>Pharmaceuticals<sup>(2)</sup></u>				
Europe	13	30	45	51
USA	87	70	55	49
<u>Petroleum Products</u>				
USA	77	78	66	47
Europe	23	22	34	45
Other	0	0	0	8
<u>Automobiles and Trucks</u>				
USA	83	66	42	38 <sup>(3)</sup>
Europe	17	22	40	39
Japan	0	12	17	23
<u>Electrical Equipment and Electronics</u>				
Japan	8	17	21	47
Europe	11	24	32	31
USA	71	59	47	11 <sup>(3)</sup>
S. Korea	0	0	0	11
<u>Computers and Office Equipment</u>				
USA	95	90	86	70
Japan	0	3	7	23
Europe	5	7	7	7
<u>Textiles</u>				
Japan	7	32	21	42
Europe	35	23	30	26
USA	58	44	41	21
Other	0	0	8	11

Notes:

- (1) excludes the petroleum and coal interests of DuPont.
- (2) includes pharmaceuticals divisions only of Hoechst and Bayer.
- (3) excludes revenues of financial subsidiaries: equivalent adjustments for non-US firms were not possible, thus understating the US share.

Source: Franko (1989,1991)

Exhibit 9

**THE CHALLENGE OF VARIETY PLUS TIME  
(AUTOMOBILE INDUSTRY)**

	<u>Japan</u>	<u>USA</u>	<u>Europe</u>
Model development time (months)	46	60	54
No. in project team	485	903	904
Ratio of delayed projects	1 in 6	1 in 2	1 in 3
Return to normal <u>quality</u> after model change (months)	1.4	11	12
Return to <u>productivity</u> (months)	4	5	12

Source: Womack *et al.* (1990)

Exhibit 10

**REGIONAL PRODUCTIVITY AND QUALITY DIFFERENCES  
(AUTOMOBILE ASSEMBLY, VOLUME PRODUCERS, 1989)\***

*Source: Womack et al. (1990)*

Exhibit 11

**LEADING EUROPEAN AUTOMOBILE PRODUCERS  
CONCENTRATE ON THE REGIONAL MARKET, 1988**

<u>Producer</u>	% of Sales in		
	<u>Home Market</u>	<u>Rest of Europe</u>	<u>Rest of World</u>
VW (Germany)	38	38	24
Rover (UK)	59	24	17
Renault (France) <sup>(1)</sup>	51	37	12
Fiat (Italy)	54	35	11
Peugeot (France)	75	20	5

Source: Lynch (1990)

Exhibit 12

**VOLKSWAGEN'S WEB OF SUPPLIES**

*Source:* VW documents 1986, plus author's adjustments based on later developments

Exhibit 13

**TEN MAJOR EUROPEAN ELECTRONICS FIRMS,  
SALES BY REGION, 1988**

<u>Firm</u>	% of sales in:		
	<u>Home Country</u>	<u>Rest of Europe</u>	<u>Rest of World</u>
Thomson (France)	29	22	49
Racal (UK)	40	15	45
Philips (Netherlands)(est)	22	46	32
GEC (UK)	60	12	28
CGE (France)	42	35	23
Olivetti (Italy)	37	42	21
Siemens (Germany)	64	22	14
STC (UK) <sup>(1)</sup>	73	14	13
Nixdorf (Germany) <sup>(2)</sup>	52	41	7
STET (Italy)(est) <sup>(3)</sup>	90	5	<5

(1) Includes ICL, now acquired by Fujitsu; the remainder of STC was bought by Northern Telecom in 1990.

(2) 1987 data: now acquired by Siemens.

(3) Subsidiary of IRI

Source: Lynch (1990)

Exhibit 14

**THE 6 LARGEST EUROPEAN PHARMACEUTICAL FIRMS,  
SALES BY REGION, 1987<sup>(1)</sup>**

<u>Firm</u>	% of sales in:		
	<u>Home Country</u>	<u>Rest of Europe</u>	<u>Rest of World</u>
Roche/Sapac (Switzerland)	3	41	56
Sandoz (Switzerland)	4 <sup>(2)</sup>	41 <sup>(2)</sup>	55
Ciba Geigy (Switzerland)	4 <sup>(2)</sup>	42 <sup>(2)</sup>	54
Wellcome (UK)	30	18	52
Glaxo (UK)	13	35	52
Beecham (UK) <sup>(3)</sup>	27	41	32

Notes:

(1) excludes subsidiaries of chemical firms

(2) estimated

(3) before the merger with SmithKline of the USA

Source: Lynch (1990) and Stafford and Purkis (1990)

Exhibit 15

**THE 10 LARGEST EUROPEAN CHEMICALS FIRMS,  
SALES BY REGION, 1987<sup>(1)</sup>**

<u>Firm</u>	% of sales in:		
	<u>Home Country</u>	<u>Rest of Europe</u>	<u>Rest of World</u>
Hoechst (Germany)	25	35	40
Bayer (Germany)	22	39	39
ICI (UK)	43	19	38
BASF (Germany)	36	29	35
Solvay (Belgium)	10	65	25
DSM (Netherlands)	22	57	21
Henkel (Germany)	30	49	21
AKZO (Netherlands)	37	44	19
Rhône-Poulenc (France)	53	29	18
Montedison (Italy) <sup>(2)</sup>	64	19	17

(1) Excludes US-owned firms, subsidiaries of oil companies and Unilever

(2) Subsequently divided into EniChem and subsidiaries of Feruzzi.

Source: Lynch (1990)



## REFERENCES

- ALBERT, M. and J. BALL, (1984), *Towards European Economic Recovery in the 1980s*, Praeger, New York.
- BALASSA, B. (1989), "EMENA manufactured exports and EEC trade policy", Development Economics, working paper, WPS 282, September, World Bank, Washington, D.C.
- BARTLETT, C.A. and S. GHOSHAL, (1989), *Managing Across Borders: The Transnational Solution*, Harvard Business School Press, Boston, MA.
- BOOZ, ALLEN and HAMILTON (1985a), *Outlook, Special report: The Information Industry*, New York.
- BOOZ, ALLEN and HAMILTON (1985b), *Consumer Electronics Industrial Policy*, Report to the Commission of the European Communities, New York.
- BOSTON CONSULTING GROUP (for the EC Commission) (1991), "The competitive challenge facing the European automotive components industry", London.
- BOWER, J.L. (1986), *When Markets Quake*, Harvard Business School Press, Boston, MA.
- BUCKLEY, P.J. and M. CASSON, M. (1985), *The Economic Theory of the Multinational Enterprise*, Macmillan, London.
- BURSI, T. (1989), *Piccola e Media Imprese e Politiche di Adattamento: il Distretto della Maglieria de Carpi*, Franco Angeli, Milan.
- CALORI, R. and P. LAWRENCE, eds., (1991), *The Business of Europe*, Sage, London.
- CAVES, R. (1982), *Multinational Enterprises and Economic Analysis*, Cambridge, Cambridge University Press, Cambridge.
- CAWSON, A., G. SHEPHERD, and D. WEBBER, (1986), "Government-industry relations in the European consumer electronics industry: contrasting responses to competitive pressure in Britain, France and West Germany", University of Sussex, working paper series on government-industry relations, July.
- CLINE, W.R. (1987), *The Future of World Trade in Textiles and Apparel*, Institute for International Economics, Washington, D.C.
- DAVENPORT, M.W.S. (1990), "The external policy of the Community and its effects upon the manufactured exports of the developing countries", *Journal of Common Market Studies*, Vol. XXIX, No. 2, December 1990, pp. 181-200.

DICKEN, P. (1987), *Global Shift: Industrial Change in a Turbulent World*, Harper & Row, New York.

DONER, R.F. (1987), "Domestic coalitions and Japanese auto firms in South East Asia: A Comparative Bargaining Study", unpublished Ph.D. dissertation, University of California, Berkeley.

DUNNING, J.H. (1988), *Explaining International Production*, Unwin Hyman, London.

ELECTRONICS INDUSTRY SECTOR GROUP (1988), "Performance and Competitive Success: strengthening competitiveness in UK electronics", report prepared for National Economic Development Council by McKinsey & Company.

FOUQUIN, M. (1991), "La dynamique interne du marché unique européen, ses conséquences sur les relations économiques internationales", OECD Development Centre research programme on Globalisation and Regionalisation, mimeo, September.

FRANKO, L.G. (1976), *The European Multinationals*, Harper & Row, New York.

FRANKO, L.G. (1989), "Global corporate competition: Who's winning, who's losing, and the R&D factor as one reason why", *Strategic Management Journal*, Vol. 10, No. 5, pp. 449-474.

FRANKO, L.G. (1991), "Global corporate competition II: Is the large American firm an endangered species?", *Business Horizons*, forthcoming.

GEROSKI, P. and A. VLASSOPOULOS, (1990), "European merger activity: a response to 1992?", in Centre for Business Strategy, *Continental Mergers are Different*, London Business School.

GOGEL, R. and J-C. LARRÉCHÉ, (1989), "The battlefield for 1992: product strength and geographic coverage", *European Management Journal*, Vol. 7, No. 2, pp. 132-140.

HAMEL, G. (1991), "Competition for competence and inter-partner learning within international strategic alliances", *Strategic Management Journal*, Vol. 12, special issue, Summer, pp. 83-104.

HAMEL, G. and C.K. PRAHALAD, (1985), "Do you really have a global strategy?", *Harvard Business Review*, July-August.

HAMEL, G. and C.K. PRAHALAD, (1989), 'Strategic intent', *Harvard Business Review*, Vol 67, No. 3, pp. 63-76.

HELLEINER, G.K. (1981), *Intra-firm Trade and the Developing Countries*, St. Martins Press, New York.

JULIUS, D. (1990), *Global Companies and Public Policy*, Pinter/The Royal Institute of International Affairs, London.

KOJIMA, K. (1990), *Japanese Direct Investment Abroad*, International Christian University, Monograph Series 1, Tokyo.

KOTABE, M. (1990), "The relationship between offshore sourcing and innovativeness of U.S. multinational firms: an empirical investigation", *Journal of International Business Studies*, Vol. 21, No. 4, pp. 623-638.

KOTABE, M. and G.S. OMURA, (1989), "Sourcing strategies of European and Japanese multinationals: a comparison", *Journal of International Business Studies*, Vol. 20, No. 1, pp. 113-20.

LANGHAMMER, R.J. (1990), "Europe 1992 and the developing countries: fuelling a new engine of growth or separating Europe from Non-Europe", *Journal of Common Market Studies*, Vol. XXIX, No. 2, December.

LAWRENCE, R.Z. (1991), *Scenarios for the World Trading System and their Implications for Developing Countries*, Research Programme on Globalisation and Regionalisation, OECD Development Centre Technical Paper No. 47, November.

LORENZONI G. and O.A. ORNATI, (1988), "Constellations of firms and new ventures", *Journal of Business Venturing*, Vol. 3, pp. 41-57.

LYNCH, R. (1990), *European Business Strategies*, Kogan Page, London.

MITSO TAKI GOURDAIN, A. (1992), "Les enjeux de la construction européenne, tels qu'ils ressortent des négociations entre la CEE et le Japon en vue d'une limitation des entrées des voitures japonaises sur le marché européen", OECD Development Centre research programme on Globalisation and Regionalisation, mimeo, January.

MORRISON, A.J., D.A. RICKS and K. ROTH, (1990), "Globalisation and regionalisation: which way for the multinational?", *Organizational Dynamics*, Winter, pp. 17-29.

MOXON, R.W. (1975), "The motivation for investment in offshore plants: the case of the US electronics industry", *Journal of International Business Studies*, Vol. 6, No. 3, pp. 51-66.

OHMAE, K. (1985), *Triad Power*, The Free Press, New York.

OMAN C. (1989), *New Forms of Investment in Developing Country Industries*, OECD Development Centre, Paris.

ONIDA, F. and G. VIESTI, eds., (1988), *The Italian Multinationals*, Croom Helm, London.

PAGE, F. (1986), "What is a 'British' car?", *Atlantic*, July, pp. 13-5.

PAGE, S. (1992), *Some Implications of Europe 1992 for Developing Countries*, Research Programme on Globalisation and Regionalisation, OECD Development Centre, Technical Paper.

PANIC, M. (1991), "The impact of multinationals on national economic policy", in Bürgenmeier, B. and Mucchielli, J.L. eds., *Multinationals and Europe 1992*, Routledge, London.

PEARCE, J. and J. Sutton (1985), *Protection and Industrial Policy in Europe*, Routledge & Keegan Paul, London.

PORTER, M.E. ed., (1986), *Competition in Global Industries*, Harvard Business School Press, Boston, MA.

PORTER, M.E. (1990), *The Competitive Advantage of Nations*, The Free Press, New York.

PRAHALAD, C.K. and Y. Doz, (1987), *The Multinational Mission*, The Free Press, New York.

ROBOCK, S.H. and K. SIMMONDS, (1989), *International Business and Multinational Enterprises*, Irwin, 4th Edition, Homewood, Ill.

RUGMAN, A.M. (1986), "New theories of the multinational enterprise: an assessment of internalisation theory", *Bulletin of Economic Research*, Vol. 38, pp. 101-118.

SAVARY, J. (1984), *French Multinationals*, Pinter/IRM, London.

SHARP, M. (1986), *Inward investment and national industrial competitiveness: a comparative study of Western Europe*, SPRU, University of Sussex.

SOETE, L. (1985), *Technological trends and employment: 3 Electronics and Communications*, Gower, Aldershot, UK.

STAFFORD, D.C. and R.H.A. PURKIS, (1990), *Macmillan Directory of Multinationals* (2 vols.), Macmillan, London.

STOPFORD, J.M. and C. BADEN-FULLER, (1990a), "Corporate rejuvenation", *Journal of Management Studies*, Vol. 27, No. 4, pp. 399-415.

STOPFORD, J.M. and C. BADEN-FULLER, (1990b), "Flexible strategies - the key to success in knitwear", *Long Range Planning*, Vol. 23, No. 6, pp. 56-62.

STOPFORD, J.M. and J.H. DUNNING (1983), *Multinationals: Company Performance and Global Trends*, Macmillan, London.

STOPFORD, J.M. and S. STRANGE (1991), *Rival States, Rival Firms*, Cambridge University Press, Cambridge.

STOPFORD, J.M. and L. TURNER, (1985), *Britain and the Multinationals*, Wiley, Chichester.

TEECE, D.J. (1985), "Transaction cost economics and the multinational enterprise: an assessment", *Journal of Economic Behaviour and Organization*, Vol. 7, pp. 21-45.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION (UNIDO) (1985), "Current world situation in petrochemicals", Vienna.

URATA, S. (1991), "Globalisation of the Japanese Electronics Industry", draft chapter in Urata, S., *Japanese Corporations in Globalisation and Regionalisation*, OECD Development Centre Study, forthcoming.

VAN DER KLUGT, C.J. (1986), "Japan's global challenge in electronics - the Philips' response", *European Management Journal*, Vol 4, No. 1, pp. 4-9.

VERGARA, W. and D. BROWN, (1988), "The new face of the world petrochemical sector: implications for developing countries", World Bank, Washington, D.C., Technical Paper, No. 84.

VERNON, R. (1979), "The product cycle hypotheses in the new international environment", *Oxford Bulletin of Economics and Statistics*, Vol. 41, pp. 255-67.

WAVERMAN, L. (1991), "Strategic trade policy and 1992", in Bürgermeier, B. and Mucchielli, J. L. eds., (1991), *Multinationals and Europe 1992*, Routledge, London.

WELLS, L.T. Jr. (1992), *Conflict or Indifference: US Multinationals in a World of Regional Trading Blocs*, Research Programme on Globalisation and Regionalisation, OECD Development Centre Technical Paper.

WOMACK, J.P., D.T. JONES and D. ROOS (1990), *The Machine that Changed the World*, Rawson Associates, New York.