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AMERICAN FIRMS FACE EUROPE: 1992

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ABSTRACT

The press and business magazines are filled with stories about a rush of American firms into the European Community to take advantage of, or avoid the adverse consequences of, the expected formation of a single market in 1992. Yet, it is hard to find evidence of a large shift in plant and equipment expenditures, employment, or financial investment toward the EC countries by American firms. The main reason seems to be that large American manufacturing firms are already well entrenched in the EC, and may even be better positioned to take advantage of the single market than most of their European rivals. The U.S. firms (unlike most Japanese companies) already supply almost all their share of the EC market from operations within the EC and depend very little on importing from the U.S. There is some indication of moves toward EC production by non-manufacturing operations such as distribution and services, by smaller companies, by those not now producing extensively in the EC, and by firms hoping to take part in public procurement.

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The American press and business magazines are filled with stories about Europe-1992, advice to firms about how to respond, and predictions about the effects on American firms that range from cheerful optimism to grim pessimism about protectionist schemes. Surveys of American executives confirm the intensity of their interest. The Economist (May 13, 1989) reported that a group of CEOs of mainly high-tech firms almost all saw the developments as an opportunity to expand their sales and operations, and more than half said they "would change their marketing and production strategies to exploit the new opportunities." Another survey of a smaller number of CEOs of very large firms reported that a majority had commissioned internal or external studies of desirable steps to respond to the new situation.

There are two very different views about the prospects for American firms in Europe. One is that the free internal market will produce much larger and more competitive Europe-based firms, and that the increased competition both in Europe and in other markets, combined with mercantilist practices by the EC authorities, will pose a severe test for American companies. The other is that American firms, in contrast to Japanese and other outside firms, are already well established in Europe and accustomed to serving the European market by producing there rather than by exporting, and that they are actually more suited to taking advantage of the end of internal barriers than are most of their European rivals. For one thing, they are not hamstrung by national loyalties and may be better able to resist pressures to retain inefficient operations and to seek the best methods of production and the best locations.

An important characteristic of American manufacturing affiliates and even wholesale trade affiliates in the EC is that they are relatively independent

of imports from the U.S. For manufacturing affiliates, these imports are only about 5 per cent of total sales in the EC, as compared with 11 per cent in all developed countries.

	Imports from the U.S. as Per Cent of Affiliate Sales, 1987	
	<u>EC</u>	<u>Developed Countries</u>
All Manufacturing	<u>5.0</u>	<u>11.1</u>
Chemicals	6.0	6.5
Non-electrical machinery	7.1	9.1
Electrical machinery	7.7	7.7
Transport equipment	0.3 - 1.3	25.9
Wholesale Trade	10.1	9.5

Source: Appendix Table A

Thus, the EC affiliates of U.S. multinationals, not heavily dependent on the U.S. for supplies or components, are not very vulnerable to protectionist measures against imports.

The parents of these affiliates could be vulnerable to protectionism in the EC even if their affiliates were not, if the parents had large exports to the EC outside of those to their own affiliates. In fact, of U.S. multinationals' sales within the EC of over \$400 million in 1982, only a little over \$40 million were parent exports from the U.S. and a little over \$25 million were parent exports to unaffiliated foreigners (Appendix Table B). Thus, not only the EC market shares of U.S. affiliates, but also the EC market shares of the U.S. multinationals of which they are a part, are supplied to an overwhelming extent from inside the EC itself.

How have American firms responded to the first indications of the possibility of a single European market and to the later signs that the creation of the single market was really going to take place? There is a great deal of

anecdotal evidence of moves by American firms to entrench themselves in the EC market before 1992. What do the data suggest as to the importance of these moves? An indication of the importance of EC operations to American firms at the beginning of the 1980s is given by the EC share in the net stock of, and expenditures on, plant and equipment in 1982.

Share (Per Cent) of the EC (12) in American Firms' Overseas Net Stock of,
and Expenditures on, Property Plant and Equipment in
Developed Countries, 1982

	<u>Net Stock</u>	<u>Expenditures</u>
All Industries	54.2	57.8
Petroleum	51.7	50.7 ^a
Manufacturing	61.0	65.3 ^a
Chemicals	54.8	57.8
Non-elect. machinery	64.9 ^a	76.6 ^c
Electrical machinery	73.3 ^a	66.2
Transport equipment	63.1 ^b	70.9 ^b
Wholesale trade	53.8	51.6
FIRE (exc. banking)	52.8	69.3
Services	63.6	70.3
Other industries	17.4	27.0

^aExcluding Portugal

^bIncluding Austria

^cIncluding Sweden

Source: U.S. Department of Commerce (1985), Tables III.A7 and III.C6.

The EC has long been the location for a majority of the overseas operations of American firms in developed countries, and an even larger part of manufacturing operations. Almost half of worldwide fixed assets in manufacturing outside the United States were in the EC countries in 1982, long before the move towards the free internal market. And the shares of plant and equipment investment taking place in the EC countries were even larger than the shares of existing fixed capital. This traditional importance of the EC

countries in U.S. multinationals' overseas operations must be kept in mind in judging the response to the plans for 1992.

The European Community has passed through a series of stages in its development. The first was the abolition of tariffs among the original six members, completed in 1967. It was followed by the expansion of the Community to its present 12 members, the last of which, Spain and Portugal, entered in January 1986. A third stage, foreshadowed by the 1985 agreement on the European Commission's White Paper on creating a single internal market, was set in motion by the ratification of that proposal in 1987.

To compare the early 1980s position to plant and equipment spending in later years, we can divide the period since 1981 into three parts, the first three years, 1982-84, before the agreement on the single market, the second, 1985-87, mostly after the publication of the White Paper on Completing the Internal Market (June 1985) but before ratification made the change appear certain, and the third, 1988-90, after ratification (July 1987), including plans for 1989 and 1990 reported in a survey taken in June 1989.

**American Firms' Plant and Equipment Expenditures in the EC,
as Per Cent of Total Expenditures in Developed Countries
Outside the United States**

	<u>1982-84</u>	<u>1985-87</u>	<u>1988-90</u>
All Industries	57.2	57.7	58.9
Petroleum	49.7	51.5	52.3
Manufacturing	66.1	64.0	64.2
Chemicals	62.3	67.3	67.9
Non-elect. machinery	74.3 ^a	72.1	61.6
Elect. machinery	60.7	66.1	65.1
Transport equipment	54.6 ^a	56.8 ^b	64.2
Wholesale trade	51.9	51.6	59.3
FIRE ^c , exc. banking	50.8	53.5	59.8
Services	74.2	67.7	64.8
Other industries	24.4	29.6	34.4

^aEC (10) only ^b1985 and 1986 only ^cFinance, Insurance, and Real Estate

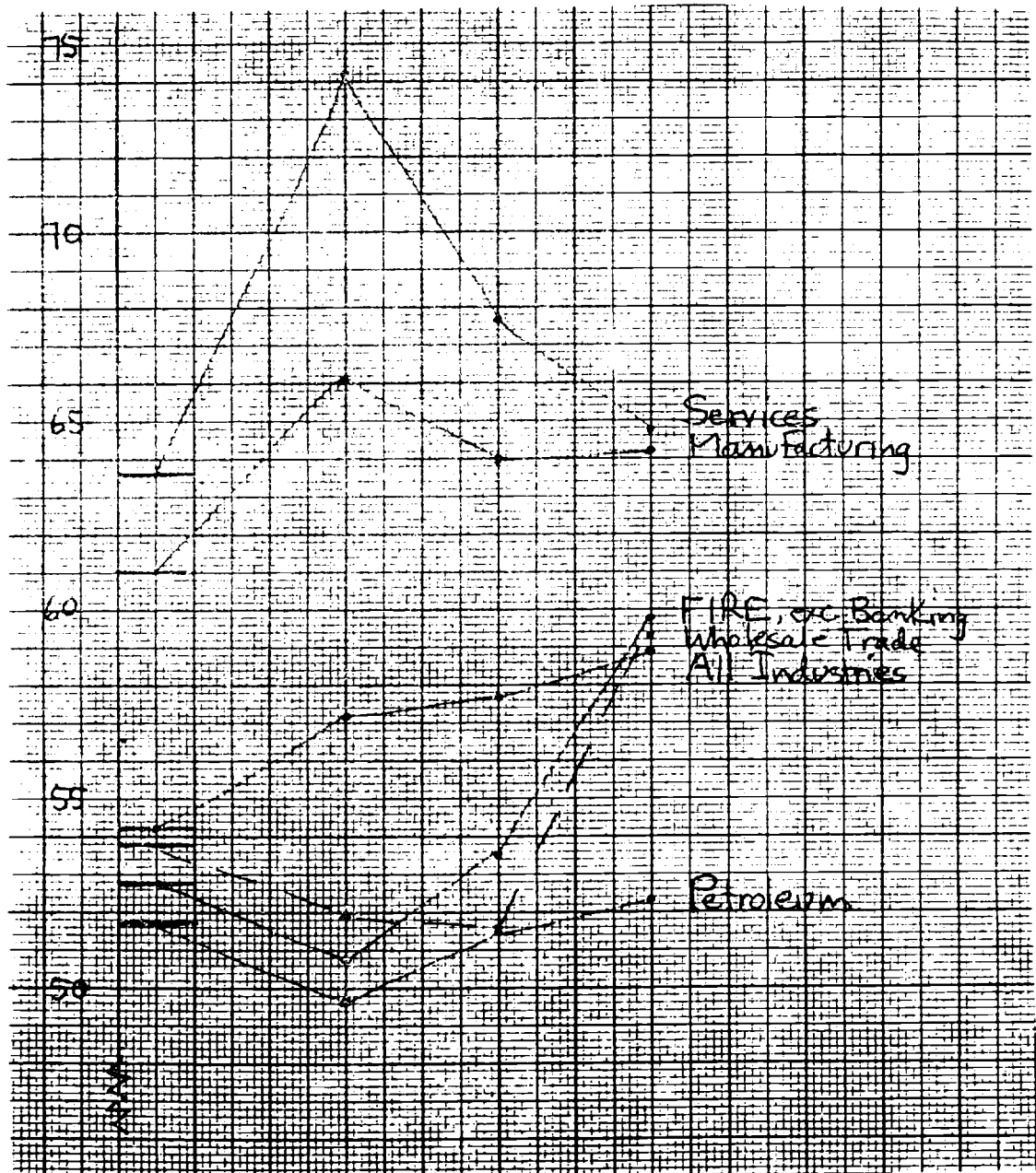
Source: Appendix Table C

These data, summarized in Chart 1, do not show any stampede to build new or improved capacity in the EC area on the part of American firms as a group. The total fixed investment planned for 1988-90 in the EC accounts for a slightly larger share of all investments in developed countries than existed at the beginning of the 1980s, but the difference is not very large: 59 per cent as compared with 54 per cent, and the 1988-90 share planned is only a little above the 57 per cent of 1982-84. In non-electrical machinery, the current EC share is less than during most of the 1980s and in electrical and electronic equipment, it is below the share in the stock at the beginning of the 1980s. The increases in the EC share of fixed investment in manufacturing are in chemicals, well above the initial 1982 stock and the capital expenditures in 1982-84, and in transport equipment, where the share is above the expenditure share of most of the 1980s and back to the 1982 share of the stock.

Chart

Share of the EC Countries in the Fixed Assets of U.S. Firms in Developed Countries, 1982, Compared with Share in Plant and Equipment Expenditures, 1982-1990

Per cent



Net
PP+E
Stock
1982

Plant and Equipment Investment
1982-84 1985-87 1988-90

The strongest signs of increased fixed investment in the EC so far are not in manufacturing but in wholesale trade (mainly sales affiliates of U.S. manufacturing firms), finance, except banking, and in the "other industries" group. The last includes agriculture and mining, construction, public utilities and transportation, and retail trade, of which retail trade accounted for about two thirds of the stock of fixed capital in 1982. In all of these industries, the EC share of actual and planned fixed investment in 1988-90 is above the share of expenditure in the 1980s and also above the share of the stock at the start of the 1980s.

Thus, it appears from the capital expenditure data that American firms already established in the European Community are concentrating on strengthening their presence in marketing and finance more than in manufacturing or the petroleum industry.

The Economist article quoted above referred to "... an extraordinary change..." in American investment in Europe and shows a chart indicating that the share of the EC in the stock of U.S. direct investment almost doubled between the end of 1984 and the end of 1987, after a considerable decline between 1981 and 1984. Why do the plant and equipment expenditure data described above picture so much milder a response? The decline in the EC share of the direct investment stock before 1985 partly reflected the fact that EC currencies fell in exchange value relative to the U.S. dollar more than others did before 1985. They also rose more rapidly after that, particularly as compared with the currencies of developing countries between 1984 and 1987. Much of the rise in the relative importance of the stock of direct investment in the EC after 1984, therefore, reflected capital gains on these investments rather than new investment by U.S. firms.

One measure that is not affected by exchange rate developments is employment. Unfortunately, the data do not extend beyond 1987, but a comparison between 1982 and 1987 suggests that up to that date at least, there was no major expansion of employment in response to the agreement on the creation of the free internal market.

	Share of the EC in Employment in Developed Countries by U.S. Multinationals	
	<u>1982</u>	<u>1987</u>
All Industries	58.9	56.5
Petroleum	47.1	48.6
Manufacturing	66.7	65.0
Chemicals	61.3	61.0
Non-electrical machinery	74.1	74.4
Electrical machinery	68.2	71.3
Transport equipment	69.2	56.2
Wholesale trade	58.3	56.6
Finance, insurance, and real estate, exc. banking	46.6	54.3
Services	61.2	59.6
Other industries	22.1	22.4

Source: Appendix Table D

The EC share of employment by U.S. firms in developed countries was actually slightly lower in 1987 than in 1982. The sharpest decline in the EC share was in transport equipment, largely from the sale of Chrysler subsidiaries in 1986, and the largest increase was in finance other than banking, mostly after the deregulation of the London stock market, also in 1986.

The employment and plant and equipment investment figures might fail to reflect an upsurge of financial investment, if it occurred, perhaps to acquire existing firms or prepare for eventual plant and equipment investment. The data for such investment in the EC countries are somewhat spotty and fre-

quently suppressed for reasons of confidentiality. Furthermore, although they reflect net new investment, they are often dominated by the financial operations of established firms that make most of their investment out of reinvested earnings. However, any large rise in the flow of new funds into EC investment would probably be revealed by these data.

For what they are worth, the flows of equity and debt investment also do not show any overall upsurge to pay for new investment.

Equity Capital Outflows and Intercompany Debt Outflows
into U.S. Direct Investment in the European Community
1982-88
(Unit: Annual Averages, Millions of Dollars)

	1982-84	1985-86	1987	1988
All Industries	787	1,015	690	993
Petroleum	-345	-176	86	NA
Manufacturing	851	-645	940	-930
Wholesale Trade	135 ^a	128	-48	874
Banking	308	166	-113	-72
Finance, Insurance, and Real Estate, exc. banking, of which UK	-76 ^a	NA	NA	2,795
Services	-30	668	-654	2,663
Other Industries	-142	-10	198	NA
		158 ^b	NA	106

^a1982 and 1984 only

^b1985 only

Source: Appendix Tables E and F

Overall, new investment in 1987 and 1988 was no higher than in 1985-86, although the 1988 investment was above the 1982-84 level in current dollars. However, the fall in the exchange value of the U.S. dollar since 1982-84 has been so great that the purchasing power of the 1988 investment must have been

below that of the 1982-84 expenditures. In manufacturing there was a net outflow of equity and debt capital in 1988, and essentially no flow for 1987 and 1988 together. The only possible indications of a substantial move to new U.S. direct investment in the EC was in wholesale trade and in finance other than banking, two of the industries in which capital expenditures also showed some signs of growth.

The data on total direct investment outflows are available up through a more recent date (the third quarter of 1989) for all industries combined. They are a poor indicator of new projects, however, because reinvested earnings are a large part of the flows, and their movements are dominated by fluctuations in earnings. They do show a resurgence of capital outflows to the European Community in the first three quarters of 1989, as compared with the similar period in 1988 or with the whole year 1988.

Total U.S. Direct Investment Capital Outflows,
Including Reinvested Earnings, to the European Community
1982-1989 (III)
(Unit: Annual Averages, Millions of Dollars)

	1982-84	1985-86	1987	1988	First Three Quarters	
					1988	1989
All Industries	- 105	12,420	18,916	4,439	- 68	12,228
Petroleum	- 566	710	326	- 639	}	NA
Manufacturing	198	6,964	13,841	82		
Wholesale Trade	44	1,170	2,148	1,617		
Banking	349	590	139	59		
Finance, Insurance, and Real Estate, exc. Banking	116	2,588	2,655	3,136		
Services	- 24	133	503	- 38		
Other Industries	- 116	266	- 695	223		

Source: Appendix Table G

However, the level of capital outflow was still below that of 1987 and, in nominal terms, close to that of 1985-86. The total direct investment capital

outflows to the European Community were as follows, as a per cent of those to all developed countries:

	<u>Per Cent</u>
1982-84	- 10
1985-86	77
1987	56
1988	41
1988 (I-III)	- 1
1989 (I-III)	75

The share in the first three quarters of 1989 was almost back to, but no higher than, that of 1985-86.

If American firms' European affiliates, particularly in manufacturing, have not been investing heavily in new financing or in new capacity, what accounts for this apparent lack of response to new opportunities? One reason is that so many American manufacturing firms have been heavily involved in investing abroad, particularly in the EC countries, for such a long time. As early as 1977, U.S. companies reporting to the Department of Commerce as parents of foreign affiliates accounted for over 60 per cent of total U.S. manufacturing employment, and the proportion in the main investing industries, chemicals, machinery, and transport equipment, was over 90 per cent (Kulchycky and Lipsey, 1984, Table 1). Of these foreign investors, two thirds had operations in the UK alone, and in the main investing industries, the proportion was over three quarters. Thus, almost all the investing firms must have already been operating within the present EC boundaries by that time.

The involvement of American firms within the EC area goes back even further. While Canada was the host to the largest number of American firms in 1966, the UK was second or third in most industries, and Germany and France

were usually fourth and fifth (Kravis and Lipsey, 1982).

There is a widespread feeling that American firms already established in Europe are already ahead of European firms in treating the EC as a single market and are well placed to take advantage of the elimination of barriers (Peck, 1989). The Economist suggests, for example, that General Motors and Ford have more "Europe-wide strength" than any of their local competitors, strong though many of them are in their own national markets, and that the same is true in their fields for other American companies such as IBM, Digital Equipment, and Unisys. In another article, Hewlett-Packard was described as having "... a better geographical balance of sales both worldwide and within the EEC than do its European competitors." ("Hewlett-Packard: Safety in Numbers," The Economist, August 12, 1989, p. 57). The main European companies, each with sales concentrated in its own small national market, "... are expected to look for partners to help them expand elsewhere. Hewlett-Packard's door is always open" (Ibid).

Similarly, the boom in the European market for personal computers is being met largely by American computer makers, and they are all reported to be shifting "...production, research, and marketing activities to their European subsidiaries," as is Toshiba ("Europe Goes Wild for Yankee PCs," Fortune, June 5, 1989, pop. 257). Several other examples are noted in the EC Commission's assessment of the effects of the removal of internal barriers. They mention, for example, that U.S. construction firms in Europe won contracts the value of which was ten times the total of all those won by European firms outside their own countries (Emerson et al, p. 53). Surveying various industries, they suggest that "... European enterprises are not so strongly positioned and rationalized with respect to the European market

itself, compared to multinational firms from the United States, Japan, and some EFTA countries (as in foodstuffs, pharmaceuticals, and telecommunications equipment) (Emerson et al, pp. 66-67). The report mentions the food-processing industry as one in which most European companies are oriented towards their own national markets, while the ten largest groups, outside of Nestlé and Unilever, are American, and are geared to serve the EC market as a whole (Emerson et al., pp. 70-71). A similar story is told of the pharmaceutical industry, in which American and Swiss firms are best placed to take advantage of the reduction of trade barriers (Ibid, p. 75). Some American firms in the pharmaceutical industry reported fairly low levels of capacity utilization, which would permit them to expand production without additional capital expenditure.

The major economic gains to the EC countries from the elimination of trade barriers are expected to come from scale economies and the increased level of competition and reduction of monopoly power. The ranking of industries by the size of economies of scale finds, at the top of the list, mostly just those industries in which American multinational firms hold strong positions in world markets. These include motor vehicles, aircraft, chemicals, office machinery, and other types of machinery. Industries in which the U.S. and American multinationals are weak are mostly at the bottom of the ranking (Ibid, pp. 129-130). Thus, it is another advantage for American firms that the greatest advances in efficiency and reductions in cost are expected to take place in the industries in which they are strongest.

It is possible that the relative lack of expansion plans for these existing companies reflects satisfaction with their current position within the EC, and that it is companies now outside the EC that are responding

strongly by engaging in acquisitions of, and mergers and joint ventures with, EC companies. It is hard to find evidence on rates of new entry, but a survey conducted for KPMG Peat Marwick, among a sample of executives in almost 600 companies in high technology, other manufacturing, transportation, and merchandising, found that of those (29 per cent of the total) not currently doing business in the EC, over two thirds said they had no plans to do business there before or after 1992 (KPMG Peat Marwick, 1989, p. 7). Only 6 per cent of the sample, 21 per cent of the current non-participants, project some type of entry into the EC market before 1992, not a strong indication of a rush to participate.

On the other hand, it is true that when new entries into production in Europe by American firms are announced, the reports usually mention 1992 as one of the reasons for the move. It was cited for example, in a recent story about Intel's first plant in Europe, a \$400 million computer and semiconductor plant in Ireland ("Intel Plans to Build Irish Computer Plant at \$400 million Cost," Wall Street Journal, October 4, 1989, p. B7). The possible growth of service industry investment is suggested by stories about American law firms' hopes for expansion in Europe ("U.S. Law Firms, Catching 1992 Fever, Bet They'll Gain Edge in United Europe," Wall Street Journal, September 26, 1989, p. B6).

The preparations for 1992 may, however, take the form of intra-European mergers and acquisitions more than of acquisitions by U.S. firms. A recent report showed the value of mergers and acquisitions in Europe tripling between 1985 and 1986 and more than doubling again between 1986 and 1988 ("Europe's Buyout Bulge," New York Times, November 5, 1989. The coming elimination of trade barriers was mentioned, for example, as a consideration in a recent bank

merger ("Germans to Buy Morgan Grenfell," New York Times, Nov. 28, 1989).

The major moves by the minority of large American firms that are not yet well established in the EC may be more in the form of joint ventures, not involving large new production facilities or financial investments. A possible prototype might be the recently announced venture between General Mills and Nestlé to sell breakfast foods in Europe where General Mills' main rival, the Kellogg Company, is already entrenched as a producer. The cost of the joint venture is reported to be "... more in the tens of millions, not in the hundreds of millions..." ("General Mills, Nestlé Plan Europe Push," New York Times, December 1, 1989), an amount that would not show up as a major investment flow or plant and equipment expenditure.

One of the surveys cited earlier found that 42 per cent of the companies "... had launched a search for acquisitions or mergers and 41% a search for joint ventures..." ("American Firms and Europe: Le défi is back," The Economist, May 13, 1989). That represents a very high proportion of joint ventures for American companies, which have in the past strongly preferred 100 per cent or at least majority ownership of foreign operations. The frequent mention of joint ventures in the press in the last few years suggests both that even very large U.S. firms are reluctant to make the capital commitments implied by wholly owned ventures and that much of the current activity in the EC represents the efforts of smaller companies, and companies less experienced in foreign operations, to hold on to their shares in the EC market. Another motivation for joint ventures, even on the part of larger U.S. companies, may be the opportunity to enter markets dominated by public procurement, as in the case of an AT&T-Philips joint venture for the production of telecommunications equipment (Peck, 1989, p. 297). The nature of these activities -- joint ven-

tures, service and trade activities rather than large-scale manufacturing -- and the smaller average sizes of the firms involved, suggests that no very large increases in investment or overseas employment are likely to result.

References

- Belli, R. David (1986), "U.S. Multinational Companies: Operations in 1983," Survey of Current Business, Vol. 66, No. 1, January.
- Brereton, Barbara F. (1986), "U.S. Multinational Companies: Operations in 1984," Survey of Current Business, Vol. 66, No. 9, September.
- _____ (1987), "U.S. Multinational Companies: Operations in 1985," Survey of Current Business, Vol. 67, No. 6, June.
- Emerson, Michael, Michel Aujean, Michel Catinat, Philippe Goybet, and Alexis Jacquemin (1988), The Economics of 1992: The EC Commission's Assessment of the Economic Effects of Completing the Internal Market, Oxford, Oxford University Press.
- Herr, Ellen M. (1986), "Capital Expenditures by Majority-Owned Foreign Affiliates of U.S. Companies, 1986 and 1987," Survey of Current Business, Vol. 66, November 10, October.
- _____ (1987), "Capital Expenditures by Majority-Owned Foreign Affiliates of US Companies, 1987 and 1988," Survey of Current Business, Vol. 67, Number 9, September.
- KPMG Peat Marwick (1989), EC 1992: Strategic Implications for American Business.
- Kravis, Irving B., and Robert E. Lipsey (1982), "The Location of Overseas Production and Production for Export by U.S. Multinational Firms," Journal of International Economics, Vol. 12, No. 3/4, May, pp. 201-223.
- Kulchycky, Ksenia, and Robert E. Lipsey (1984), "Host-Country Regulation and Other Determinants of Overseas Operations of U.S. Motor Vehicle and Parts Companies," NBER Working Paper 1463, September.

- Mataloni, Raymond (1989), "Capital Expenditures by Majority-Owned Foreign Affiliates of U.S. Companies, 1990," Survey of Current Business, Vol. 69, Number 9, September.
- Peck, Merton J. (1989), "Industrial Organization and the Gains from Europe 1992," Brookings Papers on Economic Activity, 2, pp. 277-299.
- Quijano, Alicia M. (1988), "Capital Expenditures by Majority-Owned Foreign Affiliates of U.S. Companies, 1988 and 1989," Survey of Current Business, Vol. 68, Number 9, September.
- U.S. Department of Commerce (1985), U.S. Direct Investment Abroad: 1982 Benchmark Survey Data, Bureau of Economic Analysis, December.
- _____ (1986), "U.S. Direct Investment Abroad: Detail for Position and Balance of Payment Flows, 1985," Survey of Current Business, Vol. 66, Number 8, August.
- _____ (1987), "U.S. Direct Investment Abroad: Detail for Position and Balance of Payment Flows, 1986," Survey of Current Business, Vol. 67, Number 8, August.
- _____ (1988), "U.S. Direct Investment Abroad: Detail for Position and Balance of Payment Flows, 1987," Survey of Current Business, Vol. 68, Number 8, August.
- _____ (1989a), U.S. Direct Investment Abroad: Preliminary 1987 Estimates, Bureau of Economic Analysis, July.
- _____ (1989b), "U.S. Direct Investment Abroad: Detail for Position and Balance of Payment Flows, 1988," Survey of Current Business, Vol. 69, Number 8, August.
- _____ (1989c), "U.S. International Transactions, Second Quarter 1989," Survey of Current Business, Vol. 69, Number 9, September.

_____ (1989d), "U.S. international Transactions,
Third Quarter 1989," Survey of Current Business, Vol. 69, Number 12,
December.

Whichard, Obie G. (1988), "U.S. Multinational Companies: Operations in 1986,"
Survey of Current Business, Vol. 68, Number 6, June.

_____ (1989), "U.S. Multinational Companies: Operations in 1987,"
Survey of Current Business, Vol. 69, Number 6, June.

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Appendix Table A

U.S. Exports to and Total Sales and Sales of Goods by
Majority-Owned Nonbank Affiliates of Nonbank U.S. Parent Companies, 1987
(Unit: \$ million)

	All Developed Countries			EEC(12)		
	Sales		U.S. Exports Shipped to Affiliates	Sales		U.S. Exports Shipped to Affiliates
	Total	Goods		Total	Goods	
All Industries	813,467	718,086	60,781	409,257	366,905	19,389
Petroleum	168,435	161,916	1,109	67,403	66,180	420
Manufacturing	389,156	378,343	43,333	221,351	214,329	10,963
Chemicals	77,332	77,187	5,049	45,226	NA	2,691
Non-elect. machinery	69,773	60,371	6,352	46,949	NA	3,347
Electrical machinery	30,309	30,091	2,331	11,667	11,592	897
Transport equipment	88,682	88,447	22,952	42,604	NA	404-533
Wholesale Trade	156,841	146,829	15,816	82,712	77,658	7,825
Finance, Insurance, and Real Estate, exc.						
Banking	36,911	268	25	12,211	188	NA
Services	26,400	1,558	113	16,761	832	62
Other Industries	35,725	29,172	387	8,818	7,719	NA

Source: U.S. Department of Commerce (1989a), Tables 30, 43, and 52.

Appendix Table B

Sources of Sales in the EC by U.S. Multinationals
(Nonbank Parents and Nonbank Affiliates), 1982
(Unit: Million dollars)

	Total	Majority-owned affiliates and their parents
Sales by affiliates	385,227	311,643
Exports by parents to unaffiliated foreigners	26,528	24,579
Exports by parents to non-majority owned affiliates		569
Total sales in EC	411,755	336,791
Exports by parents to all affiliates	14,457	14,441
Total exports	40,984	39,020

Source: U.S. Department of Commerce (1985), Tables II.D3, II.P2, III.D3,
and III.P2.

Plant and Equipment Expenditures in the EC(10), EC(12), and All Developed Countries
by Majority-Owned Nonbank Affiliates of Nonbank U.S. Parent Companies, 1982-1990
(Unit: \$ million)

	1982	1983	1984	1985	1986	1987	1988	1989 ^a	1990 ^a
All Industries	29,881	25,035	24,388	25,541	24,966	27,310	33,876	37,730	38,673
Petroleum	11,437	8,939	8,926	8,733	6,055	6,762	9,642	9,271	9,869
Manufacturing	13,170	11,105	10,993	12,236	13,724	14,353	16,987	20,343	20,881
Chemicals	2,694	1,861	1,978	2,277	2,632	3,229	4,116	4,785	4,851
Non-Elect. Mach.	3,991	3,125	2,681	2,586	2,526	2,628	2,982	3,261	3,518
Elect. Mach.	729	802	924	976	933	1,057	1,210	1,380	1,453
Transp. Equip.	2,478	2,304	1,996	2,762	3,460	2,934	3,123	4,219	4,280
Trade	2,246	2,057	1,885	1,818	2,171	2,234	2,610	2,739	2,704
Finance, Ins., & RE	517	290	259	283	400	909	649	834	854
Other Industries	2,510	2,644	2,324	2,372	2,616	3,052	3,988	4,543	4,366
EUROPEAN COMMUNITY									
All Industries	15,890	13,799	13,241	14,121	14,225	16,117	19,762	22,139	23,038
Petroleum	5,632	4,431	4,211	4,547	3,112	3,348	4,825	4,928	5,305
Manufacturing	7,665	6,997	6,958	7,378	8,664	9,520	11,083	12,908	13,356
Chemicals	1,318	1,143	1,231	1,404	1,756	2,287	2,843	3,229	3,258
Non-Elect. Mach.	2,839	2,394	2,015	1,733	1,875	1,936	2,033	1,890	2,061
Elect. Mach.	444	NA	NA	NA	616	741	804	880	944
Transp. Equip.	1,117	NA	1,276	1,595	1,823	NA	1,952	2,854	3,156
Trade	1,060	1,024	912	919	1,025	1,216	1,494	1,653	1,631
Finance, Insur., & RE	342	119	115	127	229	528	371	494	537
Other Industries	1,191	1,229	1,045	1,149	1,195	1,505	1,990	2,156	2,208

Source: Herr (1986) and (1987), Quijano (1988), and Mataloni (1989).

Appendix Table D

Employment in Nonbank U.S. Affiliates in
the EC(12) and in All Developed Countries, 1982-1987
(Unit: thousands)

	1982	1983	1984	1985	1986	1987
ALL DEVELOPED COUNTRIES						
All Industries	4,449.2	4,304.4	4,372.7	4,414.2	4,324.9	4,272.7
Petroleum	200.4	189.3	173.0	163.9	145.5	144.0
Manufacturing	2,991.2	2,871.9	2,970.7	2,966.4	2,771.1	2,680.5
Chemicals	358.8	353.0	347.6	358.0	355.2	352.8
Non-elect. machinery	430.0	407.3	467.8	473.5	443.8	422.7
Electrical machinery	355.3	352.9	364.8	364.7	408.8	363.4
Transp. equipment	778.0	753.5	758.7	756.7	569.0	563.2
Wholesale Trade	377.5	369.8	358.8	370.7	404.5	406.0
Finance, Insur., & Real Estate, exc. banking	98.3	105.6	99.5	119.2	123.5	132.8
Services	226.3	225.0	221.7	214.5	231.7	262.5
Other Industries	555.5	542.9	549.0	579.6	648.4	646.9
EUROPEAN COMMUNITY (12)						
All Industries	2,618.8	2,500.1	2,577.9	2,603.2	2,462.9	2,414.5
Petroleum	94.3 ^a	86.9	79.4	79.1	69.5	70.0
Manufacturing	1,994.8	1,895.5	1,982.9	1,982.1	1,811.1	1,741.1
Chemicals	220.0	215.7	211.3	220.5	218.1	215.1
Non-elect. machinery	318.8 ^a	301.0	357.7	355.2	327.9	314.7
Electrical machinery	242.2	237.1 ^a	252.7	253.7	301.0	259.2
Transport Equipment	538.3	511.5 ^a	504.8 ^a	506.2 ^a	323.6	316.5
Wholesale Trade	220.2	213.9	205.1	210.1	226.2	229.7
Finance, Insur., & Real Estate, exc. banking	45.8	46.6	44.5	58.9	65.6	72.1
Services	138.4	137.9 ^a	138.0 ^a	130.6 ^a	138.3	156.5
Other Industries	123.0 ^a	116.0 ^a	124.9 ^a	139.4 ^a	152.2	145.2

^aExcluding Portugal

Source: Belli (1986), Brereton (1986) and (1987), and Whichard (1988) and (1989).

Appendix Table E

Direct Investment Equity Flows to the EC(12) and to All Developed Countries, 1982-1988
(Unit: Million dollars)

	1982	1983	1984	1985	1986	1987	1988
ALL DEVELOPED COUNTRIES							
All Industries	2,027	1,183	-277	-945	-696	1,746	-1,890
Petroleum	NA	-571	-6	-2,510	590	1,304	-1,688
Manufacturing	1,285	354	321	246	-2,911	626	-812
Chemicals	588	540	137	162	-463	119	-167
Non-elect. mach.	100	102	85	23	-53	-46	-139
Elect. mach.	140	26	38	-22	-2,198	-19	-379
Transp. equip.	190	-22	25	-40	-28	69	309
Wholesale Trade	581	116	61	163	-79	-14	192
Banking	340	760	385	574	-164	-332	-155
FIRE, ^a exc. banking	1,169	390	-483	829	2,260	1,902	786
Services	93	-90	-19	-30	-205	98	-176
Other Industries	NA	225	-535	-217	-188	-1,839	-37
EUROPEAN COMMUNITY (12)							
All Industries	3,548	841	1,079	1,223 ^d	-27	630	-1,093
Petroleum	638	-147 ^b	103 ^b	46 ^b	64	430	NA
Manufacturing	1,323	392	437	140	-2,057	248	-110
Chemicals	370	166 ^b	143 ^b	92	-467	33	211
Non-elect. mach.	74	74 ^b	59	19	54	-25	-122
Elect. mach.	1 ^b		NA	17 ^b	-1,667	-24	-188
Transp. equip.	45 ^b	-36 ^b	22	1 ^b	NA	-85	329
Wholesale trade	429	NA	72	55 ^d	-108	8	332
Banking	156	323 ^b	423 ^b	476	-141	-102	-81
FIRE, ^a exc. banking	1,106 ^b	NA	9	521	NA	NA	671
of which UK	876	185	3	460	561	905	624
Services	42 ^b	NA	-6	-37	-130	65	-221
Other Industries	154 ^b	NA	10 ^d	1	NA	NA	-2

^aFinance, insurance, and real estate

^bExcl. Spain

Source: U.S. Department of Commerce (1986), (1987), (1988), and (1989b)

Appendix Table F

Direct Investment Intercompany Debt Flows to the EC(12) and
to All Developed Countries, 1982-1988
(Unit: Million dollars)

	1982	1983	1984	1985	1986	1987	1988
ALL DEVELOPED COUNTRIES							
All Industries	-1,619	-2,980	-1,989	-1,628	2,386	2,912	2,341
Petroleum	NA	-1,682	-1,983	-313	424	253	959
Manufacturing	-103	-681	408	-688	1,768	872	-1,408
Chemicals	7	-318	-85	-150	-10	678	147
Non-elect. mach.	-131	-17	-46	-21	482	464	-636
Elect. mach.	-63	-118	254	-115	-45	336	138
Transp. equip.	-433	-220	105	-478	1,332	382	-983
Wholesale Trade	-453	-229	-233	-436	-58	999	374
Banking	-1	99	-28	-24	-19	-2	-3
FIRE, ^a exc. banking	-932	-255	46	-281	183	665	2,173
Services	100	-129	-117	-47	246	154	-98
Other	NA	-102	-82	160	-158	-29	344
EC(12)							
All Industries	-1,465	-524	-1,118	-771 ^c	1,605	60	2,086
Petroleum	130 ^b	-810 ^c	-949 ^d	-409 ^d	-52	-344	NA
Manufacturing	-44	383	62	-642	1,269	692	-820
Chemicals	-140	-211 ^d	-123 ^d	-31	-12	645	150
Non-elect. mach.	3 ^c	NA	-65 ^b	-43 ^d	446	426	-298
Elect. mach.	14 ^d	NA	NA	-44 ^d	-58	} 268 {	-228
Transp. equip.	-85	NA	21 ^d	-524 ^d	NA		-395
Wholesale trade	-235	NA	4 ^b	215 ^d	93	-56	542
Banking	-1	37 ^d	-15 ^d	3 ^b	-5	-11	9
FIRE, ^a exc. banking	-1,312 ^d	NA	44	13	NA	NA	2,124
of which UK	-820	130	235	53	267	-1,559	2,039
Services	22 ^d	NA	-118 ^b	-80	257	163	NA
Other	-41 ^c	NA	-88 ^d	157	NA	NA	108

^aFinance, insurance, and real estate^bExcluding Portugal^cExcluding Spain and Portugal^dExcluding Spain

Source: U.S. Department of Commerce (1986), (1987), (1988), and (1989b).

Appendix Table G

Total Direct Investment Capital Outflows to the EC(12) and to All Developed Countries, 1982-1989 III
(Unit: Million dollars)

	1982	1983	1984	1985	1986	1987	1988	First Three Quarters	
								1988	1989
ALL DEVELOPED COUNTRIES									
All Industries	-21	2,135	1,101	13,669	18,589	33,954	10,812	4,873	16,401
Petroleum	-468	-1,186	177	-348	2,165	3,345	-146		
Manufacturing	1,000	1,027	750	8,675	9,094	19,181	1,906		
Chemicals	687	561	-50	958	2,096	4,204	2,472		
Non-elect. mach.	-16	148	248	3,914	3,352	4,435	-1,784		
Elect. mach.	244	102	523	230	-1,522	1,180	-267		
Transp. equip.	-706	450	-50	764	1,073	3,012	102		
Wholesale Trade	-252	94	101	1,353	2,299	4,612	2,409		
Banking	774	846	91	1,351	595	591	-90		
FIRE, a exc. banking	726	1,146	762	2,219	3,929	6,526	5,283		
Services	273	-69	-15	234	294	899	327		
Other Industries	-2,074	277	-765	184	211	-1,199	1,123		
EUROPEAN COMMUNITY(12)									
All Industries	756	-838	-233	12,061	12,778	18,916	4,439	-68	12,228
Petroleum	-532	-1,296 ^b	129 ^b	877 ^b	542	326	-639		
Manufacturing	1,074	172	-653	7,220	6,709	13,841	82		
Chemicals	277	7	-127	1,044	1,688	3,230	1,657		
Non-elect. mach.	137	-88 ^b	98 ^b	3,214 ^c	2,813	3,217	-2,027		
Elect. mach.	117	-58	278	273	-1,375	766	-536		
Transp. equip.	-74	736 ^b	-815 ^b	121 ^b	716	2,346	399		
Wholesale trade	-10	-173 ^b	51 ^b	1,032 ^b	1,308	2,148	1,617		
Banking	590	257	199	971 ^b	210	139	59		
FIRE, a exc. banking	-193	272	269	1,568	3,608	2,655	3,136		
Services	65	-41 ^b	-96 ^b	92	174	503	-38		
Other Industries	-238	22 ^b	-131	306	227	-695	223		

a finance, insurance, and real estate ^bExcluding Portugal ^cExcluding Portugal and Spain

Source: U.S. Department of Commerce (1986), (1987), (1988), (1989b), (1989c), and (1989d).