## **MNC Strategy and Performance: New evidence**

By Ideas Research Team

The Bureau of Economic Affairs (BEA) of the US Ministry of Commerce has recently released preliminary results of the 1999 benchmark survey of US direct investment abroad. These results provided in the Survey of Current Business, March 2002, enable an assessment of changes in the role and impact of multinational corporations during the years of globalisation.

It had been widely perceived that economic liberalisation would lead MNCs to expand their business operations and also relocate much of their existing operations to low-to-middle-income countries in the Asia-Pacific and in Latin America. However, the BEA evidence belies such expectations. Between 1989 and 1999 there was little change in the share of US MNCs in economic activity both in the US and elsewhere. In fact, share of US MNCs in world GDP in 1999 (6.1 per cent) was slightly lower than what it was in 1989.

Besides, while the shares of the Asia-Pacific and Latin America in the gross product of US majority-owned foreign affiliates (MOFAs) worldwide went up from 15 per cent and 9 per cent in 1989 to 18 per cent and 11 per cent respectively in 1999, Europe still remains the most important location for production by US MOFAs. The gross product of MOFAs in Europe in 1999 was US \$321.6 billion, out of a worldwide figure of US \$ 561.2 billion. In percentage terms MOFAs in Europe produced 57.31 per cent of the total gross product of US MOFAs. Canada accounted for another US \$63.8 billion, or 11.37 per cent of the total gross product of US MOFAs worldwide. The United Kingdom and Germany accounted for over half of the total gross product of MOFAs in Europe.

Chart 1

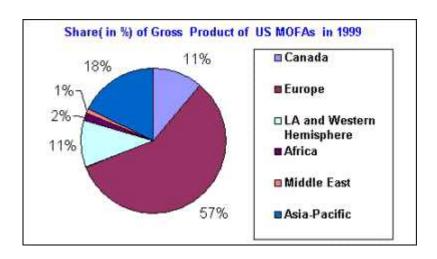
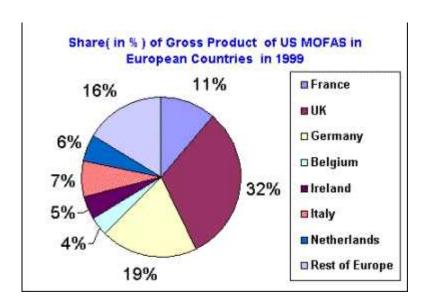
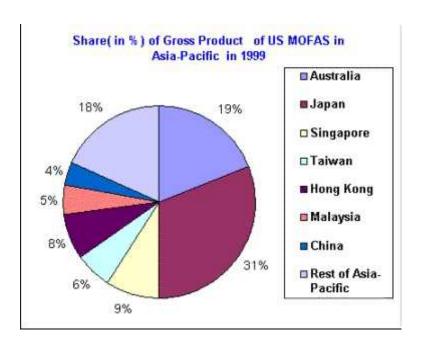


Chart 2



Further, while gross product of MOFAs in Asia-Pacific rose considerably between 1989 and 1999, the principal gainers were developed countries like Japan, Australia and Singapore. Japan and Australia accounted for almost half of the gross product of the MOFAs in the region and almost 9 per cent of total gross products of US MOFAs worldwide. Together with Singapore and Taiwan, the total share of these countries in the gross product of MOFAs in the Asia-Pacific was about two-thirds.

Chart 3



The share of UK in total gross product of MOFAs in 1999 was more than the share of Asia-Pacific, while the share of Canada, though significantly lower in 1999 than what it used to be a decade ago, was still more than the share of all Latin American countries put together. Most of the countries where the share of MOFAs in the host-country GDP in 1999 was significant in magnitude are in the developing world, with Nigeria, Honduras and Malaysia being exceptions. The share was the highest in Ireland (16.8 per cent), followed by Singapore (10.7 per cent) and Canada (10 per cent).

So, even though the periphery has witnessed some increase in MNC activity, the view that the growth of multinationals in the periphery would be at the expense of their presence in the metropolis does not hold water. Even after including the MOFAs in developed countries, the presence of US parents in the global operations of MNCs still remains strong. While in 1989 the share of US parents in the gross product of parents and MOFAs put together was 76.6 per cent, a decade later it was only marginally lower at 76.3 per cent. Indeed, with trade restrictions easing, it has now become simpler for MNCs to produce in one country and export the products to others. So, while earlier MNCs had to often set up production facilities in countries they intended to sell in, now there is no need for that anymore. The share of export sales to total sales of US parents actually increased from 6.71 per cent in 1989 to 8.05 per cent five years later. But if liberalisation entailed shifting of more

and more of the production processes to the country of final sale (or to countries near the country of final sale) one should have expected a reduction in the share of export sales in total sales of US parents. Though this share has come down to 7.10 per cent in 1999, it is still higher than what the share was in 1989. Thus, it is not true that liberalisation has always worked to the advantage of developing countries so far as attracting investment from MNCs are concerned. For many, it can work the other way round with MNCs relocating production facilities away from some countries, and later exporting to them. If liberalisation indeed worked in favour of developing countries, one would have expected more and more of the production being transferred to the countries of final destination. Share of export sales in total sales of US parents should have then steadily climbed down, a claim the data fails to substantiate. The table below will give one an idea about how much assets of MOFAs have increased in different countries between 1989 and 1994 and between 1994 and 1999.

Table 1

|  | Between 1989 and 1994 | Between 1994 and 1999 |
|--|-----------------------|-----------------------|
| All countries                                  | 64.5                  | 19.5                  |
| Canada   | 13.3                  | 41.2                  |
| Europe   | 77.3                  | 31.9                  |
| Latin America<br>& other Western<br>Hemisphere | 38.7                  | 19.5                  |
| Africa   | 36.4                  | 58.9                  |
| Middle East                                    | 45.7                  | -72.3                 |
| Asia Pacific                                   | 85.2                  | -10.7                 |
| Australia<br>& Japan                           | 69.3                  | -11.1                 |

So even as the growth of total assets of MOFAs fell sharply during 1994-1999 compared to the five-year period before it, growth of assets of MOFAs

in Canada during 1994-1999 was more than thrice the growth during 1989-1994. Even while the growth in Europe was also lower during the 1994-1999 period, it was still a respectable 32 per cent. Africa's spectacular performance in this regard should be attributed to the low base period asset value, and not so much to the region's emergence as a destination for new investment.

However, going by the number of employees, share of US parents fell from 78.6 per cent in 1989 to 74.1 per cent in 1999. But, even this need not necessarily imply that expansion of MOFAs is taking place faster than expansion of their parents in the US. It might as well be, and possibly is, true that labour-intensive segments of technology-intensive production processes are being relocated to alternative sites in the developing world where labour is cheap. Or it may even be the case that production processes in developed countries are getting increasingly mechanised, thereby not allowing the labour force employed to grow as fast as it could otherwise have. In fact, gross products of US parents and their affiliates grew at about the same rate in 1999. However, while employment in the affiliates increased 4 per cent, parent employment declined.

It must be noted, however, that the view that lower wages in some developing countries makes them an attractive site for multinational investment is not borne out by the evidence relating to US MNCs. A sample survey carried out in 1992 in 13 high-wage and 14 low wage countries (the latter including countries like Hong Kong, Singapore and Taiwan) revealed that 65 per cent of employment by manufacturing MOFAs was in relatively high-wage countries. If one takes into consideration the same two sets of countries and calculates the percentage of employment by manufacturing MOFAs in 1999, it is found that there has been only a two per cent decline in share of the said employment in the 13 high-income countries.

The share of US parents in the worldwide gross product of US MNCs has remained almost constant throughout the 1990s in almost all sectors including manufacturing, finance, insurance and real estate. Only the services sector has seen a significant decline in parent share of gross product during the latter half of the 1990s. This sector has seen a rise in its share in gross product of all industries, mainly owing to the growth of computer and data processing services. And a lot of this growth has taken place in the periphery, as parents have been outsourcing much of these activities to take advantage of the cheap but skilled workforce that the English speaking

developing countries provide. In 1989 out of the total gross product of \$67 billion of US MNCs worldwide in the services sector, US parents accounted for US \$57.1 billion, or about 85 per cent. In 1999 parents accounted for US \$178 billion out of a total of 220.8 billion, or about 81 per cent.

US MNCs are the leading spenders on Research and Development (R & D). However, R & D is still carried out mainly by the parents. In fact, share of the parents in R & D expenditure has increased during the 1990s, from 83 per cent in 1989 to 87 per cent a decade later. In 1999, US parents accounted for 68 per cent of total US R & D expenditure. The parents' large share in US R & D reflects the facts that large multinational firms still use technology as a means to market leadership, and the control that patenting ensures as the means to higher profits. The fact that parent firms account for a large share of R & D expenditures even within US MNCs points to the fact that the tendency of firms to locate research activities at or near their headquarters still persists, reducing the scientific and technological spin-offs from MNC investment in the periphery. Many MOFAs do not perform R & D at all. While the R & D performing US parents accounted for 61 per cent of the gross product of all US parents in 1999, the share of R & D performing MOFAs in the gross product of all MOFAs in the same year stood at a mere 35 per cent. The ratio of R & D expenditures to the gross product (R & D intensity) of all US parents in 1999 was 6.8 per cent. In contrast, the corresponding figure for MOFAs was only 3.3 per cent. In terms of R & D intensities MOFAs in Israel and Sweden had very high percentages of 21.3 and 15.6 respectively. The R & D intensity in China was 7.8 per cent with the OECD countries following it. In 1999 MOFAs in developing countries, leaving out China and Brazil (R & D intensity of 1.9 per cent), had an abysmally low average R&D intensity of 1.3 per cent.

The ratio of R & D expenditures to the gross product of R & D performing MOFAs in 1999 was 9.4 per cent, while that of R & D performing parents was 11.3 per cent. For Israel it was 50.8 per cent, for Sweden 41.4 per cent, and for China it was 22.5 per cent. At the other end of the spectrum, the ratio of R & D expenditures to the gross product of R & D performing MOFAs in Brazil in the same year was only 4.3 per cent, and in other developing countries the average was 6 per cent.

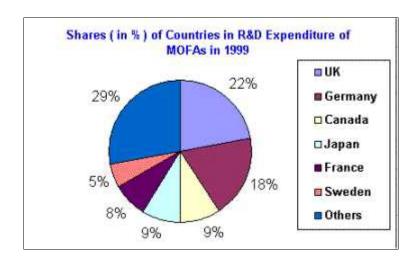
In the communications equipment segment, MOFAs however spent more on R & D than their US parents. Among R & D performing communications equipment firms MOFAs had an R & D intensity of 50 per cent, while that

of R & D performing US parents was only 38 per cent. The figures were exactly the opposite in computers and peripheral equipment, with MOFAs in the field having an R & D intensity of only 8 per cent while for parents in the field it was 27 per cent in 1999.

Manufacturing parents have been the largest spenders on R & D with R & D intensities being particularly high in computers and electronic products (particularly communications equipment), chemicals (particularly pharmaceuticals and medicines), and transportation equipment. Almost all parents manufacturing computers and electronic products conduct R & D. While the R & D intensity of those parents in this industry carrying out R & D in 1999 was 30 per cent, the industry figure for all parents in computers and electronic products in the same year stood at 29 per cent. Outside of manufacturing, parents in publishing and computer systems design and related services both exhibited relatively high R & D intensities.

Moreover, while MOFAs spent US \$18.4 billion on R & D in 1999, US \$15.7 billion were spent in research centres in developed countries, with those in UK, Germany, Canada, Japan and France spending around US \$10.8 billion. UK and Germany together, accounted for more than two-fifths of all R & D spending by MOFAs.

Chart 4



Share of R & D performing MOFAs in gross product of all MOFAs has been higher in most of the developed countries compared to such shares in the developing world. For all countries taken together, in 1999 this share was 34.9 per cent. In Germany it was 49 per cent, in Singapore 48.4 per cent, in

France 43.7 per cent, in UK 42.7 per cent, and in Israel 41.9 per cent. Among the developing countries the share of R & D performing MOFAs in gross product of all MOFAs has been particularly high in Brazil, with the share in 1999 being 43.8 per cent. If one leaves out Brazil and China (34.5 per cent), the share of R & D performing MOFAs in gross product of all MOFAs in other developing countries was only 22.3 per cent in that year.

What the figures above imply is that not many of the MOFAs in developing countries do engage in R & D, and those who do have not contributed significantly to the gross product of the MOFAs in these countries. It may very well be the case that MOFAs in developing countries are more interested in exploitation of natural resources in those countries, oil and natural gas in particular. MOFAs in the manufacturing sector, which make most of the R&D expenditure made by MOFAs, are mostly located in the OECD countries.

Finally, if we look at expansion by US MNCs in 1999, we find that more than half of the new affiliates of US MNCs have been acquired, and only a little more than 46 per cent of the new affiliates have been newly established, resulting in investment in green-field projects. This means that only in a little more than half the cases does the creation of new affiliates involve investment in new capacity or the creation of new employment opportunities in countries where they are established. On the contrary, take-overs by US MNCs have often led to retrenchment of workers working in these companies before take-over.

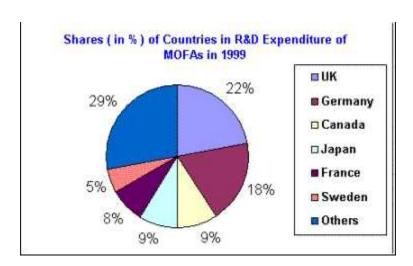
Europe is still the most popular location for new affiliates. In 1999, 56 per cent of all new affiliates were accounted for by Europe. The new European affiliates produced 68 per cent of the gross products of all new affiliates put together, and accounted for 61 per cent of the people employed by the new affiliates. Canada accounted for another 8.5 per cent of the new affiliates, and only 18 of the 1,077 were set up or acquired in Africa.

## **USDIA**

The US direct investment abroad (USDIA) on a historical cost basis stood at US \$1244.7 billion at the end of 2000. However, hardly any money has been invested till date in poor countries, particularly those in Africa. The share of USDIA on a historical cost basis that accrued to Africa till 2000 was only 1.27 per cent of the total USDIA worldwide while US \$233.4 billion had

gone to the United Kingdom, which is about 19 per cent of the USDIA. Another 10 per cent had gone to Canada, while Netherlands had got a 9 per cent share. Even within Europe, USDIA on a historical basis in 2000 was only US \$672 million in Greece. In Central America it was only US \$115 million in Honduras and US \$904 million in Guatemala. Ecuador in South America has received only US \$838 million till 2000.

Chart 5



If one looks at the fresh USDIA made in 2000, Europe got US \$60.4 billion out of a total of US \$113.9 billion and Canada got another US \$15.4 billion. So together Europe and Canada bagged two-thirds of all fresh USDIA made in 2000. Africa got less than US \$1 billion with countries like Nigeria and South Africa witnessing an outflow of US money. While South America attracted close to US \$5 billion worth of USDIA in 2000, money actually flew out of Ecuador. Same was the case with Honduras in Central America.

Out of the US \$60.4 billion that went to Europe, UK got more than a third, and Netherlands, Ireland, Switzerland and Italy together got almost another half. So these five countries got US \$50.3 billion with the rest of the European countries getting only US \$10.1 billion. Many European nations also saw their net USDIA dwindling during 2000, with Belgium, France, Austria and Finland being the prominent among them.

The table below gives the shares of the major destinations in USDIA on a historical cost basis in 2000 and the shares in fresh USDIA made in 2000. One can see that only in Europe and Canada (besides the Middle East,

whose share of USDIA is very low) the shares of fresh USDIA in 2000 are higher than the shares of USDIA in 2000 on a historical cost basis.

Table 2

|  |  | 44.000000000000000000000000000000000000 |
|--|--|---|
| Region/Country<br>USDIA                        | Share in USDIA in 2000<br>on historical cost basis (%) | Share in fresh<br>made in 2000 (%)      |
| Asia & Pacific                                 | 16.04  | 15.56                                   |
| Africa   | 1.27   | 0.82                                    |
| Latin America<br>& other Western<br>Hemisphere | 19.23  | 16.41                                   |
| Middle East                                    | 0.95   | 1.17                                    |
| Canada   | 10.16  | 13.50                                   |
| Europe   | 52.12  | 53.04                                   |

These figures reject the widespread belief that increasing shares of fresh USDIA are going into developing countries, and negate all claims about the erstwhile East-European countries becoming a hotbed for investment by US MNCs in recent years. USDIA in Eastern Europe at historical cost in 2000 was only US \$11 billion, with new net investment in the year 2000 being to the tune of a meagre US \$1.4 billion. And most of this new investment was in the financial sector, and did not contribute much to the growth of infrastructure or manufacturing industries in the region. While Asia and the Pacific region saw a US \$17.7 billion rise in USDIA in 2000, Japan got US \$6.2 billion of the amount, and Hong Kong and Singapore together got another US \$6.3 billion.

China, an emerging market in Asia, got only US \$1.6 billion during the year. This is contrary to the popular perception that being the largest developing country recipient of FDI, China must be attracting a lot of USDIA as well. The share of China in USDIA on a historical cost basis was only 0.77 per cent of the total USDIA on a historical cost basis till 2000, and 4.80 per cent of the USDIA in the Asia-Pacific region. Out of the total fresh USDIA made in 2000 China got a mere 1.33 per cent. Out of the fresh USDIA that was

made in the Asia-Pacific region in 2000, China's share was a not-too-significant 8.57 per cent. However, this data definitely reveals that China's share in USDIA is rising and its importance as a destination of investment by US MNCs is increasing as well.

Much of the increase in USDIA in 2000 was accounted for by reinvested earnings of the affiliates except in UK, Switzerland and Italy-where the increases mainly reflected acquisition. In UK the acquired firms were mostly existing British businesses, while in Switzerland and Italy it was mainly the existing foreign businesses which were acquired. So there has been little additional capacity created through fresh investment by the US parents in foreign countries in 2000. Even in Europe, there was not much investment of this kind in that year. Acquisitions rarely create additional capacity, and are mostly followed by downsizing of the existing workforce rather than expansion in the acquired firms.

Most of the USDIA that Africa and the Middle East have received till date has gone into exploiting petroleum resources in these areas. As we observed in the section on R & D, MOFAs do not spend much in these regions. USDIA figures on a historical cost basis in 2000 for the Middle East show that while about US \$2.9 billion had been invested in the area to explore petroleum, the manufacturing industries got only US \$2.5 billion. Figures for Africa reveal even greater exploitation of the region's oil and natural gas by US MNCs. USDIA in Africa in 2000 on historical cost basis has been around US \$10 billion in the petroleum sector, but only a meagre US \$2.2 billion in manufacturing. Out of the USDIA in manufacturing in Africa, a little less than US \$950 million has gone to South Africa.

If one looks at recent direct investment made by US in different countries, and compare how much it has grown in 2000 over what it was in the year before, one will find that USDIA had grown by only 6 per cent in Africa and about 8.5 per cent in Latin America. In contrast USDIA in Canada and Europe grew at 14 per cent and 10 per cent respectively. Though in the middle-east it rose 12.7 per cent, this was probably owing to the fact that assets of MOFAs in the region had fallen sharply in the five years preceding 1999. Overall, USDIA rose 10 per cent during the year.

Besides, distribution of whatever little USDIA has gone into developing countries has been extremely skewed with a few countries getting almost the entire USDIA coming into developing countries. For example, USDIA on a

historical cost basis in 2000 in South America stood at US \$79,354 million. US \$35,560 million of that, or about 45 per cent went to Brazil, another 18 per cent to Argentina, and 14 per cent to Chile. Venezuela got about 11 per cent of the USDIA in South America. The distribution was even more skewed in Central America. Of the US \$74,754 million the region attracted as USDIA till 2000, Mexico and Panama got more than 47 per cent each. Out of the USDIA going into other countries in the western hemisphere, Bermuda got more than 63 per cent, and United Kingdom Islands, Caribbean got another 24 per cent. And the investment in Bermuda really didn't help the country much as it is just used as an offshore tax haven for US parents, and not as a destination for setting up production facilities.

While there has been much optimism in the developing world about increase in FDI after liberalisation, these data relating to US MNCs belie any such hope. While much of the expansion and investment by US MNCs is still being directed at the OECD countries, the spate of acquisitions and mergers would in all probability increase the dominance of a few MNCs over the global economy. That increase in dominance delivers much less than the expected increase in new production facilities and employment opportunities on which the case for economic liberalisation rests.