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Technology, Development



CentrePiece Spring 2005 Multinational firms are demonised by antiglobalisation campaigners. Yet according to a new book by Tony Venables and colleagues, the evidence is that they are generally a force for prosperity in the world economy. Multinationals: heroes or villains of the global economy? F oreign-owned multinationals employ one worker in every five in European manufacturing and one in seven in US manufacturing. They sell one euro in every four of manufactured goods in Europe and one dollar in five in the United States. Yet policy-makers and the public around the world have mixed feelings about multinationals: they see them either as welcome bearers of foreign wealth and knowledge or as unwelcome threats to national wealth and identity. Policy-makers want multinationals to invest in their country, but are unhappy when national firms close down domestic activities and open up foreign ones or when foreign brands compete successfully with national ones. This Jekyll and Hyde perception of multinationals stems more from ambiguous feelings about large market players with no national identity than from rigorous economic analysis. Indeed, the debate on multinationals is rarely grounded on economic arguments and there is little understanding of what multinationals are, or of what costs and benefits they bring to local economies. Multinationals are often different from purely national firms and some concerns are legitimate. They are relatively large and they do have competitive power in the market place and bargaining power in the policy-making arena, particularly in smaller developing countries. They are global players that can circumvent local regulations and policies more easily than national firms. They are footloose, able to move activities between their plants at relatively low cost,

removing benefits as rapidly as they deliver them. And they do massproduce standardised products, jeopardising product variety. Yet other features of multinationals also explain why countries compete fiercely to attract them. They often bring scarce technologies, skills and financial resources. They are fast in taking advantage of new opportunities and contributing to national wealth creation. They are bound by international standards and market competition and they often offer better employment conditions and product qualities than national firms. Moreover, multinationals are not just giant corporations like Microsoft or Coca Cola. Many small and medium-sized enterprises, firms with limited market power in domestic and foreign markets, have one or more foreign subsidiaries. Investing abroad and thus becoming a multinational is a strategy open to many types of firms. Our book addresses concerns about multinationals and brings clarity to the debate. It provides a thorough assessment of what multinationals are, why and where they arise and their impact on home and host economies. We conclude that although none of these concerns have straightforward answers, the argument favours multinationals: they are a fundamental feature of modern economies and there is no evidence that they are less beneficial to home and host economies than national firms. What are multinationals? Multinationals are firms that own a significant equity share — typically 50% or more — of another company operating in a foreign country. They include modern corporations like IBM, General Motors, Intel and Nike, but also small firms like Calzaturificio Carmens, a shoemaker employing 250 workers divided between Padua (Italy) and Vranje (Serbia). The activities of multinationals are best measured by firm-level data like

sales or number of employees. Unfortunately, these data are not widely available. Instead, researchers rely on data on flows 2 CentrePiece Spring 2005 The facts on foreign direct investment Fact 1: the recent growth of FDI has far outpaced the growth of trade and income The past 20 years has seen an enormous growth of activity by multinationals. Figure 1 shows that inflows of FDI have grown much faster than either trade or income. While worldwide real GDP increased at a rate of 2.5% a year between 1985-99 and worldwide exports by 5. 6%, worldwide real inflows of FDI increased by nearly 18%. This compares strikingly with pre-1985 data, when GDP, exports and FDI were following closer trends. Fact 2: FDI originates predominantly from advanced countries Between 1998-2000, 93% of outward FDI flows originated in an advanced country. Developing countries increased their share of outward flows through the 1970s and 1980s to a peak of 15% in the mid1990s, only to see it then decline. Among individual countries, the United States is the world's largest foreign investor. The EU as a whole accounts for 71% of all outward stocks, a share that has risen sharply, partly because of the rise in intra-EU investments associated with deepening integration. In the developing world, only the Asian countries — especially China, Hong Kong, Singapore, South Korea and Taiwan — supplied a significant share of world FDI flows by the mid-1990s. Most of these investments took place within Asia and GDP exports, FDI inflows, (constant 1995 \$ index numbers 1970 = 100, log scale) of foreign direct investment (FDI) recorded from balance of payment statistics and which are available across time, industrial sectors and for many receiving and sending countries. FDI is an investment in a foreign company where the foreign investor owns at least 10% of the

ordinary shares, undertaken with the objective of establishing a 'lasting interest' in the country, a long-term relationship and significant influence on the management of the firm. FDI flows are different from portfolio investments, which can be divested easily and do not have significant influence on the management of the firm. Thus, to create, acquire or expand a foreign subsidiary, multinationals undertake FDI. Figure 1: Trends in world GDP exports and FDI inflows, Year Figure 2: Sources of outward FDI Percentage of GDP Year therefore declined drastically following the Asian crisis in 1997/8. Yet most of the difference between the advanced and developing countries is accounted for by sheer economic size, and the difference in outflows relative to GDP is perhaps less than might be expected. Figure 2 shows FDI outflows relative to source country GDP. In the mid-1990s, outward flows ranged between an average of 1. 3% of GDP for the advanced countries to an average of 0. 9% for the developing countries. The noticeable exception is the EU: although it declined in 2001, the FDI share of GDP remains higher for the EU than elsewhere in the world. 3 CentrePiece Spring 2005 Fact 3: FDI goes predominantly to advanced countries though the share of developing countries has been rising The advanced countries' share of world FDI inflows has fluctuated between 58% and 78%. This is a lower share than as sources of FDI but the breakdown is similar, with the largest share concentrated in the EU, although the United States is the largest single destination country. The share of worldwide FDI received by the developing and transition economies jumped from 25% in 1988-93 to more than 40% in 1992-7 before falling again to 21%. These flows go overwhelmingly to Asia and Latin America, with China alone taking

around one quarter of the total. The increase in FDI flows to developing countries reflects their growing importance as a source of financing in these economies. Figure 3 shows FDI inflows relative to the GDP of the host economy. During 1988-92, advanced countries received FDI inflows at an average annual rate of 0.9% of GDP, while the average for developing and transition countries was 0. 78%. By 19939, the inflow rate for the advanced countries had increased to 2. 3% of GDP, while that for developing and transition countries had more than doubled to 3.4% of GDP, with Asia and Latin America taking the lion's share. Fact 4: mergers and acquisitions account for the dominant share of FDI flows The establishment of a foreign subsidiary may take place in two ways: ' greenfield investment', when a new plant is set up from scratch; or a merger with or acquisition of an existing firm (M&A). Table 1 shows that the majority of FDI takes place through M&A and its share has increased steadily since the mid-1980s from 66% to 76%. The share of M&A is much smaller in developing countries. Fact 5: most FDI is concentrated in skill and technology intensive industries The most noticeable trend in the sectoral distribution of FDI stocks in the advanced countries is the increase in the share of services and the parallel decline of the primary sector. This trend reflects the overall shift of world GDP from the primary sector and agriculture towards services. The share of manufacturing in FDI Table 1: — approximately 40% — is larger than the share of manufacturing in world GDP — approximately 30%. Table 2 shows the distribution of world inward FDI stocks: the share of services is 50%, manufacturing 42% and the primary sector 8%. The broad sectors in which the presence of multinationals is greatest are characterised by large

investments in research and development, a large share of professional and technical workers and the production of technically complex or differentiated goods. Fact 6: multinationals are larger and typically more productive than national firms Multinationals are generally large companies compared with national firms. Their home activities are generally larger than those of national firms, and foreign subsidiaries are on average larger than national firms in host economies. A crude measure of this gap in host countries can be gauged by comparing the average size Cross-border M&A investments as a percentage of FDI inflows to the host countries 1987-91 1992-94 1995-97 1998-2001 World Developed countries Developing countries and transition economies 66. 29% 77. 49% 21. 94% 44. 75% 64. 93% 15. 49% 60. 18% 85. 39% 25. 79% 76. 23% 88. 96% 35. 74% Figure 3: Hosts of inward FDI Multinationals generally perform better than national firms in home and host economies alike Percentage of GDP Year 4 CentrePiece Spring 2005 Being multinational is often the best way to operate in an integrated global economy of foreign subsidiaries with that of all manufacturing firms in the world's five biggest economies. Table 3 shows that foreign subsidiaries are relatively large when size is measured by number of employees, turnover or value added. It also shows that the labour productivity of foreign subsidiaries is above average, both when measured by turnover and value added per employee. This finding is partly due to the sectoral composition of FDI, which is different from that of the economy as a whole. The evidence on the operations and impact of multinationals Mobility of firms not capital FDI is long-term compared with highly mobile capital flows like portfolio investments or bank credits. Such investments cover the cost of starting or

buying and then running foreign plants or other activities, and are best thought of as movements of firms rather than movements of capital. The key difference is that firms bring in their own very distinctive bundle of capabilities. Whether a loan is granted by Citicorp or Credit Agricole does not make much of a difference. But whether FDI is carried out by Renault or Monsanto makes a great deal of difference. Indeed, each firm is a unique bundle of factors, competences and procedures that get transferred to foreign operations. Consequently, different investments might have substantially different effects on the host and home economies. Variety of motives The heterogeneity in the characteristics of multinationals is mirrored in the variety of reasons why firms become multinationals. Much FDI is ' horizontal', intended primarily to serve host country markets. In some cases, these investments arise to circumvent trade barriers and are boosted by protectionism. In others, they are promoted by trade liberalisation, as when Table 2: World inward FDI stock by industry Industry Share of world FDI inward stock (%) Total Manufacturing Food, beverages and tobacco Textiles, clothing and leather Wood and wood products Publishing, printing and reproduction of recorded media Coke, petroleum products and nuclear fuel Chemicals and chemical products Rubber and plastic products Non-metallic mineral products Metal and metal products Machinery and equipment Electronic and electronic equipment Precision instruments Motor vehicles and other transport equipment Other manufacturing Services Trade Transport, storage and communications Finance Business activities Other services Primary sector 100 41. 6 2. 8 1. 0 1. 5 1. 0 1. 9 6. 7 0. 6 1. 0 3. 0 2. 5 3. 6 1. 4 3. 0 11. 6 50. 3 10. 5 5. 9 15. 9 10. 4 7. 6 8. 1 Table 3: Comparing

the average size and labour productivity of foreign affiliates and all firms in manufacturing in the five biggest national economies Year: 1997 France Germany Japan UK United States Foreign affiliates Number of employees per firm Turnover per firm (\$ millions) Value added per firm (\$ millions) Turnover per employee (\$ millions) Value added (\$ millions)/ employees 0. 068 0. 23 18. 0 61. 1 265. 6 All firms Foreign affiliates All firms Foreign affiliates All firms Foreign affiliates All firms Foreign affiliates All firms 130. 9 25. 8 7. 7 0. 197 0. 059 288. 9 105. 6 0. 366 172. 5 33. 8 6. 0 0. 196 0. 035 313. 8 184. 1 34. 6 0. 587 0. 110 49. 1 11. 5 3. 4 0. 234 0. 068 301. 9 94. 5 32. 2 0. 313 0. 107 25. 4 4. 5 1. 9 0. 177 0. 073 782. 5 234. 6 66. 2 0. 3 0. 085 52. 9 10. 7 3. 8 0. 202 0. 072 5 CentrePiece Spring 2005 regional economic integration provides a boost to inward FDI. The standard explanation of why firms invest abroad is rooted in 'scale economies'. Some firms develop intangible assets like a brand name or new technology, the benefits of which can be spread across several plants: the brand name of Coca Cola benefits Coca Cola plants in the United States as well as in Ghana. These intangible assets are a source of increasing returns to scale and market power. That is why multinationals are often giant corporations. So why is a medium-sized firm like Calzaturificio Carmens a multinational? Because firms also invest abroad for reasons other than the exploitation of market power and by so doing are able to save on production and distribution costs. They go abroad to gain market access, to look for cheap factors of production, to source specific technologies and to exploit location-specific externalities. These motives can be pursued by relatively small firms that implement flexible and fragmented operations across several countries. Increasingly, firms are

organising their production to benefit from the advantages that freer trade and lower transport costs have created. Internal or external operations Foreign operations do not necessarily need to be carried out by wholly owned foreign subsidiaries. In many circumstances, they can be carried out in looser ways, through arms' length agreements with local firms, such as licensing contracts to produce a component or assemble a finished good or agency contracts to market a given product. These agreements are often cheaper than setting up a foreign subsidiary. A considerable share of international activities happens this way, and the share would be even larger but for market failures that often prevent such agreements from functioning efficiently. For example, a multinational with an exclusive technology may fear that a licensing contract could lead to dissipation of its proprietary knowledge. In that case, setting up a foreign subsidiary is a preferable strategy. Efficiency gains for the global economy Organising activities across the border works. There are complementarities between the capabilities of firms and the characteristics of countries that can be effectively achieved by FDI as well as by trade in goods. Multinationals generally perform better than national firms in home and host economies alike. Such firms are able to expand by becoming multinational, applying their higher productivity to a wider range of inputs. Multinationals are also on average larger than other firms, they do more research and development and they use more skilled personnel. There is consistent and robust evidence of this when comparing the activities of multinationals in both home and host countries with those of national firms. Global benefits mostly translate into local benefits If multinationals are more efficient than national firms, then the larger their

share of world activity, the more efficient will be world production and the higher world income. But these global benefits may not necessarily make everyone better off. At the country level, world efficiency gains might not always trickle down to improve welfare. For example, outward FDI diverts national resources to foreign countries and this diversion could impoverish home countries if it leads to a contraction of activities at home. But the evidence is that outward FDI strengthens firms, leading to expansion rather than contraction of activities at home. The relocation of labour intensive activities is a key concern in high-income countries. But in general, this is an opportunity for firms to reduce their production costs and remain competitive. Multinationals tend to be larger than other firms, do more R&D and use more skilled personnel Outward FDI strengthens firms, leading them to expand rather than contract their home activities 6 CentrePiece Spring 2005 Although some activities get transferred, they become an element of a strategic process that strengthens activities that remain in the home country. There is evidence of technological upgrading as home activities become more skill intensive and productivity growth accelerates. Inward FDI creates employment in the host country, although there are also concerns that it causes profits to be channelled abroad and local industry to be damaged. But the evidence is generally that 'crowding out' affects only the most inefficient local producers, local resources that are released are put to a better use and prices decline to the benefit of local consumers. Multinationals generally pay higher wages than local firms and in some countries, the impact of job creation by multinationals has been so large that wages have risen rapidly, this being most obvious in the case of Ireland.

There is also considerable evidence that inward investment is associated with linkages to local firms and with technology transfer, raising the productivity of local firms. These effects are strongest where host countries have sufficient skills and technology to interact with multinationals. But when technological and income gaps are too wide, this transfer is limited and FDI is no shortcut to faster income growth. Convergence or divergence of world income? The nature of the interaction between foreign firms and domestic activities in host countries has long-term implications for the convergence of world income. FDI in developing countries is of particular importance here. Such investments provide an important source of capital formation even in very backward economies, and more importantly, a source of firm-level capabilities that would otherwise be absent. But the impact on host economies is small if there is little interaction with domestic activities. Consider the creation of human capital, a key ingredient for growth. The evidence is that even in developing countries, multinationals employ more educated personnel than national firms. If there is no effort to expand and enhance local skills through education policies, the gains are likely to be small. Ireland is the shining counter-example here: the high-tech US multinationals that invested there in the 1980s and 1990s generated a massive demand for local skills. Irish engineers based abroad moved back home and an explicit policy to enhance high education in science and technology was launched. This was, of course, to the benefit of the whole Irish economy. Are the positive effects of FDI short or long lasting? Another problem for long-term income growth is that the presence of multinationals could be short-lived. The cost to multinationals of relocating activity is

generally low as production is already organised across countries. But while the only available evidence on the volatility of multinationals is for highincome economies, surprisingly it shows that they are less volatile than national firms. Multinationals react faster to shocks but the overall magnitude of their reaction is less than that of national firms. This need not be the case for developing countries. Many recent FDI flows to developing countries are essentially seeking cheap labour and many are concentrated in cheap labour countries neighbouring large high-income markets, like Mexico or the Central and Eastern European countries. And thanks to FDI, these economies have been able to achieve high rates of growth. But wages rise with income. For these foreign activities to stay in the longer term, other attractions must be developed. Many of these favourite locations of the 1990s are already falling out of favour as activities move to new locations where labour is cheaper. Particularly worrying are reports that even countries with an obvious locational advantage like Mexico are seeing FDI moving to locations further away from the United States but where labour is cheaper. Foreign firms may go as they come and their positive effects could be shortlived. For this reason, developing countries cannot just rely on cheap labour to attract FDI. The strategy successfully followed by Ireland managed to use its initial cost advantage to create substantial clusters of foreign firms drawing on a highly skilled labour force. Even in developing countries, multinationals employ more educated personnel than national firms Multinational Firms in the World Economy by Giorgio Barba Navaretti and Anthony J Venables (with Frank G Barry, Karolina Ekholm, Anna M Falzoni, Jan I Haaland, Karen Helene Midelfart and Alessandro Turrini) is published by

Princeton University Press (2005). Giorgio Barba Navaretti is Professor of International Economics at the University of Milan. Anthony J Venables is Professor of International Economics at LSE and director of CEP's research programme on globalisation. 7