

Outward Investment, Employment and Wages in Swedish Multinationals

Magnus Blomström and Ari Kokko

Stockholm School of Economics

1. Introduction

The debate on the home country effects of FDI, which was particularly lively in the U.S. some 20 years ago, has re-emerged on the agenda during the past decade. The main reason is the accelerated reduction of trade and investment barriers throughout the world, resulting both from multilateral trade liberalization and regional integration, which has created new, large markets and removed restrictions on where plants can be located. Although a more liberal trade and investment environment is expected to improve global efficiency and welfare, it is not obvious that the benefits will be distributed equally between the countries and regions. The worry in the home countries of MNCs – in particular, those home countries that are large net outward investors – is that investment abroad will replace investment at home and that this will lead to the export of jobs.

However, until recently, such apprehensions did not gain much of a footing in the Swedish debate. On the contrary, the Swedish debate was for a long time characterized by a consensus that foreign investment by Swedish multinationals would benefit both Sweden and the firms themselves. Ever since the 1960s, the view was that “What’s good for Volvo is good for Sweden”. This attitude may seem particularly surprising in view of the highly international nature of Swedish industry. Sweden is currently ranked as the 10th largest foreign investor in the world. In the mid-1990s, Swedish multinational corporations (MNCs) already had more than half of their employees in foreign locations, which is nearly twice as many as in 1970 (Braunerhjelm & Ekholm [1998]). By 1997, only 37 percent of the jobs in the 80 largest Swedish MNCs were found in Sweden (NUTEK 1999)

The extensive internationalization of Swedish industry since the beginning of the 1970s can be explained both by the continuous growth of foreign subsidiaries throughout the period and by slower employment growth in Sweden. In the early 1990s, when the Swedish economy was struggling with a financial crisis, there was in fact a significant decline in the number of employees in the Swedish operations of these MNCs. This pattern can be seen clearly by taking a closer look at developments in the 16 largest Swedish multinationals. Between 1978 and 1994, the total number of people employed by these firms in Sweden fell by just over 11 000. At the same time, the number of employees in their foreign subsidiaries increased by 55 000 people. Thus, the entire expansion by these large Swedish corporations took place outside of Sweden.¹

In this paper, we will briefly account for the reasons for and the effects of the high level of overseas involvement by Swedish MNCs and point to some factors suggesting that the Swedish attitude to internationalization has been far too uncritical.

2. Why do Firms Invest Abroad?

Over the last few decades, several different (but complementary) explanations for foreign direct investment have been offered in the literature. As early as 1960, Stephen Hymer, a pioneer in the field, explained FDI as a result of the existence of firm-specific assets and imperfect competition (Hymer [1960]). His analysis was based on the assumption that domestic firms always have an advantage over foreign investors due to their superior knowledge about the local market. Foreign firms will therefore only survive if they can compensate for this by providing a superior production technology, product (trademark), or organization. A precondition for foreign direct investment is thus the existence of this type of proprietary assets. Firms need to be strong to survive in international competition.

A further condition for international production is that direct investment must be the most profitable way of utilizing the firm's different assets. For example, sometimes a firm may have the alternative of selling patents and licenses to independent foreign companies. However, the transaction costs for trading in this type of information are often high. In order for the buyer to assess the value of the

¹ All statistics on Swedish MNCs are taken from the Research Institute of Industrial Economics' (IUI)

information, he or she must become acquainted with the technology, after which it can be difficult for the seller to obtain his asking price. Buckley & Casson [1976] were among the first to speak of the *internalization* of production within multinational corporations as means of avoiding these problems.

In other cases, exporting from the home country base may be a viable alternative to foreign direct investment. However, there are many types of transaction costs which make exporting an expensive alternative. Transportation costs and man-made trade barriers are perhaps the most obvious examples, but it can also be more expensive and more difficult to get close to foreign consumers if a firm merely exports goods from its home country (Dunning [1981]). Production presence in a market is often interpreted as a long-term commitment, which in turn facilitates marketing, particularly of capital goods and durable consumer goods that require after-sales service.

The arguments above mainly explain direct investment that targets the domestic markets in recipient countries. Until recently, most of Sweden's foreign investment has been of this type. However, the situation has changed drastically as a result of the trade liberalization of the past decades. Instead of horizontal investment that aims to imitate the activities of the parent company in different countries, it has now become possible to organize vertical production systems that comprise several countries. By dividing up the value chain into several independent components and making individual location decisions for each of these links, multinational firms are able to utilize the comparative advantage of several countries. Labour-intensive parts of production end up in low-wage countries and knowledge-intensive operations in countries with a relatively good supply of skilled labour. In order to survive and compete with other firms, each firm with global ambitions must exploit these opportunities to minimize costs. The key issue both for home countries and host countries has therefore become the same: Which parts of the value chain will end up in their country?

3. How is the Domestic Economy Affected?

database, unless other references are given.

The old debate: Complementarity or substitution?

The question that has been discussed the most with regard to the home country effects of foreign direct investment is whether production abroad replaces or complements previous exports by the parent company or by other firms in the home country (see Blomström & Kokko [1994] for a survey of the literature). Although foreign production normally replaces some previous exports of finished goods, this need not entail that the home country will make an export loss in the long run. For instance, if a firm is able to increase its sales on a foreign market by establishing affiliates on that market, the export loss in terms of finished goods can be partly or fully compensated for by an increase in the export of intermediate goods to the affiliate. This will result in either a positive effect or no effect at all on the overall level of exports.

Studies based on data from the United States have consistently shown a positive correlation or no correlation at all between production by American firms in a specific country and American exports to that market (for example, see Blomström et al. [1988]). A negative correlation has also been found between production by American firms in a specific country and exports by other countries to that country, as well as a positive correlation between foreign production by American firms and total global exports by American firms (Lipsey & Weiss [1984]). All in all, these studies appear to suggest a complementary relationship between FDI and home country exports.

However, studies of Swedish MNCs have shown more mixed results. For a long time, as in the U.S. analyses, only positive correlations between foreign production and exports were found. The studies undertaken by Birgitta Swedenborg are the most important in this area. In her most comprehensive study, Swedenborg [1982] reached the conclusion that if foreign production increased by SEK 100, this would result in an increase in exports from the parent company to the subsidiaries by SEK 12 and a decrease in exports to other customers in the recipient country by SEK 2. The net effect would thus be an increase in exports of SEK 10.² In later years, however, negative correlations have been found. For instance, Svensson [1996] claims

² Swedenborg's study was commissioned by a government committee set up to analyze the home country effects of FDI ("The Direct Investment Committee") which in several different reports

that rising exports by Swedish foreign subsidiaries to third countries cause a fall in exports by the parent company to these countries (which Swedenborg's analyses failed to take into account). Accounting for this effect, foreign production has a negative net effect on exports by the parent company, according to Svensson.

The one question that remains to be answered in all of these analyses is what would have happened to exports if the firms had not invested abroad. Would the firms have been able to maintain (or even increase) the market share they had carved out exporting from Sweden, or would they have been driven out of the market by other firms, leading to a reduction in exports by the parent company? If the reason for the foreign investment was trade barriers, perhaps the alternative was not to export at all.

While different studies have assumed different "survival rates" for exports (i.e. the proportion of the affiliate's market share that the parent company can retain by exporting if the affiliate is closed down), all studies agree that production presence is essential. For example, a government report prepared by the "Direct Investment Committee" (SOU 1981:33) assumed survival levels of two to eight per cent for standard products, while a corresponding English study assumed that exports by the parent company to specific foreign markets would cease totally if the local affiliates were closed down (Reddaway [1968]). The general view from many microeconomic and case studies is thus that the multinationals would not have been able to maintain their international market shares in the long term if it had not been possible for them to produce abroad.

The effects of foreign direct investment on capital formation, employment and wage levels in the home countries of the multinationals have also been the subject of some research interest. In terms of capital formation, several studies have indicated that foreign investment reduces investment activity in the home country (see, for example, Belderbos [1992] and Stevens & Lipsey [1992]). The main reason for this is that the cost of capital rises according to the rate of lending by firms. Foreign direct investment, therefore, competes with domestic investment for the relatively cheap capital, i.e. reinvested profits and first mortgage loans. Negative effects of U.S. direct investment have also been reported with regard to domestic employment (Blomström et al. [1997] and Brainard & Riker [1997]), but this mainly applies when the

reached similar conclusions regarding the effects of foreign direct investment. See, for example, SOU

investment is made in low-wage countries. Finally, U.S. wage studies have concluded that there is a positive correlation between foreign production and wage levels in parent companies (Kravis & Lipsey [1988]).

The new debate: Structural effects on the home economy

As discussed above, it is often necessary for firms to move parts of their operations abroad in order to maintain their market shares in tough international competition. This is an important to keep this fact in mind when analyzing the effects of foreign direct investment. Instead of focusing solely on the quantitative effects of internationalization - for instance, the question whether FDI and home country exports are complements or substitutes - it is therefore appropriate to examine which type of operations are moved abroad and which type remain in the home country.

In an earlier study, in which we compared the employment effects of Swedish and U.S. foreign investment, we demonstrated a number of significant differences between the two (Blomström et al. [1997]). American data indicates a negative correlation between domestic employment and foreign production. While an increase of USD 1 million in net sales by the parent company (a proxy for production) resulted in the creation of 6 new jobs in the parent company, a corresponding sales increase by the foreign subsidiaries resulted in the loss of one job in the parent company. The main reason for this was that U.S. multinationals to a large extent relocate labor-intensive production to low-wage countries. (When domestic production worth USD 1 million was replaced with production by foreign subsidiaries in developing countries, this resulted in a loss of 18 jobs in the parent company.) U.S. firms currently have a relatively high level of activity in developing countries. 20 per cent of foreign production by U.S. multinationals currently takes place in developing countries, compared with only 7 per cent of production by Swedish firms. This means that the more skilled jobs (“white-collar workers”) are kept in the U.S. whilst the less demanding jobs (“blue-collar workers”) are relocated to low-wage countries, a situation which reflects the comparative advantages of the U.S.

Our study also showed that Swedish foreign direct investment resulted in increased employment in Sweden, albeit at a falling rate since the 1970s. For example,

in 1990, a production increase of USD 1 million in the foreign subsidiaries resulted in 1 new job in the parent company. However, this expansion mainly concerned low-wage jobs (“blue-collar workers”). In other words, it appeared as though Swedish multinationals, in contrast to American, were greatly expanding their skilled operations abroad and keeping low-wage operations in Sweden. There is reason to suspect that this pattern reveals shortcomings in the conditions for highly advanced production in Sweden.

A further way of illustrating what is actually happening within Swedish multinationals is to compare wage trends in Sweden and abroad. We can start by stating that, in recent years, the average wage per employee in foreign operations of Swedish multinationals has risen far more quickly than in the Swedish operations. In 1970, the average wage in firms’ operations located in Sweden was 52 per cent higher than in the foreign operations. In 1994, the difference was only 6 per cent (Blomström & Fors [1999]). Swedish subsidiaries in industrialized countries paid on average 6 per cent higher wages than the parent company in Sweden. It has not been possible to trace any similar developments in U.S. firms. In the United States, the wage-relationship between a parent company and its subsidiaries has remained largely unchanged during the corresponding period.

This wage development in Swedish firms is partly due to the fact that Swedish wages have fallen considerably in relation to wages in countries that are Sweden’s competitors. Within manufacturing industry, Swedish wages fell by 32 per cent in relation to the average wage for OECD countries between 1970 and 1994 (see Table 1). However, these wage developments cannot be explained by this factor alone. If we compare wage developments within the parent companies of Swedish multinationals with the OECD average during the same period, we only see a decline of 12 per cent. And if we consider Swedish subsidiaries abroad, we find that wages have *increased* by 25 per cent compared with the OECD average (Table 1). This suggests that Swedish MNCs are transferring more and more advanced operations to subsidiaries located abroad.

Table 1. Wages in Sweden and in Swedish multinationals in relation to the OECD average, 1970 – 1994.

	1970	1990	1994
Sweden	1.17	0.92	0.79
Swedish parent companies	1.38	1.48	1.21
Swedish subsidiaries	1.03	1.30	1.29

Sources: Research Institute of Industrial Economics' (IUI) database and UNIDO's wage statistics. The comparison covers solely manufacturing industry.

Foreign subsidiaries of Swedish multinationals also pay much higher wages than the average wages within manufacturing industry in their host countries (see Table 2) and that this gap has generally widened since 1970. This is a further sign that Swedish foreign firms' production has increasingly become relatively advanced.

Table 2. Wages in Swedish subsidiaries in relation to average wages in the host country.

	1970	1990	1994
Australia	1.01	1.36	--
Belgium	1.66	1.90	--
Denmark	1.17	1.25	--
England	1.24		1.32
Finland	1.21		1.43
Greece	2.56		1.54
Italy	1.78		1.22
Japan	--	1.75	1.66
Canada	1.18		1.37
Netherlands	1.15		1.17
Norway	1.29		1.05
Portugal	1.18		2.20
Spain	1.62		1.99
Germany	1.22		1.43
USA	1.09		1.30
Austria	1.33		1.61

Sources: Research Institute of Industrial Economics' (IUI) database and UNIDO's wage statistics. The comparison covers solely manufacturing industry.

These statistics suggest that there are structural changes in the operations of Swedish MNCs that may have contributed to a hollowing out of Swedish industry, at least until the early 1990s. However, they say little about how significant the structural changes are in quantitative terms, and what their impact on the Swedish economy is. Although there is no direct evidence on this point from earlier studies, there are indications that the effects may be very significant. A first point to note is that the plant and employment dynamics within MNCs are remarkably large in comparison with the net changes recorded in industrial statistics. One measure is provided by Fors and Kokko [2000], who examined the changes in the population of plants owned by the 17 largest Swedish MNCs in Sweden and abroad during the period 1986-1994. They found that more than half of the 229 Swedish plants that existed in 1986 had disappeared from the sample by 1990, as a result of closures or sales to other firms.

Simultaneously, the 17 MNCs had established or acquired 105 new plants in Sweden. The changes in the population of foreign plants were almost as large. 119 of the 304 foreign affiliates existing in 1986 had disappeared by 1990, while 205 new affiliates had been established over the same period. Figure 1 shows that the development between 1990 and 1994 was similar, with the exception that the number of new Swedish plants was much lower than the number of disappearing plants, reflecting the contraction in home operations as a result of the financial crisis of the early 1990s.

Figure 1. Plant Dynamics: Changes in the Population of Domestic and Foreign Plants 1986-1994, 17 Swedish MNCs

Insert here

Another illustration of the changes taking place within Swedish MNCs is provided by Hakkala and Kokko [2000], who examine the turnover of labor in the Swedish operations of the 30 largest MNCs. For the period 1986-1994, they find average annual gross losses of jobs of more than 20 per cent. However, since the average gross rate of job creation is nearly 18 per cent, there is only a net change of about - 3 per cent. Distinguishing between employment changes from the entry and exit of entire plants, and changes occurring in surviving plants, they also find that the changes due to entry and exit of plants dominate. Table 3 summarizes some of their findings regarding employment dynamics.

Table 3. **Employment Dynamics: Changes in Domestic Employment 1986-1994, 30 Largest Industrial MNCs (per cent of total employment in sample).**

Year	Net change %	Entry %	Exit %	Expansion %	Contraction %	New jobs (2+4) %	Lost jobs (3+5) %
	1	2	3	4	5	6	7
1986	-0,5	11,0	-12,8	3,4	-2,1	14,4	-14,8
1987	4,4	15,0	-11,5	4,1	-3,2	19,1	-14,7
1988	6,5	22,8	-17,3	4,4	-3,4	27,2	-20,7
1989	-4,6	7,0	-11,1	3,2	-3,6	10,1	-14,7
1990	-3,2	16,5	-20,2	6,6	-6,0	23,1	-26,2
1991	-11,8	14,0	-22,2	3,5	-7,2	17,5	-29,3
1992	-8,4	9,5	-11,8	1,6	-7,7	11,2	-19,6
1993	-4,7	14,0	-16,1	2,8	-5,4	16,8	-21,5
1994	-3,6	14,6	-21,3	6,9	-3,7	21,5	-25,0
Average 1986-1994	-2,9	13,8	-16,0	4,0	-4,7	17,9	-20,7

Source: Hakkala and Kokko [2000], Table 3.

Both Fors and Kokko [2000] and Hakkala and Kokko [2000] conclude that these changes within the MNCs give great scope for structural changes. The closure (or sale) of old plants and the establishment (or acquisition) of new ones is not a random process, but instead the result of strategic choices on the part of the MNCs. With a more liberal trade environment, there are improved opportunities to restructure operations to exploit the comparative advantages of the nations and regions where the MNCs operate. Unlike the U.S., where the comparative advantages in skilled labor have led to structural changes favoring advanced operations, Sweden was apparently not considered as the optimal location for high-tech operations before the mid-1990s.

4. Why do These Differences Exist?

Why then are the home country effects of Swedish and U.S. foreign investment so different? With regard to this, we would like to focus on differences in “individual climates” (mainly payroll taxes) and wage policy rather than differences in “business climates” (e.g. corporation taxes) between the two countries. The Swedish business climate for large corporations – the kind of firms we are discussing here – has always

been, and continues to be, favorable from an international perspective (see ISA [1999]). For instance, corporate taxes in Sweden are among the lowest in Europe, and far lower than in the United States.

However, the “individual climate” in Sweden is far less favorable. The “individual climate” has proved to be especially important for growth (see Blomström et al. [1996]). Growth requires education, and lengthy technical or scientific education is particularly important for promoting growth. However, there has to be an incentive for young people in Sweden to invest in such educational programs. In the U.S., there is a relatively good supply of skilled labour. This is probably largely due to the fact that education is rewarded in the form of high net wages. In addition, if there is a short-term shortage of a specific occupational group within the country, a pragmatic immigration policy is applied to overcome this shortage. In this type of environment, multinationals render production more efficient by locating labor-intensive parts of their operations in low-wage countries and the more advanced operations in the home country.

This opportunity did not appear to be a viable option for Swedish firms during the period up to the mid-1990s. If we assume that Swedish multinationals are equally rational as their American competitors, and expand their operations in those locations that are most favorable for the firm, it becomes obvious that Sweden’s comparative advantage have generally been found within low-wage activities. Swedish firms have thus been forced to expand abroad in order to satisfy their skill requirements. In order to entice more firms (both Swedish and foreign) to locate highly advanced production in Sweden, it is therefore necessary to improve access to highly skilled labor. This is hardly possible to achieve with low wages and high payroll taxes.

A further explanation for why Swedish firms have been expanding their most advanced production in foreign locations rather than in Sweden may be related to Sweden’s “solidary wage policy”. Raising the salaries of individual, often highly educated key groups (persons) in Sweden normally also results in wage increases for other parts of society. Consequently, it is cheaper for firms to employ these individuals in countries that do not have such a wage policy, even if their salaries are higher in these countries.

5. Investment in Research and Development

The positive Swedish approach to foreign investment by Swedish firms can be partly explained by the fact that these firms localize a large share of their research and development (R&D) activities in Sweden instead of in foreign subsidiaries. Although this share has fallen over the years (from 91 per cent in 1970 to 75 per cent in 1994, the latest year for which we have figures – see Braunerhjelm & Ekholm [1998]), parent companies still dominate the R&D activities of these firms. The current view is that as long as research activity is kept mainly within Sweden, there is no cause for concern. However, this view is based on a misconception.

Research is often emphasized as being a key component for a country's economic development. Many governments have therefore introduced various economic policy measures to persuade firms to undertake more research. This has also been the case in Sweden, perhaps more so than in other countries, with the result that, since the late 1970s, Sweden has been ranked as having one of the highest R&D expenditures in relation to GDP in the world. In spite of these efforts, the returns in the form of growth or development of hi-tech production have been disappointing. The reasons for this have been examined in a number of studies.

The studies receiving most attention to date of Sweden's low return from R&D have focused on the actual R&D activities that have been undertaken. For example, OECD [1986] claimed that Swedish research has been relatively ineffective and has not focused enough on hi-tech industry. It has also been claimed that an excessive share of Swedish R&D has been devoted to rationalizing the production of low-tech and medium-tech products, such as paper and pulp, and to other activities that do not generate hi-tech production and exports (e.g. housing and energy research) (Blomström et al. [1990]). A further explanation for the low technology content of Swedish exports is based on the "technical balance of trade". According to the "Swedish Productivity Delegation", the fact that Sweden is a net exporter of licenses, patents and "know-how" suggests that Sweden's exports are more hi-tech than they may seem from studying the normal trade statistics (SOU 1991:82).

One common element linking all of these explanations for the Swedish "R&D enigma" is the view that as long as companies' research is successful (in the sense that it generates new, hi-tech products), then Sweden's hi-tech production will increase (given that production rights, for example in the form of licenses, are not sold abroad).

However, such an obvious correlation does not exist. Research undertaken in recent years has shown that the competitiveness of *Sweden* has developed at a different rate than the competitiveness of *Swedish firms*, since Swedish firms have located parts of their production abroad. While Sweden's share of world exports of industrial goods fell by more 20 per cent between 1965 and 1986, Swedish multinationals increased their share by 16 per cent (Blomström & Lipsey [1989]). The reason for this is that, at the same time as the competitiveness of Sweden as a country declined, Swedish firms increased their competitiveness by expanding their production abroad. This shows that competition factors such as research results, which are transferable within a firm over national borders and which can be utilized for production both in the home country and abroad, cannot guarantee the long-term competitiveness of *a country*. This can be illustrated using an example from Volvo. Volvo's 800 series was mainly developed in Sweden, but the cars were manufactured for a long time in Belgium only.

The distinction between *country* and *firms* is important from the view of national economic policy if the firms are multinationals. Economic policy that aims to improve a country's competitiveness may well fail if it only creates (or reduces the costs of) such assets that can be utilized in production both in the home country and in foreign subsidiaries. A typical example of such measures is government research and development grants. It is therefore important to differentiate between R&D (e.g. the development of a new microprocessor) and R&D-intensive production (manufacture of the microprocessor). As long as R&D is undertaken by multinational firms, there is no guarantee that the R&D-intensive production will take place in the same country where the actual research is undertaken. Different factors will determine whether a country has comparative advantages within research and development or within R&D-intensive production.

6. Conclusions

In the policy debate, it is often claimed that foreign direct investment, and most recently the sale of Swedish firms to foreign investors, is not a cause for concern so long as jobs and R&D are kept in Sweden. In this paper, we have indicated a number of factors that imply that we should perhaps question such claims:

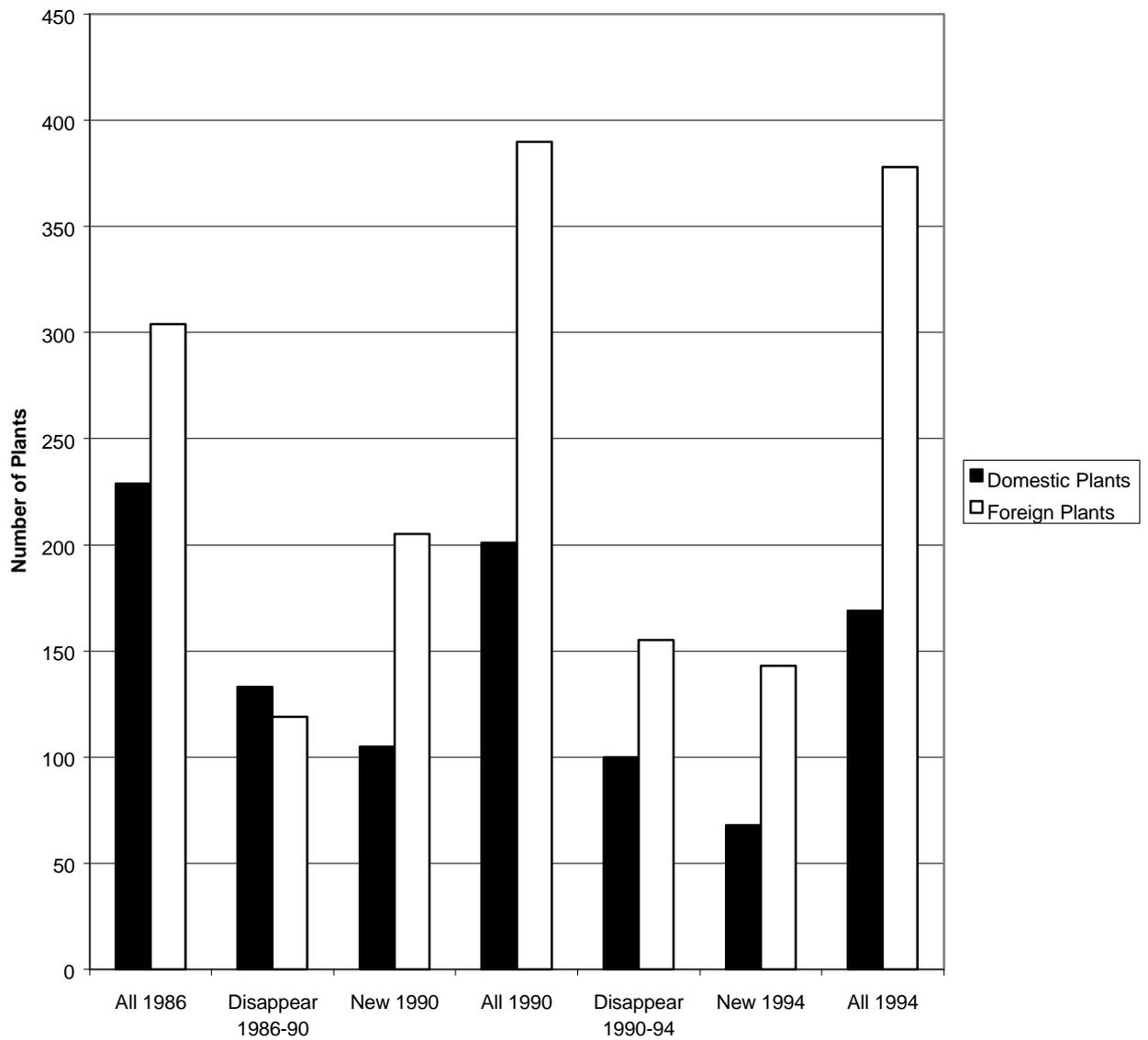
-*Firstly*, our studies indicate that it is the more advanced operations of Swedish multinational firms that are being located outside of Sweden. This is a relatively new

phenomenon and we have not been able to find corresponding developments in any of the other countries we have studied.

-Secondly, Swedish research activities do not guarantee the long-term competitiveness of Sweden as a country, as long as this research is undertaken within multinational corporations. In recent years, Swedish firms have pursued intensive research activity in Sweden, but have utilized the results of this research in their subsidiaries abroad. Since this research is subsidized by the Swedish government, other countries are benefiting at Sweden's expense.

It is often necessary for firms to relocate parts of their operations abroad if they are to survive in the long run. Naturally, the policy conclusion of our results is therefore not that we should attempt to prevent the internationalization of firms. Instead, we need to create better conditions for firms so that they will localize their most attractive operations in Sweden. In some cases, this may concern research and development, but in general it is the R&D-intensive production that is the most crucial. An important criterion for such production is a good supply of skilled labour. In order for Sweden to regain its competitive position in this area, it is necessary to improve the "individual climate" in Sweden. Payroll taxes must be cut and it must be possible to give key groups (persons) significant wage increases without having to compensate the rest of society.

Figure 1. Plant Dynamics: Changes in the Population of Domestic and Foreign Plants 1986-1994, 17 Swedish MNCs.



Source: IUI and Statistics Sweden.

References

- Belderbos, R.A. [1992], "Large Multinational Enterprises Based in a Small Economy: Effects on Domestic Investment", *Weltwirtschaftliches Archiv*, Band 128.
- Blomström, M. & G. Fors [1999], "Outward FDI and Relative Wages", Draft, Stockholm School of Economics, November.
- Blomström, M., G. Fors & R.E. Lipsey [1997], "Foreign Direct Investment and Employment: Home Country Experience in the United States and Sweden", *Economic Journal*, Vol. 107.
- Blomström, M. & A. Kokko [1994], "Home Country Effects of Foreign Direct Investment", in S. Globerman (ed.) *Canadian-Based Multinationals*, Calgary: Calgary University Press.
- Blomström, M. & R.E. Lipsey [1989], "The Export Performance of U.S. and Swedish Multinationals", *Review of Income and Wealth*, Vol. 35.
- Blomström, M., R.E. Lipsey & K. Kulchycky [1988], "U.S. and Swedish Direct Investment and Exports", in R.E. Baldwin, (ed.) *Trade Policy Issues and Empirical Analysis*, Chicago: Chicago University Press.
- Blomström, M. R.E. Lipsey & L. Ohlsson [1990], "What do Rich Countries Trade with Each Other? R&D and the Composition of U.S. and Swedish Trade", *Banca Nazionale del Lavoro*, No. 173.
- Blomström, M., R.E. Lipsey & M. Zejan [1996], "Is Fixed Investment the Key to Economic Growth?", *Quarterly Journal of Economics*, CXI (1).
- Braunerhjelm, P & K. Ekholm [1998], *The Geography of Multinational Firms*, London: Kluwer.
- Buckley, P. & M. Casson [1976], *The Future of the Multinational Enterprise*, London: Macmillan.
- Dunning, J. [1981], "Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Developmental Approach", *Weltwirtschaftliches Archiv*, Band 117.
- Fors, G. & A. Kokko [2000], "Home Country Effects of FDI: Foreign Production and Structural Change in Home Country Operations", in M. Blomström and L. Goldberg (Eds), *Topics in Empirical International Economics: A Festschrift in Honor of Robert E. Lipsey*, Chicago: Chicago University Press.
- Hakkala, K. & A. Kokko [2000], "Sverige i en globaliserad ekonomi", in B. Södersten, (Ed.), *Marknad och politik*, Stockholm: SNS Förlag.
- Hymer, S. [1960], *The International Operations of National Firms: A Study of Direct Foreign Investment*, PhD Thesis, M.I.T (Published by M.I.T. Press, 1976)

ISA [1999], *Klimatet för utländska investeringar i Sverige*, Stockholm: Regeringskansliets Offsetcentral.

Kravis, I. B. & R.E. Lipsey [1988], "The Effects of Multinational Firms' Foreign Operations on their Domestic Employment", NBER Working Paper 2760.

Lipsey, R.E. & M.Y. Weiss [1984], "Foreign Production and Exports of Individual Firms", *Review of Economics and Statistics*, Vol. 64.

NUTEK (1999), *Svenskägda företag med verksamhet i utlandet 1997*, NV 15 SM, Stockholm: NUTEK.

OECD [1986], *OECD Science and Technology Indicators*, Paris: OECD.

Reddaway, W.B. [1968], *Effects of U.K. Investments Overseas: Final Report*, Cambridge University, Department of Applied Economics, Occasional Paper 15.

SOU 1981:33, *Effekter av investeringar utomlands*, Stockholm: Liber Förlag.

SOU 1991:82, *Drivkrafter för produktivitet och välstånd*, Stockholm: Liber Förlag.

Stevens, G. & R.E. Lipsey [1992], "Interaction Between Domestic and Foreign Investment", *Journal of International Money and Finance*, Vol. 11.

Swedenborg, B. [1982], *Den Svenska industrins investeringar utomlands*, Stockholm: Research Institute of Industrial Economics (IUI).

Svensson, R. [1996], "Effects of Overseas Production on Home Country Exports: Evidence Based on Swedish Multinationals", *Weltwirtschaftliches Archiv*, Band 132.