Internationalisation and growth: evidence from Sweden

Magnus Blomström *

Summary

■ Outward investment is a way of maximising the rents on the accumulated knowledge and skill of a country's firms, or preserving them as long as possible when the country itself has lost its comparative advantage in its industries. This paper examines the internationalisation of Swedish firms and investigates the type of operations they move abroad. The conclusion is that Swedish MNCs, in contrast to US multinationals, expand their more advanced activities abroad and keep the low-wage operations at home. Presumably this is because Sweden has lost its comparative advantage in highly advanced production. The conclusion is that the home country effects of capital movements in the form of foreign direct investment depend very much on the macroeconomic conditions in the investing country. ■

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Internationalisation and globalisation concern in one way or another the increased international mobility of goods, services and factors of production. Today, only the positive effects of international trade on income and welfare are generally recognised, while the effects of international mobility of factors of production are still being discussed. Trade primarily contributes to a more efficient allocation of resources—countries are encouraged to specialise in those areas in which they have a comparative advantage. More recently, the growth effects of trade have also been studied.¹ There is much evidence to suggest that specialisation is favourable to growth, even if the effects may appear to be relatively modest (see Rodríguez and Rodrik, 1999). The WTO's efforts to promote free trade are motivated by these expected advantages.

The effects of international factor mobility are, on the other hand, more debated. Recently, the effect of capital mobility on economic stability has been the subject of much discussion and some people are of the opinion that the Asian crisis in 1998 was largely the result of unreliable flows of capital. Since there is still much disagreement regarding the effects of these capital flows, they will not be treated in this paper. Neither will international labour mobility be discussed. For various non-economic reasons, most countries have chosen to restrict immigration, and the immigration that does take place is mainly for political rather than economic reasons. This leaves foreign direct investment (FDI), which is probably that type of factor mobility which has the greatest long-term effect on economic growth.

Foreign direct investment has aroused strong feelings worldwide. A great deal of concern has been expressed that investment abroad will replace investment at home and that this will lead to jobs being

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¹ See for example Sachs and Warner (1995).

exported. However, such apprehensions have never really gained a footing in the Swedish debate. In Sweden, there has for a long time been almost total agreement that foreign investment by firms will benefit both Sweden and the firms themselves. Ever since the 1960s, the view has been "What's good for Volvo is good for Sweden". This attitude may seem particularly surprising in view of the highly international nature of Swedish production. Sweden is currently ranked as the 10th largest foreign investor in the world. In the mid-1990s, Swedish multinational corporations (MNCs) had more than half of their employees in foreign locations, which is nearly twice as many as in 1970 (Braunerhjelm and Ekholm, 1998). The proportion of employees in foreign locations has risen further in view of the continued relocation abroad of Swedish industry in recent years.

The extensive internationalisation of Swedish firms since the beginning of the 1970s can be explained both by a continual expansion of foreign subsidiaries throughout the period and by slower growth in employment in Sweden. More recently, there has been an overall decline in the number of employees in the Swedish operations of these firms. 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.²

In this paper, I will briefly account for the reasons for and the effects of the high level of overseas involvement by firms and I will point to some factors which suggest that the Swedish attitude to internationalisation has been far too uncritical.

1. Why do firms invest abroad?

Over the last few decades, several different although not unrelated explanations have been offered for foreign direct investment by firms. As early as 1960, Stephen Hymer, a pioneer in the field, explained FDI as being due to the existence of firm-specific assets and imperfect competition.³ He based his analysis on the assumption that do-

² All statistics of Swedish MNCs that have been used in this paper are taken from the data base of the Research Institute of Industrial Economics (IUI). ³ Hymer (1960).

mestic 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 organisation. A primary condition of foreign direct investment is thus the existence of this type of unique assets. Firms must be strong to survive internationally.

A further condition for international production is that direct investment must be the most profitable way of utilising the firm's different assets. For example, sometimes firms may have the alternative of selling patents and licenses to independent firms. 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 information, he or she must become acquainted with the knowledge/skills, after which it can be difficult for the seller to obtain his asking price. Buckley and Casson (1976) were among the first to speak of the internalisation of production within multinational firms in order to avoid these problems.

In other cases, exporting from the base in the home country 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 other 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.⁴ Production presence in a market is often interpreted as a long-term commitment, which in turn facilitates marketing, particularly in the case of capital goods and durable consumer goods which require after-sales service.

The above line of reasoning mainly explains direct investment which 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 liberalisation 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 organise vertical production systems that apply in several countries. By dividing up the processing chain into smaller components, multinational firms are able to utilise the comparative advantage of several countries. Labour-intensive

⁴ Dunning (1981).

parts of production end up in low-wage countries and the knowledgeintensive 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 make savings. The key issue for both home countries and host countries has therefore become the same: Which parts of the processing chain will end up in their country?

2. How is the domestic economy affected?

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.⁵ Although foreign production normally replaces previous exports of finished goods to a certain extent, 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 itself 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. 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 US 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.⁶ 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.⁷ All in all, these studies consequently 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 US 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

⁵ See Blomström and Kokko (1994) for a survey of the literature.

⁶ For example, see Blomström et al. (1988).

⁷ Lipsey and Weiss (1984).

conclusion that if foreign production increased by SEK 100, this would result in exports by the parent company to the subsidiaries rising by SEK 12 and exports to other customers in the recipient country falling by SEK 2. The net effect would thus be an increase in exports of SEK 10.⁸ In later years, however, negative correlations have been found. For instance, Svensson (1996) claims that rising exports by Swedish foreign subsidiaries to third countries cause a fall in exports by the parent company to these countries. According to Svensson, if this factor is taken into consideration, which it was not by Swedenborg, then foreign production has a negative net effect on exports by the parent company.

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) their market share 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 levels" for exports (i.e. the proportion of a subsidiary company's market share that the parent company can retain by exporting if the subsidiary is closed down), all studies agree that the survival level is low. 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, whereas a corresponding English study assumed that exports by the parent company to a specific country would cease totally if the subsidiaries ceased production in that country.⁹ The general view is thus that the multinationals would not have survived international competition 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.¹⁰ The main

⁸ Swedenborg's study was commissioned by the "Direct Investment Committee", which in several different reports reached similar conclusions regarding the effects of foreign direct investment. See, for example, SOU 1981:33.

⁹ Reddaway (1968).

¹⁰ See, for example, Belderbos (1992) and Stevens and Lipsey (1992).

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. profits that can be reinvested or first mortgage loans. Negative effects of US direct investment have also been reported with regard to domestic employment,¹¹ but this mainly applies when the investment is made in low-wage countries. Finally, US wage studies have concluded that there is a positive correlation between foreign production and wage levels in parent companies.¹²

3. Structural effects on the home economy

As shown above, it is often necessary for firms to move parts of their operations abroad in order to survive in the long run. It is important to keep this fact in mind when analysing the effects of foreign direct investment. Instead of concentrating on the extent of this internationalisation, it is therefore appropriate to examine which type of operations is moved abroad and which type remains in the home country.

In an earlier study, in which we compared the employment effects of Swedish and US foreign investment, we demonstrated a number of significant differences between the two.13 American data indicate 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 US multinationals to a large extent relocate labour-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.) US firms currently have a relatively high level of activity in developing countries. 20 per cent of foreign production by US 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 US, while the less demanding jobs ("blue-

¹¹ Blomström et al. (1997) and Brainard and Riker (1997).

¹² Kravis and Lipsey (1988).

¹³ Blomström et al. (1997).

collar workers") are relocated to low-wage countries, a situation which reflects the US comparative advantages.

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 appears as though Swedish multinationals, in contrast to American, are greatly expanding their skilled operations abroad and keeping low-wage operations in Sweden. There is also reason to suspect that this pattern reveals shortcomings in the conditions for highly advanced production in Sweden.

It is important to note that this study compares firms with similar firm-specific assets (R&D and knowledge intensive) which are often competitors, but which are based in different home countries. Since the comparative advantages of the home countries differ, the effects of the investment may also differ significantly. Whilst US foreign direct investment reinforces the effects of international trade, and precipitates a restructuring in the American economy towards more highly advanced production, it appears as though Swedish international investment maintains a traditional industrial structure 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.¹⁴ Swedish subsidiaries in industrialised 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 US firms. In the US, 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 the manufacturing

¹⁴ Blomström and Fors (1999).

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, 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.

	1970	1990	1994
Sweden	1.17	0.92	0.79
Swedish parent com- panies	1.38	1.48	1.21
Swedish foreign sub- sidiaries	1.03	1.30	1.29

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

Sources: The data base of the Research Institute of Industrial Economics (IUI) and UNIDO's wage statistics. The comparison covers only 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 this gap has generally widened since 1970. This is a further sign Swedish foreign firms' production has increasingly become relatively advanced.

	1970	1990	1994
Australia	1.01	1.36	
Belgium	1.66	1.90	
Denmark	1.17	1.25	
UK	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
US	1.09		1.30
Austria	1.33		1.61

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

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

4. Why do these differences exist?

Why then are the home country effects of Swedish and US foreign investment so different? With regard to this, I would like to focus on differences in "individual climates" (mainly taxes) and wage policy rather than differences in "business climates" (e.g. corporate 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, favourable from an international perspective.¹⁵ For instance, corporate taxes in Sweden are among the lowest in Europe, and far lower than in the US.

However, the "individual climate" in Sweden is far less favourable. The "individual climate" has proved to be especially important for growth.¹⁶ 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 in-

¹⁵ See ISA (1999).

¹⁶ See Blomström et al. (1996).

vest in such educational programs. In the US, 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 labour-intensive parts of their operations in low-wage countries and the more advanced operations in the home country.

This opportunity does not appear to be a viable option for Swedish firms today. If we assume that Swedish multinationals are equally rational as their American competitors, and expand their operations in those locations that are most favourable for the firm, it becomes obvious that Sweden's comparative advantage currently lies within low-wage activities. Swedish firms are thus 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 labour. This is hardly possible to achieve with low wages and high taxes.

A further explanation for why Swedish firms are expanding their most advanced production in foreign locations rather than in Sweden may be related to Sweden's "solidaristic 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 localise 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,¹⁷ parent companies still dominate the R&D activities of these firms. The current view is that as long as research ac-

¹⁷ From 91 per cent in 1970 to 75 per cent in 1994, the latest year for which we have figures—see Braunerhjelm and Ekholm (1998).

tivity is kept mainly within Sweden, there is no cause for concern. However, this view is based on a misconception.

Research is often emphasised 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 rationalising 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).¹⁸ 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 "knowhow" 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 mystery" 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. Whilst 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.¹⁹ The reason for this

¹⁸ Blomström et al. (1990).

¹⁹ Blomström and Lipsey (1989).

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 utilised 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 utilised in production both in the home country and in foreign subsidiaries. Typical examples of such measures are 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 (manufacturing 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. How is the host country affected by FDI?

In recent years, a number of foreign firms have shown an interest in Sweden as a localisation of production, although this interest has mainly concerned the acquisition of Swedish firms. In view of this, I would like to finish with some concluding comments on the effects of foreign direct investment on the host countries.

There is a general consensus that inward foreign direct investment is generally good.²⁰ Foreign investors contribute with knowledge and technology that is often lacking in the recipient country. Some of these assets spill over to local firms in the host countries where the subsidiaries are located and thereby increase their productivity. The main channels for these effects appear to be the mobility of labour from foreign-owned to domestic firms and the relationship with sub-

²⁰ See Blomström and Kokko (1998).

contractors. Furthermore, foreign-owned firms contribute towards increased competition and thus increased efforts to maintain market share and productivity in domestic firms.

However, the level of significance of these positive effects depends on the business climate in the recipient country. If the business climate is favourable, the effects are significant. In other cases, the positive effects may be limited by regulations and distortions. One may then question whether the business climate in Sweden is ideal in this context. If Swedish firms do not wish to localise technologicallyadvanced production in Sweden, then why should foreign firms wish to do so?

7. 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 as long as jobs and R&D are kept in Sweden. In this paper, I 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 longterm 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 utilised the results of this research in their subsidiaries abroad. Since this research is subsidised 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 internationalisation of firms. Instead, we need to create better conditions for firms so that they will localise 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. 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.

References

- Belderbos, R.A. (1992), Large Multinational Enterprises Based in a Small Economy: Effects on Domestic Investment, Weltwirtschaftliches Archiv 128.
- Blomström, M. and G. Fors (1999), Outward FDI and Relative Wages, Mimeo, Stockholm School of Economics.
- Blomström, M., G. Fors and R.E. Lipsey (1997), Foreign Direct Investment and Employment: Home Country Experience in the United States and Sweden, Economic Journal 107.
- Blomström, M. and A. Kokko (1994), Home Country Effects of Foreign Direct Investment, in: S. Globerman (ed.), Canadian-Based Multinationals (Calgary University Press. Calgary.
- Blomström, M. and A. Kokko (1998), Multinational Corporations and Spillovers, Journal of Economic Surveys 12.
- Blomström, M. and R.E. Lipsey (1989), The Export Performance of U.S. and Swedish Multinationals, Review of Income and Wealth 35.
- Blomström, M., R.E. Lipsey and K. Kulchycky (1988), US and Swedish Direct Investment and Exports, in: R.E. Baldwin (ed.), Trade Policy Issues and Empirical Analysis (Chicago University Press, Chicago).
- Blomström, M., R.E. Lipsey and L. Ohlsson (1990), What do Rich Countries Trade with Each Other? R&D and the Composition of US and Swedish Trade, Banca Nazionale del Lavoro, No. 173, 215-235.
- Blomström, M., R.E. Lipsey and M. Zejan (1996), Is Fixed Investment the Key to Economic Growth?, Quarterly Journal of Economics CXI, 269-276.
- Brainard, S. L., and D. A. Riker (1997) Are US Multinationals Exporting US Jobs?, NBER Working Paper No. 5958.
- Braunerhjelm, P. and K. Ekholm (1998), The Geography of Multinational Firms (Kluwer, London).
- Buckley, P. and M. Casson (1976), The Future of the Multinational Enterprise (Macmillan, London).
- Dunning, J. (1981), Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Developmental Approach, Weltwirtschaftliches Archiv 117.

- Hymer, S. (1960), The International Operations of National Firms: A Study of Direct Foreign Investment, Ph.D. Thesis, (Published by M.I.T. Press, 1976).
- ISA (1999), Klimatet för utländska investeringar i Sverige (Regeringskansliets Offsetcentral, Stockholm).
- Kravis, I. B. and R.E. Lipsey (1988), The Effects of Multinational Firms' Foreign Operations on Their Domestic Employment, NBER Working Paper No. 2760.
- Lipsey, R.E. and M.Y. Weiss (1984), Foreign Production and Exports of Individual Firms, Review of Economics and Statistics 64.
- OECD (1986), OECD Science and Technology Indicators (OECD, Paris).
- Reddaway, W.B. (1968), Effects of U.K. Investments Overseas: Final Report, Occasional Paper No. 15, Department of Applied Economics, Cambridge University.
- Rodríguez, F. and D. Rodrik (1999), Trade Policy and Economic Growth: A Sceptic's Guide to the Cross-National Evidence, NBER Working Paper No. 7081.
- Sachs, J. and A. Warner (1995), Economic Reform and the Process of Global Integration, Brookings Papers on Economic Activity (Brookings, Washington, D.C.).
- SOU 1981:33, Effekter av investeringar utomlands (Liber förlag, Stockholm).
- SOU 1991:82, Drivkrafter för produktivitet och välstånd (Liber förlag, Stockholm).
- Stevens, G. and R.E. Lipsey (1992), Interaction Between Domestic and Foreign Investment, Journal of International Money and Finance 11.
- Swedenborg, B. (1982), Svensk industri i utlandet. En analys av drivkrafter och effekter (IUI, Stockholm).
- Svensson, R. (1996), Effects of Overseas Production on Home Country Exports: Evidence Based on Swedish Multinationals, Weltwirtschaftliches Archiv 132.