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Foreign Direct Investment in Non-Metropolitian Norway An Analysis of Strategies, Objectives and Autonomy

by

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ABSTRACT

The internationalisation of the western economy in recent years implies cross-border investments and an increasing number of firms with production in more than one country. The exploitation of natural resources has traditionally been the main reason why foreign firms have been investing in non-metropolitan Norway. This article discusses whether this still is the case, or whether other objectives, such as access to markets or strategical motives, are becoming more important. This article also analyses location choices and investment strategies of foreign firms, and to what extent these are affected by firms' objective for investing. The second part of the article discusses the degree of autonomy of foreign owned plants in non-metropolitan Norway. Does foreign ownership in general means a low degree of autonomy for the national plants or is the picture more differentiated? Our study finds that autonomy varies between plants, and the final part of article points to internal and external factors which may explain why some plants have a more autonomous position than others.

1. Introduction

The total volume of foreign direct investment in Norway (in companies where foreign investment counts for at least 10% of the share capital) increased from 73,2 billion Nkr in 1990 to 151,5 billion Nkr. in 1997. Investments take place both in central or metropolitan parts of Norway and in the non-metropolitan areas. This paper focuses on foreign owned plants in non-metropolitan Norway (1). These areas count for about one third of the total employment in firms where foreign investors control more than 50% of the share capital (Rusten et al., 1999). Like in other western countries rural areas in Norway traditionally have had a larger share of firms within manufacturing industries exploiting natural resources, than is the case in major urban regions. There has also been a territorial division of labour within firms, with a concentration of head offices and R & D facilities in the greater city regions and branch plant and production facilities in rural areas (Hayter, 1997).

The main objective of this paper is to find out why foreign firms invest in non-metropolitan Norway (section 2). Is the seeking for natural resources still the most important motive? A secondary objective is to find out to what extent these plants enjoy an autonomous position in their relations with their foreign owners (section 3). The analysis is based on a sample of 225 foreign firms, this includes about 54% of the firms in non-metropolitan Norway where foreigners are controlling more than 50% of the share capital.

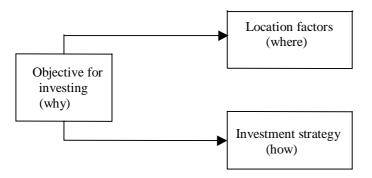
2. Analysing objectives for investing in non-metropolitan Norway

2.1.Introduction

The first part of the paper is our analysis of why foreign firms are investing in non-metropolitan Norway. In addition, the analysis also discuss location choices and investment strategies of foreign firms. The regional linkages of foreign firms in Norway are discussed in Rusten and Jakobsen (2000). The analytical point of departure is that a firms objective for investing in a foreign country, affects the location factors which are considered important when the firm decide where to locate its plant. Firms which invest in a foreign country to get "closer" to the customers will tend to locate in the geographical core area for demand (Hayter,

1997). This means reduced transportation costs and better access to market information. We also assume that the objective for investing affect firms investment strategy (figure 1). Firms investing in a foreign country to get access to valuable resources will probably prefer purchases as investment strategy. Intangible resources such as trademarks, technology or a specific competence are often internalised in existing national firms (Langlois and Roberstson, 1995).

Figure 1. The relation between objectives, location factors and investment strategies for foreign firms.



2.2. Outlining objectives for investment

We now turn to the question: Why are foreign firms investing in non-metropolitan Norway?

The theory of foreign direct investment (FDI) indicates why firms invest abroad (Hill and Munday, 1992). Hymer (1976) viewed the internalisation of a firm's activities as a means of increasing its market power. But to succeed in a foreign country, a firm must have some advantages over domestic rivals allowing it to overcome the additional costs associated with production abroad. Several studies have focused on ownership advantages, such as technology, organisational competence and innovation skills (Lall, 1980). Inspired by transaction cost theory, other studies have explained FDI as a consequence of multinational firms preferring internalisation of transactions within the firm instead of trade or licensing (Hennart, 1982). In particular, intangible assets, such as competence and technology are

difficult and costly to transfer internationally (Hill and Munday, 1995). Dunning (1981, 1988) introduced the "eclectic paradigm", where he combines the market power and the transaction cost approach when explaining international production. In Dunning's model three conditions must be met for FDI to occur. First, the foreign firm must have ownership advantages, which makes it able to compete with local firms, despite the disadvantages of being foreign. Second, FDI must be preferred over trade or licensing. The cost and uncertainty of transactions in the market can favour internalisation of transactions through foreign direct investment (Green and Meyer, 1997). Third, there must be location advantages of a particular foreign country, for instance specific resources or market demand, which make FDI in them preferable to FDI in other potential host countries, or to domestic investment in the home country.

These general conditions help us to explain why foreign investment occurs. But different firms will have different objectives when implementing investment projects. The theory of FDI has traditionally differed between three main objective; market seeking, resource seeking and efficiency seeking (Dunning, 1988). When firms are market seeking they establish plants in attractive markets to get "closer" to the customer or to avoid trade restrictions. Resource seeking means that the objective for investing in a foreign country is to get access to attractive resources, for instance raw materials, semi-manufactured products, trade marks, technology or a specific competence. Efficiency seeking involves the achievement of economies of scale and scope, and cost minimising by exploiting specific location advantages in different regions. Location advantages can for instance be the cost of labour or political authorities support action towards foreign investment.

Organisational theory introduces a fourth objective: strategical interaction (Veron, 1985, Hennart and Park, 1994). In a competitive international economy firms react to the strategy of their rivals. This can for instance make them locate in the same geographical areas as the market leader ("follow the leader"), to purchase competitors or to attempt to conquer rivals on the international market by establishing plants in their home country (Porter, 1990).

Foreign direct investment in non-metropolitan Norway has traditionally been related to exploiting of natural resources. During the first decades of the last century foreign investors established themselves within mining and quarrying, within manufacturing of wood and within heavy industries based on hydro electrical power (Hodne, 1981). The extraction of petroleum after 1970 triggered of a new wave of foreign direct investment. *Is the exploitation*

of natural resources still the main reason why foreign firms are investing in non-metropolitan Norway, or are other objectives, for instance to get access to an attractive market, becoming more important? We can also assume that the globalisation processes of the western economy during the last couple of decades with increased international competition has resulted in greater emphasis on strategical motives (Dicken et al., 1997).

In our survey we asked our respondences to rank the importance of each of these objectives, since firms in most cases are basing their investment decisions on more than one objective (Hennart and Park, 1994). Our survey shows that market seeking is now by far the most important objective for foreign firms investing in non-metropolitan Norway (table 1). In an international economy with increasing cross-border investments, market seeking has surpasses resource seeking as the most important motive for investing in non-metropolitan Norway. Multinational firms are exploiting the attractive Norwegian market by setting up subsidiaries.

<u>Table 1. Objectives for foreign firms investing in non-metropolitan Norway</u> a)

	Mean	Standard deviation	N
Market seeking	5,28	1,98	219
Resource seeking	3,55	2,37	216
Strategical interaction	3,40	1,90	216
Efficiency seeking	1,48	1,23	217

Note:

a) The importance of objective is measured on a scale from one (no importance) to seven (very important).

What are then the structural characteristics of plants established by market seeking? First, many of these plants have only a limited production in Norway. They are mainly "wholesale plants", and a large part of them are only operating on the Norwegian domestic market (table 2). Multinational firms could have operated in the Norwegian market through trade or licensing instead of setting up these "wholesale plants". One important reason for preferring direct investment is the necessity of "being" in the market. This strengthens their possibilities of building networks and establishing long term relationships with the customers. Some of the commodities and services these firms are selling are also specialised, and require presence and ability to follow up the customers. In addition, uniqueness and speciality means considerable transaction costs when externalised (Williamson, 1985). Finally, political restrictions on trade and goods can make it necessary to be located in the market.

Investors emphasising on market seeking may also set up "manufacturing plants". These plants often export goods and services. While three out of four "manufacturing plants" to some extent are operating on the international market, this only goes for 14% of the "wholesale plants". But it is also a fact that there is no sharp distinction between manufacturing, wholesale and business services. For instance are some of the plants that are categorised as manufacturing small services-units with limited production.

Table 2. Distribution of foreign firms in non-metropolitan Norway according to motive, sector, sales and the size of the plants (%)

	All firms	Firms emphasising market seeking a)	Firms emphasising resource seeking	Firms emphasising strate- gical interaction
SECTOR				
Manufacturing	37,3	33,3	<u>56,5</u>	34,4
Wholesale	46,2	<u>50,9</u>	$\overline{25,9}$	46,9
Others b)	16,4	15,8	17,6	18,8
SALES				
Only Domestic	57,2	64,8	35,3	56,5
Domestic/Export	42,8	35,2	<u>64,7</u>	43,5
SIZE				
Small c)	54,2	56,4	37,6	57,8
Medium/Large	45,8	43,6	<u>62,4</u>	42,2
N	225	162	85	64

Notes:

The second most important objective for foreign firms investing in non-metropolitan Norway is resource seeking. Attractive resources may be raw materials, trade marks, technology or a specific competence. Foreign firms that are resource seekers are mainly setting up "manufacturing plants". Exploiting attractive resources imply production and processing, and thus plants established as a result of the resource motive, are often larger then other plants (table 2). They also to a larger extent export their products.

The third most important objective for foreign investment in non-metropolitan Norway, strategical interaction is about how firms react to the strategy of their rivals, for instance by locating in the same geographical area as the market leader. There are no specific

a) Firms are classified as emphasising a selected objective when they have ranked the importance of the objective between 5 and 7 on a scale from 1 (no importance) to 7 (very important). It is possible for firms to emphasise more than one objective.

b) "Others" includes business services, transport and construction.

c) "Small" are plants with less than 20 man-years.

characteristics related to plants established in non-metropolitan Norway as a consequence of strategical interaction. We would expect that larger multinational groups who set up subsidiaries would have put a stronger emphasis on strategic interaction than smaller multinational groups, since it is especially larger firms that take part in the global competition (Pfeffer and Salancik, 1978). But a significant correlation between an emphasis on strategical interaction and company size could not be found in our material. Lack of characteristics related to firms when emphasis strategical interaction also indicates that this objective in most cases is combined with other objectives when foreign firms establish themselves in non-metropolitan Norway.

The last objective we have identifies, efficiency seeking, is not of importance for foreign firms investing in non-metropolitan Norway. Efficiency seeking as a motive for investment presupposes the existence of cost advantages in the host country compared to other countries. Efficiency seeking is of importance when foreign firms invest in less developed countries by setting up low cost production facilities for export to other markets. Since Norway is a high-cost country, one would not expect to find examples of production cost minimising strategies. Efficiency seeking can also be of importance in situations where a government introduces comprehensive investment incentives towards foreign firms, which is the case in peripheral regions of the European Union (Crone and Roper, 1999). Norwegian political authorities have, however, not introduced this kind of support action towards foreign investment.

2.3. Outlining location factors

As mentioned earlier, we assume that foreign investors are looking for localities which satisfy their demands related to the main objectives of the firms (see figure 1). Location factors can be defined as characteristics which vary from place to place and which, directly or indirectly, are of importance for the location of firms. These factors can be measured on local or regional level. Our analysis deals with the regional level. Important location factors are cost and quality of labour, community infrastructure, supply and cost of input-factors, the policy of regional authorities towards economical activity, externalities in specialised agglomerations of firms and proximity to the geographical core area for demand for the firm's products (Hayter, 1997).

Generally, our data shows that the supply of qualified labour is the most important location factor for foreign investors looking for a site for establishing a plant in non-metropolitan Norway (table 3). Competence and knowledge is becoming increasingly important in business life and supply of human resources with relevant qualifications is a critical success factor (Jones, 1996, Hayter, 1997, Storper, 1997,). Foreign firms seems to focus even stronger on this factor than domestic firms (Jakobsen, 2000). Studies from other European countries confirms that supply of qualified labour is a critical factor for investors looking for a site in a foreign country (Breathnach, 1998, O'Donoghue, 2000).

Table 3. Important location factors for foreign firms in non-metropolitan Norway a)

	Mean	Standard deviation	N
Supply of qualified labour	4,30	1,76	210
Community infrastructure	3,92	1,94	208
Geographical core area for demand	3,40	2,03	213
Industrial milieux	3,10	1,95	210
Supply of input factors	3,06	1,96	205
Regional authorities support	1,82	1,40	210

Note:

a) The importance of factors is measured on a scale from 1 (no importance) to 7 (very important).

Community infrastructure is rated as the second most important factor. A well developed transport system, housing environment and recreation facilities for the employees are important condition when firms choose a location. Foreign firms in non-metropolitan Norway, to a certain degree, also prefer locations near the geographical core area for the demand for their products. Even when firms are operating on a national level it can be advantageous to locate in the region with the highest demand. This will reduce the transport costs, and make it easier to establish closer relationship with important customers and improve the access to information about the market (Hayter, 1997). Other factors of importance when foreign firms are establishing themselves in non-metropolitan Norway, are location close to important suppliers of input and, if possible, location in specialised agglomerations of firms (industrial milieux). Geographical concentration of firms generate positive externalities, for instance specialised input and services and pool of workers with specialised skills (Storper, 1997). Local linkages between firms in these agglomerations can also reduce transactions cost, by lowering the cost of finding potential sellers and buyers, and can thus stimulate a horizontal co-operation between firms (Williamson, 1985). Finally, regional authorities can influence firms' location decision by economical support, preparation of sites, and through general

information (Eden and Potter, 1993). Our data shows, however, that regional authorities have played a minor role in the location decision process.

The initial question raised in this section was: How is a firm's objective for investing in a foreign country affecting its *appraisal* of location factors? Not surprisingly, there is a positive correlation between an emphasis on market seeking as objective and geographical core area for demand as location factor (table 4). Even when firms operate on a national level, it is important to be located in the region with highest demand. This is very important in situations where there are big spatial variations in demand, and where firms produce goods or services that require physical presence and close connection with the customers. There is a negative correlation between market seeking as important motive and supply of input factors as an important location factor. One reason why market seekers do not emphasis location near their suppliers, is that over half of these plants have their most important suppliers within the multinational group they are part of.

<u>Table 4. The importance of different location factor for foreign firms emphasising market seeking as investment objective</u> a) b)

IMPORTANT LOCATION FACTORS	Gamma	N
Geographical core area for demand	0.557	211
Community infrastructure	0.152	207
Industrial milieux	0.060	209
Supply of qualified labour	0.038	209
Supply of input factors	-0.436	203

Notes

We can identify a positive correlation between resource seeking as investment objective and the supply of input factors as important location factor (table 5). This means that firms investing in non-metropolitan Norway in order to get access to attractive resources prefers locations close to the source or the suppliers of these resources, for instance raw materials or semi-manufactured goods. Geographical proximity will reduce transport costs and guarantee the access of critical input factors (Pfeffer and Salancik, 1978). Many of these resources

a) Emphasising market seeking includes firms with a score from 5 to 7. Location factors are classified as importance for firms when they have scores from 4 to 7.

b) In the analyses all the selected variables are dichotomised (for instance emphasising or not emphasising market seeking and community structure as important or not important location factor). Correlation between dichotomised variables is measured as Gamma on a scale from -1.0 to +1.0. As a rule of thumb gamma has to be at least 0.3 to be significant. This method is especially designed for correlation analyses of variables on ordinal level.

seekers are larger manufacturing plants. It is not a surprise that our material shows that supply of qualified labour also is considered as important.

<u>Table 5. The importance of different location factor for foreign firms emphasising resource seeking as investment objective a</u>)

IMPORTANT FACTORS	Gamma	N
Supply of input factors	0.481	202
Supply of qualified labour	0.298	206
Industrial milieux	0.199	206
Community infrastructure	0.033	204
Geographical core area for demand	-0.083	207

Note:

Our survey indicates that different investment objectives implies focusing on different location factors. The next question is then, how are location decisions affecting the geographical distribution of foreign firms in non-metropolitan Norway?

There is a concentration of foreign owned firms to non-metropolitan East Norway. About 80% of the firms in our survey are located in this area, while "only" 45% of the population in non-metropolitan Norway is living here (table 6). Location in this non-metropolitan area means relative proximity to the major Norwegian metropolitan area (Oslo region).

It comes as no surprise that markets seekers locate in non-metropolitan Eastern Norway, thus attaining proximity to the geographical core area for the demand. It is a more a surprise that two out of three firms which emphasise the resource motive, also choose to locate in Eastern non-metropolitan Norway. This indicates that intangible resources such as trademarks, technology and competence have become of greater importance at the expense of natural resources. In general, the occurrence of these "new" resources will be related to the geographical distribution of economical activity, and a large share of the economical activity in non-metropolitan Norway is located in the eastern part of the country.

Firms dependent on natural resources and raw materials are to a greater extent located in specific regions, in Norway especially along the western and nothern coast of the country. These resources were of great importance when foreigners established themselves in Norway in the first part of the 20^{th} century. In these areas - "the rest of non-metropolitan Norway" - the resource motive is still of greater importance than the market motive. About 70% of the

a) See notes table 4.

foreign owned firms are emphasising resource seeking, while 57% are emphasising market seeking. But even if access to natural resources, raw materials and semi-manufactured goods still is important in some areas, this access has lost its dominant position as a main motive for foreign investment in non-metropolitan Norway.

<u>Table 6. The distribution of foreign firms in non-metropolitan Norway according to motive</u> and location (%)

	All Firms	Firms emphasising market seeking a)	Firms emphasising resource seeking	Firms emphasising strate- gical interaction
REGION Non-metropolitan East Norway b)	79,6	84,2	62,4	78,1
Rest of non- metropolitan Norway	20,4	15,8	37,6	21,9
Sum	100	100	100	100
N	225	165	85	64

Notes:

2.4. Investment strategies

The final question raised in this section of the paper is: What are the investment strategy for foreign firms establishing themselves in non-metropolitan Norway? The theory of foreign direct investment distinguishes between three investment strategies. The first is a "greenfield" strategy, which involves setting up a new plant. The second alternative is to purchase or merge with an existing firm. The third alternative is called "brownfield", which means reactivating a "sleeping" firm (Warren, 1969, Hayter, 1997). There is also a forth alternative, which is related to events on an international level. A plant can get new owners through purchase or mergers between large multinational firms (Lee and Wills, 1997).

a) Firms are classified as emphasising a selected objective when they have ranked the importance of the objective between 5 and 7 on a scale from 1 (no importance) to 7 (very important). It is possible for firms to emphasising more then one objective.

b) Non-metropolitan Norway refers to the areas outside the four cities regions of Oslo, Stavanger, Bergen and Trondhem. Non-metropolitan East Norway includes the counties of Østfold, Hedmark, Oppland, Buskerud, Vestfold, Telemark and about one fourth of the county of Akershus

Our data shows that greenfield and purchases/mergers are equal important as investment strategies (table 7). The main advantages when firms choose greenfield strategies is that the investor is "free" to choose a locality, and thus able to exploit specific location advantages. Also, when a plant is established from "scratch" a mode of organisation can be introduced without adjusting to the culture or the structure of an existing organisation. On the other hand it is expensive to invest in new production equipment and facilities, and it can often be difficult to find qualified people for key positions in the firm.

Table 7. Investment strategies among foreign owned plants in non-metropolitan Norway

Strategy	Number	%
Greenfield	99	45,0
Brown field	3	1,4
Purchases/mergers	97	44,1
International transactions	21	9,5
Total	220	100,0

When using purchases/mergers as a strategy, the foreign firm can integrate the competence of the purchased firms in the new organisation. It can also inherit an established network consisting of sellers of inputs and buyers of outputs. As a consequence, this strategy helps to reduce some of the risks related to investment in a foreign country, but at the same time it present the firms with restrictions when it comes to choosing a locality. Firms can not to the same extent as when using greenfield strategy, exploit specific location advantages. The locations of potential purchasing candidates will structure their chooses (Ó hUallacháin and Reid, 1996).

The critical factor of this investment strategy is to find suitable candidates for purchasing. But the risk of failure can be reduced by buying firms which the investor has already some historical knowledge about. In a study of direct foreign investment in metropolitan Norway, Rusten, Kvinge and Jakobsen (1999) shows that it is common to buy firms the investor already have established economical links with. These firms may already be customers of the foreign firms commodities or services, or co-operate with the purchaser in various ways. Thus, foreign investment often follows after an initial penetration of host economy through trading (Haigh, 1989).

In our survey the term investment strategy is related to "last change in ownership". In some cases these changes are induced by transactions on an international level. Globalisation and

economical integration between nations have strengthened the position of multinational firms competing on international markets. In these markets purchases or mergers with other multinational firms are important strategies for achieving a dominant position. For about 10% of the plants in non-metropolitan Norway, the last change in ownership was related to these kind of international transactions.

In our analytical perspective we assumed that the objective of investment would affect firms investment strategy (see section 2.1). But generally our material does not indicate a significant correlation between objectives and investment strategy. For instance, there is no tendency for firms emphasising market seeking or strategical interaction to prefer a specific investment strategy. Only resource seeking firms seem, to a certain degree, to focus on a specific investment strategy. There is a positive correlation between resource seeking as important motive and purchases/mergers as investment strategy (Gamma 0.455). As already pointed out this can partly be explained by the fact that some of the resources these firms are seeking, for instance technology and competence, are internalised in domestic firms. Other important resources, such as natural resources and raw materials, can be obtained by purchases or mergers with domestic firms which are producing goods based on these resources or have developed efficient network towards suppliers of them.

3. The autonomy of foreign owned plants in non-metropolitan Norway

3.1. Introduction

The next section of the article will analyse the degree of autonomy of the foreign owned plants in non-metropolitan Norway. In general, foreign ownership means that the plant is part of a large organisational unit. In the public discussion it is common to claim that inclusion in an international or multinational group means a low degree of autonomy for the national plant (Benito, 1996). We can assume that this will especially be the case in rural areas, since many large firms traditionally have concentrated leadership and strategical functions, both on national and international level, to the greater city areas. Is this assumption correct or is the picture more differentiated? The following analysis tries to answer these questions.

3.2. Degree of autonomy

To identify the degree of autonomy of the subsidiary we have to analyse its position within the organisations pattern of internal authority relations. An organisation consists of different units with specified functions and tasks. The position and the activities of each unit are defined and co-ordinated through systems of authorities. We can distinguish between formal position and informal position within an organisation. While formal position is related to official labels as national branch, national head office or transnational head office, the informal position refers to actual managerial autonomy (Hatch, 1997). When analysing the autonomy of foreign owned plants in non-metropolitan Norway, the latter approach is the most interesting. The autonomy of firms varies with functions. We have asked the managers of the Norwegian plants about degree of autonomy in three areas or functions; a) budgeting, b) purchasing/sales/co-operation and c) strategical decision.

In general the managers claimed that they had a relatively autonomous position. More than half of the managers said they had a high degree of freedom when it comes to budgeting (table 8). Budgeting is a more or less standardised function carried out by operating units within the general framework given by their head office. The managers are also relatively autonomous when it comes to daily operations as choosing suppliers and buyers or finding partners for co-operation projects.

Table 8. Managerial autonomy (%)

	Budgeting	Purchasing/sales/ co-operation	Strategical decisions
Low	7,1	20,7	19,4
Medium	36,2	35,6	46,8
High	56,7	43,7	33,8
Sum	100,0	100,0	100,0
N	224	221	222

The last function we have asked the managers about, strategical decisions, is the most important one. In general, strategy are about choosing internal and external modes of organisation, which hopefully will give a high turnover and generate profit. The decision to penetrate a new market or introduce a new product are examples of such strategies (Hill and Jones, 1995). As we expected, the authority of the managers is lower when it comes to strategical decisions. But in most cases they are allowed to present their own opinions and to a

certain degree make their own decisions, and some of them (one out of three) even claimed they had a high degree of autonomy in making strategical decisions. In relation to method, it is important to keep in mind that these findings refer to the plant managers own evaluation of the situation, and some of them may over-estimate their own position. Even when this methodological question is considered, our finding gives a picture of a relatively high degree of autonomy among foreign owned plants in non-metropolitan Norway.

To define an overall autonomy, these three functions can be combined into an autonomy index. Since strategy decisions is the most important function it is treated as twice as important as the others in the construction of this index. Low score on the index means that firms can be characterised as "the remote controlled daughter", while high score can be connected to the term "the autonomous daughter" (Rusten et al.,1999). These autonomous positions can to a certain degree be related to Galbraiths (1994:115) differentiation between the "parent-child model" and the "peer-to-peer model". In the parent child model strategy and co-ordination are concentrated in the country of ownership, while the peer-to-peer model means that each unit makes strategical decisions and has larger responsibility. But in Galbraiths presentation different categories was not only related to autonomy and responsibility. It was also related to the units position within the multinational firms division of labour.

Table 9. Managerial autonomy index (%) a)

Autonomy position	All firms
Remote controlled daughter	12,4
Mixed form	44,0
Autonomous daughter	43,5
Sum	100,0
_N=	209

Note:

a) Minimum score in this index is 4 and maximum 12. Remote controlled daughters include scores from 4 to 6, mixed forms 7-9 and autonomous daughters 10-12.

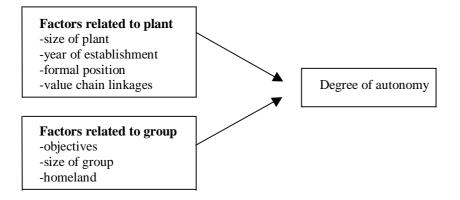
Our analysis shows that only one out eight plants can be classified as "remote controlled daughters" (12%), while more then 40% are "autonomous daughters". The rest of the firms can be characterised as "mixed form" (table 9).

3.3. Explaining autonomy

Our analysis indicates that foreign owned firms in non-metropolitan Norway are more autonomous than has been traditionally claimed. But there are variations between plants. As mentioned above a little less then half of the plants have high degree of autonomy, while the rest have medium or low degree of autonomy. The main objective of the following discussion is to outline factors explaining the autonomy position of foreign owned plants in non-metropolitan Norway. Why have some plants a more autonomous position then others?

In this discussion we will distinguish between explanation factors related to the plant (internal factors) and explanation factors related to the group the plant is part of (external factors). The first category include the size of the plant, the year of establishment, the formal position of the plant within the group, and the value chain linkages the plant have with other subsidiarities in the group. The second category includes foreign firms objective for investing in non-metropolitian Norway, the "home-land" of this group (that is the location of the head office) and the size of the group (figure 2).

Figure 2. Potential factors affecting degree of autonomy



Analytically we dichotomised the dependent variable (degree of autonomy) into high degree of autonomy (the autonomous daughter, 43,5% of the total sample), and medium or low degree of autonomy (mixed forms and remote controlled daughters, 56,5% of the total sample). For standardisation purposes the independent variables (factors affecting degree of autonomy) were also dichotomised into equal groups, as far as possible. We then outlined

different hypotheses or assumptions for analysis. The method and our data do not permit sophisticated testing and eventually falsification of these hypotheses. Instead the statistical analysis is used to achieve support or non-support in the discussion of the connections we are outlining.

Our first assumption was: (1) "Larger plants will have higher degree of managerial autonomy then smaller plants". We assumed that responsibility increased with size, and the need for internal co-ordination is more important in larger plants. But our analysis did not indicate that larger plants (20 or more man-year) have higher degree of autonomy than smaller plants (table 10). One reason for this can be that "larger" multinational plants in non-metropolitan Norway, in a general sense, are relatively small. Most of them gives employment to less than 100 man-years.

Table 10. Explaining degree of autonomy

Variables	Low or medium degree of High degree of autonomy		Correlation	N
	autonomy		(Gamma) a)	
1. Size of plant	Small (less then 20 man year)	Medium size / Large	-0.122	118/101
		(20 or more man year)		
2. Year of	Before 1990	During the 1990s	0.548	89/120
establishment		_		
3. Formal position	Branches	Head office (national or	0.136	52/164
		transnational)		
4. Value chain	Backward linkages	Forward linkages or no	0.265	114/96
linkages	_	commodities linkages		
5. Objective	Not emphasising	Emphasising	0.045	149/62
	strategical interaction	strategical interation		
6. Size of group	Plant contribute with less than	Plant contrib. with more than	0.013	122/93
	10% of total turnover in group	10% of total turnov. in group		
7. Homeland	Neighbouring countries (Swe.,	Non-neighbouring countries	0.095	131/85
	Denm., Finl.)	_		

Note:

Our second supposition was: (2) "Plants established during the 1990s will have higher degree of managerial autonomy than older plants". Our assumption was that plants established during the 1990s to a larger extent than older plants, would reflects new trends in leader philosophy, such as increased decentralisation of leadership and local control. Here our analysis showed a strong positive correlation. Shorter product life-cycles, rapid technological changes and increased competition makes it necessary for multinational firms to locate a greater variety of functions and more responsibility at plant level, allowing plants to respond rapidly to changes (Morris, 1992). Tendencies toward decentralisation of authority may also

a) For explanation see table 4, note b)

reflects the problems of co-ordination faced by multinationals as increasingly complex global organisations (Clarke and Beaney, 1992). Terms introduced to describe the new mode of organisation of multinational firms are "interorganisational networks" and "multi-centre firms (Ghosal and Bartlett, 1990, Forsgren, 1990). About half of the foreign owned plants in non-metropolitan Norway have been established during the 1990s.

We also outlined an hypothesis which presumed a relation between the plant's formal and informal position (actual managerial autonomy) within the group: (3) "Plants that are national or transnational head offices will have larger degree of autonomy than branch plants". The basic idea is that plants defined as head offices, will also have a strong informal position within the group, and thus a larger degree of autonomy. Before we make any comment on this, we will shortly outline the formal position of plants in our material. Three types of formal position within the group can be identified; national branch, national head offices and transnational head offices. In our material national head office is the dominant position (68% of the sample). In many cases companies in this position are controlling other national branches. But the term national head office can also be used even if there is only one unit within the country.

About one out of four are national branch plants (24%), while 8% of the foreign owned plants in non-metropolitan Norway are transnational head offices. The latter units give instructions and co-ordinate activities of plants within the group that is located in other countries. Most of the transnational head offices in our material are operating as Nordic head office. It is worth noting that only 5% of the plants with owners from other Nordic countries are transnational head offices, while the share among plants with owners from other countries are 13%. This indicates that the probability for a plant to be a regional or Nordic head office is larger when the owner is located outside the Nordic region.

When analysing the connection between formal and informal position within the group we have differentiated between branch and national head offices / transnational head offices as the two main types of formal position (see table 10). Surprisingly, when using this categorisation we found no correlation between formal position and degree of autonomy But when we tested the correlation between transnational head office only and high degree of autonomy we found a strong positive correlation (Gamma 0.478). This indicates that the formal position of national head offices does not necessarily means higher degree of

autonomy, while the formal position of transnational head offices in most cases does. But it is important to notice that we only have 18 transnational head office in our sample, and this finding gives only a restricted explanation on why some plants in non-metropolitan Norway have a more autonomous position then others.

The next factor we have analysed is the importance of value chain linkages within the group: (4) "Plants that are only "sales offices" for commodities and services produced in other part of the organisation will have lower degree of autonomy then plants with their own production". Before discussing this assumption we will present the internal value chain linkages for foreign owned plants in non-metropolitan Norway. A company's value chain can be used to measure the division of labour within the organisation. Different activities are linked through internal transactions, and each activity should, in theory, add value to the product (Porter, 1985). When defining the Norwegian's plant position in the value chain of the multinational group it belong to, we must examine which kind of linkages they have to other departments of the group. We can distinguish between forward and backward linkages. Forward linkages means that the plant are producing inputs (semi-manufactured products, services etc.) for other departments of the group, while backwards linkages indicate that they are buying inputs from other units in the group before selling the product on the market.

For more than half of the foreign owned plants in non-metropolitan Norway backward linkages are the dominant internal value chain linkages (table 11). These linkages are especially dominant among wholesale plants. In three out of four cases the most important activities within these plants are marketing and sales of commodities produced in other department of the group. They are mainly operating as "sales offices". Forward linkages, which means that the plants are producing inputs for other department of the group, is especially distinctive among manufacturing plants. One out of three of these plants are related to other units in their group through forward linkages.

Table 11. Internal value chain linkages for plants in non-metropolitan Norway

	Numbers	%
Forward linkages	39	18,1
Backward linkages	117	54,2
No commodities linkages	60	26,7
Total	216	100,0

We assume that plants which only are "sales offices" for commodities and services produced in other part of the organisation will have lower degree of autonomy than plants with their own production. But our data give only a weak indication of a correlation between these variables (see table 10). This indicates that "sales offices" in non-metropolitan Norway after all operate as relatively autonomous units.

When discussing external factors for explaining the degree of autonomy of plants, we start with the foreign investor, or the group, objective for investing in non-metropolitan Norway. The following hypothesis was outlined: (5): "Plants which are established by strategical interaction will have higher degree of autonomy than other plants". Emphasising strategical interaction implies reacting to the strategy of rivals. We expected that plants which are established for competing with rivals in the regional or national market would be given extended possibilities for defining their own modes of organisation when operating in the market. But our data shows no specific correlation between high degree of autonomy and emphasising strategical interaction. We also tested for the connection between emphasising market seeking and resource seeking and high degree of autonomy, but could not find any significant correlation. In sum, this indicates that investor's objective for investing are not determining the degree of managerial autonomy of the plant.

The second external factor is the size of the multinational group. The following hypothesis will be discussed: (6) "Plants which are part of small multinational groups will have higher degree of autonomy than plants which are part of larger groups". We assume that plants which are part of small multinational groups, are given more liberty to define their own strategies and modes of organisation. We do not have information about the actual size of the group, and must base the categorisation on the Norwegian plant share of the total turnover in the group. About 56% of the plant in our material contribute with less then 10% of the total turnover in their group. A small share (less then 10%) indicate that they are part of a large multinational group, while a larger share (at least 10%) indicate that they are part of a small international or multinational group. When analysing the importance of the size of the group we did not find any correlation between degree of autonomy and size of group (se table 10). This can of course be correct, but it can also be a consequence of our problems with defining the size of the group.

The final potential explanation factor is related to homeland of the foreign investors: (7) "Plants with owners from a neighbouring country will have a lower degree of autonomy then plants with owner from a more distance place". We assumed that short geographical distance between plant and head office makes it easier for the head office to exercise control and coordination. Again our material did not support our assumption (see table 10). Ownership in neighbouring country does not seem to result in a lower degree of autonomy for the plant. But as we mentioned earlier, the possibility of being a transnational head office is bigger when the owner is located in a non-neighbouring country, and this position implies higher degree of autonomy then other formal positions.

4. Concluding remarks

This paper has analysed the objectives of foreign firms investing in non-metropolitan Norway, and the degree of autonomy of these foreign owned plants. When discussing objectives for investment, we found that market seeking is the dominant objective. Market seeking has surpassed resource seeking as the most important motive for foreign firms to invest in non-metropolitan Norway. Many of the plants which are generated by market seeking are "wholesale plants" operating on the domestic market.

Our analysis have also shown that the objective for investing to a certain degree determines what location factors that are important in the location decision. For the market seekers, proximity to the geographical core area for demand is an important location factor. Even when market seeking firms are operating on a national level they tend to locate close to where the demand is highest. This explains their preference for location close to the capital city region of Oslo. For resource seekers, the location of suppliers of input factors are important when they choose a site for the plant. They supply of qualified labour is also important to them.

"Greenfield" and purchases/merges are equal important as investment strategies. When it comes to the relation between objectives for investing in Norway and investment strategy there is a lack of correlation. Only resource seeking firms seem to prefer a specific investment strategy. Our material indicates that these firms often choose purchases or mergers as

investment strategy. This can partly be explained by the fact that some of the resources these firms are seeking, for instance technology and competence, are internalised in domestic firms.

In the second part of the paper we analysed the autonomy of these foreign owned plants in non-metropolitan Norway. We discussed managerial autonomy position in three different areas; budgeting, purchasing/sales/co-operation and strategical decision. In general, the plants seems to have a relatively autonomous position. More then 40% of them could be classified as "autonomous daughters", while only one out of eight are "remote controlled daughters".

In the following analysis of factors explaining degree of autonomy, we found that year of establishment of the plant gave the best explanation on the degree of autonomy. In general, plants established during the 1990s have high degree of autonomy. These plants are reflecting new ideas within management and leader philosophy, with stronger focus on decentralisation and local control. In addition we found that formal position of a plant also to a certain extent affects managerial autonomy. In general transnational head office had higher degree of autonomy than firms with other formal position (national head office or branches). External factors, for instance investor's objective for investing or the size of the group, does not seem to affect the degree of managerial autonomy of the plant.

When comparing our analysis with a study that we have conducted on foreign direct investment in metropolitan Norway, two things can be mentioned. First, market seeking is even more dominant as objective for investment in the metropolitan areas (Rusten et al., 1999). It is thus adequate to draw a distinction between foreign direct investment in Norwegian metropolitan areas and the non-metropolitan areas of Eastern Norway on one side, and foreign direct investment in the rest of non-metropolitan Norway on the other side. The first is strongly dominated by market seekers, while access to natural resources and raw materials still is of great importance in the latter. Secondly, both in metropolitan and non-metropolitan areas in Norway, foreign owned plants seems to have a relatively autonomous position.

Finally, we can comment on some political implication of our studies. Foreign owned plants are more autonomous than traditionally claimed. This indicate that regional and national authorities to a greater extent should focus on positive effects related to foreign ownership, for instance the possibilities for local firms to participate in international networks and learning

processes. But foreign investors emphasis on market seeking, and the strong concentration of plants to the Norwegian metropolitan areas and the non-metropolitan area of Eastern Norway, illustrate that it can be difficult to use foreign ownership as an instrument in the regional policy for economical development of traditional rural areas in Norway.

Endnote

(1) Non-metropolitan Norway is defined as Norway outside the four cities regions of Oslo, Stavanger, Bergen and Trondheim. The definition of the boundaries of these regions is based on centralisation, economical structure and establishment density. Almost two thirds of the total Norwegian population live in non-metropolitan areas according to this definition.

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