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Central, provincial, and municipal government policy in the Netherlands and the impact on firm migrations

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The study of firm migration has become a full-grown part of Economic Abstract. Geography since the nineteeneighties in the Netherlands. Economic geographical studies and the used theories only pay attention to the (spatial) business environment, as an explaining factor and neglect business internal processes and the impact of government. This paper focuses on the impact of government policy on firm migration. The authors argue that certain governmental policies can have both positive and negative influences on the amount and direction of firm migration. They researched this influence, using publicly accessible newspaper archives on the Internet; 547 newspaper articles concerning migrated firms and firms planning to migrate were analysed. The analysis stresses the influence of governments on firm migration decisions. It is mainly the local government, which influences firm migrations. Central government only denotes the headlines. The 547 newspaper articles show that certain policy lines have a significant importance with respect to firm migrations. Finally, it is concluded that in future publicly accessible newspaper archives will be a useful expedient to collect international business demographic (research) data.

1. Introduction

Recent publications of economic geographers stress the importance of new firms reflecting the quantitative growth of firm start-ups in many countries. However, the same is true for firm migrations, at least in the Netherlands upon which country we shall focus our attention in this paper. As we will describe in the fourth paragraph of the paper, using data of Kemper and Pellenbarg (1997), the number of firm migrations in the Netherlands is not only high but also growing.

Ebels (1997, p. 14) presents a definition of firm migration by pointing out that migration of firms may be viewed as "a process of adjustment, whereby one residence or location is substituted for another in order to better satisfy the needs and desires of each intended migrant". Following this definition, we may identify four types of firm migrations:

- 1. integral migrations; the whole firm moves from one location to another location;
- 2. partial migrations; a part of the firm activities moves from one location to another, while other activities stay at the original location;
- 3. temporary migrations; a (part of the) firm moves to another location during the period the original location is being rebuild;
- 4. combination-migrations; the migration of one firm is totally dependent on the move of (an)other firm(s). These types of migrations mainly occur in restructuring areas or inner parts of towns where the whole area is cleared for new developments.

It must always be borne in mind that firm migrations are expensive operations based on incomplete information. Inertia caused by factors such as history, costly investments, risk avoiding behaviour/conservatism, emotions, business internal commotion, and push factors play an important role. Lloyd and Dicken (1977) argue that "the location decision per se is a relatively infrequent occurrence (...). Locationally, most manufacturers, particularly those operating on a modest scale, are highly conservative". Managers not only have limited information, but as a rule also have little or no experience in organising these complex processes.

Therefore, firms are dependent on the support of external advisors such as real estate agents, consultants, building firms, removers, contractors, organisation advisors, engineer agencies, and local governments. This enumeration illustrates the complexity and broadness of firm migration processes.

2. The location theory and firm migrations in practice

Nowadays, we acknowledge that a mismatch exists between location theory, which is often used to explain firm migrations, and real world location decisions. At this stage, it is important to stress certain shortcomings of the theory in general. We distinguish three sets of factors causing firm migrations:

- 1. internal business and market developments;
- 2. developments in the production milieu and/or business environment;
- 3. government policy.

The attention in economic geographical research for the third factor is related to the growing importance of the new perspectives of critical realism and regulation theory, next to the commonly used neo-classical and behavioural theories. The new theories explain industrial location dynamism by giving priority to the policies of nation states, the structure of labour markets, and business strategies and structures, as well as the relationship between them. For further reading about these theoretical backgrounds, we refer to Roger Hayters' (1997) book 'The dynamics of Industrial Location; The Factory, the Firm and the Production System'.

The three factor sets are influenced through three types of migration motives:

- 1. push factors causes firms to leave the present location;
- 2. pull factors are attractive elements of importance by choosing a new location;
- 3. keep factors stimulate a firm to stay at the present location.

Combining the two perspectives, we can place all firm migration decisions and motives in the following matrix.

Table 1: The position-finding of firm migration factors

| | Internal business and market developments | Production milieu | Government policy |
|------|---|-------------------|-------------------|
| Push | | | |
| Pull | | | |
| Keep | | | |

Location theory and spatial scientists primarily pay attention to factors in the second column of table 1. Many studies were written concerning the shortcomings of the classical location theory. The most important shortcomings are related to the ideas of Pred (1967, 1969) and Simon (1958), who stressed the role of an entrepreneur as a 'satisficer', instead of a '*Homo Economicus*'. According to them, the location choice is based on incomplete and subjective information. This theory is referred to as the so-called behavioural location theory. Another major point of criticism concerning location theory is the lack of focus on how the land should be planned, without recognising that firms already have an existing location and do not operate within a real free market, without government influence. Both points of criticism implicate that location theory can hardly be used in practice. Our main goal in this paper is to clarify one neglected aspect of the relation between the location theory and the daily practice viz., the possible impact of government policy on firm migration.

Before beginning with our overview we want to present some important background information about firm migrations. Earlier, we stressed the high/inertia costs of firm migrations. Despite this, firms decide to move to another location. In general, this relates to the fact that firm migration results in a more 'optimal' location. A new location offers better opportunities to take into account of changing market and firm conditions. This connects with the remark of Alexandersson (1967) about "the so-called growing location freedom of manufacturing as energy sources, originally tied to water power and then coal fields, have widened to include electricity and oil pipeline networks, which along with other sources, have essentially rendered power a ubiquitous input".

In the next paragraph we will elaborate the influence of government policy on (re)location decisions of firms in more detail.

3. Government policy and firm migration

The biggest problem of investigating the relationship between firm migration and government policy is to be found in the different goals of entrepreneurs and government, and the different goals of separate government Departments and levels. From a government perspective, it is almost impossible to speak of one optimal location for a specific firm. The general goal of government is to create an optimal societal prosperity and welfare. Separate Departments or Ministries contribute to this general goal, but their contribution has to be in accordance with the Departments' own insights. The same holds true for government bodies on different levels: national, provincial, and local. Therefore, different government bodies have their own sub goals, which may have a counteracting impact on firm migrations, and spatial economic policy. We must acknowledge that some policies (especially the regional economic and physical planning policies) are more directly focused on firm migrations. The clashes of interests can be clarified with the following example: on the one hand the movement of a firm may be a condition to restructure a business area, to build new houses, to modernise a shopping district, and to improve the living environment. On the other hand firm migration may lead to a decline of a business area, employment loss, increasing commuter traffic, degrading inner parts of towns, and exclusion of low-skilled labour.

The preceding section illustrates the complexity of the impact of firm migrations. Opposite of this, firms have their own goals and locational wishes. Therefore, it is logical that entrepreneurs give varying report marks concerning different kinds of government policies (Van Steen, 1998, *Rapportcijfers overheidsbeleid*). This makes it even more difficult to speak of an optimal location.

Watts (1987, p. 98) distinguishes three types of government policies:

- 1. Explicit. Top down policies implemented by national or supranational governments which seek to stimulate industrialization in designated regions, but not others, by some form of incentive or subsidy;
- 2. Implicit. Policies that are conceived of primarily in national terms, such as trade and tariff policies, and defence policies, may have regional effects, which may or may not be intended;

Derived. These spatial policies occur whenever national, regional or local
governments pursue different industrial policies. There is considerable variation
among local governments in their enthusiasm and willingness to seek manufacturing
investment.

This paper focuses on the third type of government policies. Watts stresses that "it may be that in a period when explicit and formal regional policies are in decline, local support for industry has never been greater throughout the OECD. Nowadays, this is the case in many European countries. Government policies aimed at assisting certain regions in the Netherlands are shifting towards the European Union. This internationalization also has an opposite effect; the growing importance of the local and regional level and the growing need of these communities of having an own identity, image, and policy.

The main problem of researching the European Union policies is its focus on separate regions. The aim of this paper is to clarify the relationship between government policy and firm migration in general. Therefore, we ignore the European Union policies and we focus on the central, province, and municipal level. Finally, following the ideas of Watts (1987), we stress that both central and local governments have a direct interest in industrial movement because:

- many decisions of governments have both an explicit and an implicit impact on the flow and direction of industrial movement and on the success and viability of the moves;
- 2. many key physical and economic planning policies are dependent upon there being an adequate flow of industry in desired directions.

We acknowledge that it is extremely difficult to measure the importance of these impacts and it is not at all clear whether the volume of movement can be expected to increase or decrease in the future.

We evaluate the impact of the Dutch government policies on firm migration in paragraph 5 and 6. First however, we present an overview of the most important migration motives and the amount of firm migrations in the Netherlands.

4. Macro data on firm migration and firm migration motives in the Netherlands

Firm migration in the Netherlands

It is not surprising to see that the spatial conditions for the functioning of firms in many regions, and especially large cities are becoming oppressive in a small and densely populated country with a growing economy, such as the Netherlands. Firms find it increasingly difficult to secure sites for their growth and development and witness growing hindrances in the flow of goods along the highway system, especially in the national core area, the Randstad region. Migration to less congested areas is a natural consequence. In view of this, the Ministry of Economic Affairs attempts to enlarge and improve the number and quality of available industrial locations. The Ministry of Transport and Public Works invests a lot of money in the building of road infrastructure and mobility reducing instruments. These two policy elements are of significant importance, because lack of space to accommodate economic activities and traffic congestion in especially the *Randstad* are the main driving forces underlying firm migration.

The last ten years, Kemper en Pellenbarg (1988, 1991, 1993, 1995, and 1997) have written several articles, which document the firm migration processes in the Netherlands. Table 2 gives an overview of the macro figures. The migration rate in the table is the result of dividing the number of migrations by the total number of registered firms. Before interpreting these data, it is important to acknowledge that the data are derived from the databases of the Dutch Chambers of Commerce. These data are based on the legal duty of firms to be registered. This means that the data in table 2 refer to juridical firms, instead of spatial settlements. BCI (1997) concluded that as a consequence of this 25% of the registered migrations are in fact unjustly registered as migrations. Despite the critics, Pellenbarg (1996, p. 23) argued that the migration data of the Chambers of Commerce offer a faithful reflection of spatial trends in the location dynamism of the Dutch trade and industry. Besides that the database is the only database available containing firm migration data covering the whole of the Netherlandsⁱ.

Table 2 Firm migration in the Netherlands in the period 1986-1995*

| Year | Number of migrations | Migrationrate |
|------|----------------------|---------------|
| 1986 | 27,085 | 5.0 |
| 1987 | 36,036 | 6.1 |
| 1988 | 39,138 | 6.4 |
| 1989 | 43,008 | 6.7 |
| 1991 | 48,000 | 6.5 |
| 1991 | 54,000 | 7.5 |
| 1992 | 56,000 | 7.6 |
| 1993 | 58,000 | 7.4 |
| 1995 | 67,700 | 7.9 |

^{*} Due to a change in the registrations of the database of the Chambers of Commerce in 1993, the data after 1992 are not comparable with the years before. A linkage can be made, making use of two figures in the year 1991: a measured figure of 48,000 migrations with regard to the years before, and a corrected figure of 54,000 to realise a comparison with the years 1992-1993.

Source: Ebels, 1997, p. 37 en Kemper and Pellenbarg, 1997, p. 508.

Table 2 shows that especially in the period 1994/1995 the number of firm migrations has grown considerably, i.e. with almost 10,000 moves compared to the foregoing two-year period 1992/1993. Most of the relocated firms can be found in the wholesale and commercial service sectors, where the annual percentage of moved firms has now grown to ten percent. For all sectors together, mobility rose from 7.4% in 1993 to 7.9% in 1995. This rise is closely related to the recent economic growth. Many studies point to the fact that the recorded firm migrations are first of all a local and regional phenomenon. Only a minority (6,300 from the total number of 67,700) of the migrant firms cover larger distances (i.e. cross provincial boundaries). Migrated firms are usually small: on average they have three employed persons. This means that yearly circa 180,000 jobs are moved; 18,000 jobs are connected with large-distance firm migration ii.

When analysing the data on inter-provincial firm migration, recent figures show the diminishing attractiveness of the *Randstad*.

The migration deficit of the three *Randstad* provinces together has grown from an annual average of 430 firms in 1992/1993 to 520 firms in 1994/1995. Referring to the Dutch migration figures, we may conclude that the periphery of the Netherlands becomes more and more involved in the overflow of economic activity of the national core region. Especially the province of Noord-Brabant with 201 newly settled firms and 1,300 jobs is the big winner. Besides that the provinces of Utrecht and Groningen experience, despite a net loss in firms, employment growth.

Finally, we may conclude from the migration studies that firm migration is typical for young and small firms that have survived the often difficult and hectic start up phase and are entering a growth phase characterised by accommodation problems. Although long distance migration only comprises a small part of the total migration an exodus or net influx over longer periods in regions can cause considerable effects on the regional economy.

Migration motives

Since the early nineteen seventies, many studies have been published concerning firm migration in the Netherlands. These studies give us a clear-cut picture of the driving forces underlying the process of location change. Our summary of migration motives will be limited to enumerating the most important push, pull, and keep factors. We refer to Pellenbarg (1985, 1995), Ebels (1997), Ministry of Economic Affairs (1997), and Van Steen (1997, 1998) for a more detailed elaboration of the motives.

Lack of space for expansion, is always push factor number one, and accessibility problems are a good number two. This comes as no surprise after the foregoing description of the migration process. Both factors play the leading part again as pull factors, but then they are more or less of equal importance. The third key variable in the explanation of the firm migration process is the labour market in the sense that the wish to retain the present employees is keep factor number one for most firms that are facing the necessity of finding a new location. A manager tries to ensure that employees can continue to work for the firm without the necessity of removing. Nowadays, migrating firms use social plans preventing employees to quit their jobs. This possible labour loss will induce managers to minimise the migration distance.

The chance of employment loss through long distance migration is larger due to the increasing number of two job households. This means that employees have to take into account the job of their partner.

Most migration studies, partly because of the written-interview character, the limited extension of the research, and the restricted time, only pay attention to the rational factors such as space for extension, infrastructure, and economic costs. Unfortunately most migration studies mainly present these superficial motives. Despite this, we stress that irrational and/or emotional factors are of greater importance than most of the studies acknowledge. The only way to discover the importance of these neglected irrational motives is with the help of time-consuming in-depth-interviews with recently migrated firms. But, the biggest problem of the interview approach is the problem of making generalizations and the enormous exertion costs. This paper, therefore, sticks to the rational tradition of most firm migration studies. One rational factor, which deserves more attention, is government policy. The remaining part of our paper is devoted to an attempt to analyze this influence, through the use of newspaper publications.

5 Research methodology

We presented a paper concerning the relation between central government policy and firm migration at the Dutch RSA Congress on the fourth of April 1998 in Antwerpen. This relation was analyzed by means of ministerial document analysis, interviews with ministerial policy makers, and official government memoranda concerning the spatial economic structure of the Netherlands. We identified seven policy lines, which may influence the amount and direction of firm migration in the Netherlands:

- 1. physical planning;
- 2. environmental management;
- 3. housing;
- 4. spatial economic policy;
- 5. transport and infrastructure;
- 6. green space and recreation;
- 7. large cities and the urban economy.

The possible impact on firm migration was analyzed by interpreting the relation of the spatial focus and the governmental goals. The analysis resulted in either of two possible outcomes: a decreasing impact or an increasing impact on firm migrations. A decreasing impact means that a policy line could result in fewer migrations, an increasing impact means possibly more migrations. We determined the average influence by means of summarizing the impact of the push, pull, and keep factors. We use these seven policy lines for convenience sake on all three administrative levels, although we recognize that it is with this top down approach sometimes difficult to place municipal policy in one of these policy lines. This means that we suppose that local governments translate the centrally determined policy lines. This systematic will be explained in paragraph 6.

Table 3 Central government policy and firm migration

| Policy line | Focus | Average influence on firm migration |
|----------------------------|-------------------------------|--|
| Both Physical planning and | Inner parts of towns | Decreasing (keep > push + pull) |
| Housing | New housing Estates | Increasing (pull + push > keep) |
| Environmental | Business Environment Plans | Increasing (push) |
| management | | |
| Spatial economic policy | Existing business areas | Decreasing > Increasing (keep > push + pull) |
| | New business areas | Increasing (pull + push > keep) |
| Transport & Infrastructure | Mainports & hinterlands | Increasing (pull + push > keep) |
| | Accessibility of city centres | Decreasing (keep > push + pull) |
| | Transport junctions | Increasing (pull + push > keep) |
| Green space and recreation | Relation urban-rural areas | Increasing (pull + push > keep) |
| Large cities and the urban | Large cities | Decreasing (keep > push + pull) |
| economy | | |

We briefly clarify these results by explaining why the focus on inner parts of towns in the physical planning has a decreasing impact. Nowadays, the spatial planning in the Netherlands focuses on restructuring and revaluation of degenerating inner parts of towns. On the one side people and firms will be stimulated to stay at the present location and on the other side people and businesses outside the city centre may decide to locate in these problem areas (the so-called urban renewal thinking).

The major problems of table 3 are related to the low empirical level of the analysis, the absent information concerning the impact of the three administrative levels, and the weighing/importance of the policy lines. Therefore, our main concern was to collect empirical data that could verify the results in table 3 and clarify the importance of the policy lines and the impact of the three administrative levels.

Collecting empirical data

Publicly accessible newspaper archives offer a quick and cheap method to collect empirical data about migrated firms. We are well-informed about the criticism such as the subjectivity of the journalist, the possible one-sided perspective towards policy sensitive information, the relatively large chance of inaccurate information, the leaning to sensation, and the possibility of oversimplified information on using newspaper articles to describe the problems of firm migration. Notwithstanding the existence of such flaws, newspaper articles offer a useful data source to collect information concerning migrated firms. Besides that the main purpose of the paper is just to analyse the general importance of governmental policy levels and to clarify the impact of the seven policy lines, also in general terms.

First, we describe the used search method to look for newspaper articles concerning migrated firms before presenting the main results of our analysis We had the run of five regional newspaper archives and one national archive through the Internet page www.nlmenu.nl/nlmenu.eng/tijdschriften/home.html. Only these archives offered search engines to look for certain words in the texts of articles in the period January 1992 until November 1997. We collected the articles by means of searching with the words 'firm movement (bedrijf verplaatsing)' and 'firm relocation (bedrijf verhuizing)'. This resulted in three types of articles:

- 1. general articles concerning the impact of firm migrations on e.g. regions, whole communities, and inner parts of towns;
- 2. specific articles containing information about migrated firms;
- 3. irrelevant articles containing information such as the movement of people and goods within firms, and firms responsible for the movement of people or materials.

We only pay attention to the second data source. Table 4 presents the resulting number of specific articles per archive.

Table 4: The number of specific articles for the six archives

| Archives/newspaper | City/Region | Number of specific articles |
|----------------------|------------------------------|-----------------------------|
| Rotterdammer | Rotterdam (harbour) | 19 |
| Brabants newspaper | Roosendaal region | 79 |
| Brabants daily paper | Eindhoven - Den Bosch region | 178 |
| Gelderlander | Province Gelderland | 158 |
| Limburger | Province Limburg | 103 |
| Telegraaf | The Netherlands | 10 |
| Total | * | 547 |

Table 4 illustrates that the empirical data only apply to the south and a part of the east of the Netherlands. Only the *Telegraaf* is a newspaper with national coverage. We argue that despite this dominance the data sources offer a useful expedient to analyse the general relation between government policy and firm migration.

6. The empirical results

We created a table to structure the results per article. This table consisted of the seven policy lines on the y-axis and the three administrative levels on the x-axis. While reading the first articles, we concluded that the central and province level only had a direct impact and the local government could have a direct and an indirect impact. A direct impact means that the government more or less focuses on stimulating a firm to relocate. This is done with the help of subsidies, the law, permissions, acquisition of ground and real estate, transformation to other land use such as housing and new businesses. An indirect impact refers to general policies, which may influence firm migrations such as building a new business areas, strictly applying permissions, planning housing estates near firms, and assisting soil decontamination projects. Besides that the structure and the text in the articles often helped us to interpret the impact of government policy.

In many cases a direct impact resulted in severe protests of firms, the municipality, and neighbors and critical remarks of the journalist. Finally, it is important to stress that in all cases, where a migrated firm is influenced by different policy lines and/or governmental levels it also is subjected to the influence of general business economic factors. We concentrate on the first group of influences here, but the second is never absent.

Overview of all archives

Table 5 presents the absolute and relative importance of the seven policy lines and the various administrative levels for the six archives together. The reader should acknowledge that the listed absolute number of 500 is not comparable with the total number of 547 articles, because of the earlier described influence of different policy lines and governmental levels on one firm. This means that one firm results in two or more 'hits'.

Table 5: The structure of the collected newspaper information (n = 547)

| Policy lines | Central | Province | Direct | Indirect municip. | Abs. | % |
|----------------------------|---------|----------|----------|-------------------|------|-----|
| | | | municip. | | | |
| Physical planning | 0 | 9 | 31 | 34 | 74 | 15 |
| Environmental | 0 | 14 | 39 | 35 | 88 | 18 |
| management | | | | | | |
| Housing | 2 | 7 | 59 | 36 | 104 | 21 |
| Spatial economic structure | 1 | 26 | 90 | 84 | 201 | 40 |
| Transport & Infrastructure | 3 | 2 | 12 | 6 | 23 | 4 |
| Green space and | 0 | 2 | 8 | 0 | 10 | 2 |
| recreation | | | | | | |
| Large cities and the urban | 0 | 0 | 0 | 0 | 0 | 0 |
| economy | | | | | | |
| Absolute | 6 | 60 | 239 | 195 | 500 | 100 |
| % | 1 | 12 | 48 | 39 | 100 | |

Table 5 shows that the policy lines of the Ministries of Economic Affairs and Housing, Physical Planning and Environmental Management have the largest impact on firm migration.

Besides that table 5 stresses that it is on the local level that the influence of the government policy on firm migrations becomes more apparent. We recognize that this is partly a consequence of the local focus of the selected newspapers. Despite this moderation, we conclude that central policy indicates the main lines, but in practice it is the local government and in some cases the province, which implements these policy lines on business level. The five most interesting results of table 5 are:

- 1. spatial economic policy of municipalities influences firm migration directly in 16% and indirectly in 15% of the cases in the newspaper articles. This is mainly caused by the government supported construction of business areas and the reservation of sites on business areas with the help of local governments;
- 2. table 5 stresses the impact of advancing house-construction within municipalities. Housing directly influences firm migration in 11% of the cases, and indirectly influences firm migration in 7% of the cases. These figures result from the municipalities' need, to build houses in inner parts of towns on former business sites (see also Ebels, 1997);
- 3. the relative high impact of 5% of spatial economic policy on provincial level is attributed to the regional planning policy of concentrating business areas in large regional centers. This means that smaller centers are bound to strict amounts of new business areas. The consequence of this policy is that these smaller centers have no capacity to house migrated, starting, and growing firms so that these firms are more or less forced to migrate to larger centers;
- 4. we argue that the low impact rates of transport and infrastructure policy are striking because of the mentioned importance of accessibility as push factor number two;
- 5. the absence of the impact of the large city policy is owed to the recent implementation of this policy, the focus on the whole city, and the untransparency of the implementation of large city policy intentions.

The separate archives

This section shows the results of the four main archives and analyzes the difference with Table 5. Table 6 presents the results of the four main archives and lists the impact of the three administrative levels.

Table 6: The impact of government levels in the archives, by government level

| Government | Gelderlan- | %. | Brabants daily | % | Limbur- | %. | Brabants news | % |
|-----------------|------------|-----|----------------|-----|----------|-----|---------------|-----|
| level der abs. | | | paper abs. | | ger abs. | | paper abs. | |
| Central | 0 | 0 | 2 | 1 | 2 | 2 | 2 | 3 |
| Province | 13 | 13 | 17 | 8 | 20 | 19 | 10 | 14 |
| Direct munic. | 40 | 41 | 112 | 51 | 54 | 51 | 32 | 44 |
| Indirect munic. | 44 | 46 | 88 | 40 | 30 | 28 | 28 | 39 |
| Total | 97 | 100 | 219 | 100 | 106 | 100 | 72 | 100 |

The relatively high impact of provincial policy in Limburg may be attributed to the industrial history of Limburg. This caused a relatively high percentage of industry in the city centers in Limburg. Therefore, the province of Limburg set up a special firm migration fund. We suppose that this fund causes the relatively high provincial rate. The differences between the municipal impact on firm migrations are relatively small and the only striking rate is the low indirect impact in Limburg. This is explained by the just mentioned industrial history, and the resulting urgency of solving the problems of this centrally located industry. Municipalities are more inclined to show a direct interest in these firms. Table 7 shows the importance of the policy lines in the four main archives.

Table 7: The importance of the policy lines in the four main archives

| Policy lines | Gelder- | % | Brabants | % | Limbur- | % | Brabants | % |
|--------------------|-------------|-----|------------|-----|----------|-----|----------------|-----|
| | Lander abs. | | daily abs. | | ger abs. | | newspaper abs. | |
| Physical | 17 | 18 | 40 | 18 | 5 | 5 | 12 | 17 |
| Environment | 15 | 15 | 41 | 19 | 16 | 15 | 16 | 22 |
| Housing | 15 | 15 | 52 | 24 | 22 | 21 | 15 | 21 |
| Spatial economy | 42 | 43 | 71 | 32 | 59 | 55 | 24 | 33 |
| Transport&Infra | 1 | 1 | 13 | 6 | 3 | 3 | 5 | 7 |
| Green space/ recr. | 7 | 8 | 2 | 1 | 1 | 1 | 0 | 0 |
| Large cities and | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| urban econ. | | | | | | | | |
| Total | 97 | 100 | 219 | 100 | 106 | 100 | 72 | 100 |

The table shows two striking results. On the one hand, the relatively low impact of physical planning policy in Limburg, and on the other hand the relatively high impact of spatial economic policy in the same province. An explanation for the low impact of physical planning may be the existence of three instead of one regional plan. The relatively high impact of spatial economic policy is once again related to the just mentioned problems due to the industrial history of Limburg.

Non governmental factors

This final section summarizes a group of "remaining factors", which are influencing firm migrations. We found the following five factors: neighbors, business economic factors, disasters such as fire and floods, surrounding firms, and investments of developers. Table 8 presents the findings in all the six archives.

Table 8: Non governmental factors in the six archives (n=547)

| Archive | Neighbor | Business | Disasters | Surrounding | Developer | Total |
|----------------|-----------|----------|-----------|-------------|-----------|-------|
| | civilians | economic | | firms | | |
| Gelderlander | 13 | 107 | 3 | 3 | 1 | 127 |
| Telegraaf | 0 | 10 | 0 | 0 | 0 | 10 |
| Brabants daily | 17 | 45 | 0 | 0 | 0 | 62 |
| newspaper | | | | | | |
| Limburger | 11 | 54 | 2 | 4 | 5 | 76 |
| Brabants | 7 | 33 | 1 | 2 | 2 | 45 |
| newspaper | | | | | | |
| Rotterdammer | 1 | 16 | 1 | 2 | 0 | 20 |
| Total | 49 | 265 | 7 | 11 | 8 | 340 |

Table 8 not surprisingly shows that business economic factors have the largest impact on firm migration decisions. We argue that the ratio (0.48) between the total amount of business economic factors in table 8 related to the amount of newspaper articles should be almost 1. Business economic factors are always a conditional factor when analyzing firm migrations. A firm with adequate managers would never invest a large amount of money, without including the business economic situation of the firm.

We suppose that an explanation for the ratio of 0.48 may be the often internal and secret character of business economic information. Journalists, therefore, have no information about these factors and are forced to omit it. Another striking result is the impact of neighbor civilians on firm migrations. Firms are in 9% of all the cases more or less forced to migrate because of the complaining neighbors.

7. Conclusion

We may conclude that the combination of the ministerial document analysis and interviews, and the analyzed 547 newspaper articles, illustrate that the impact of government policy on firm migration decisions is significant. Recent articles confirm this relationship by means of quotes such as: "execution of environmental laws costs firms two milliard guldens; migration of firms causes a mobility reduction of 10% instead of the government aim of 30%; migration of firms from the Randstad by the central government results in a large amount of practical problems; municipalities should coddle firms planning to migrate; the municipalities in the region should offer enough business areas to prevent firms from leaving the region" (literally translated from Dutch). Therefore, in future, firm migration research should further elaborate and analyze this relation and look for theories in political science, administrative science, and organizational sciences, which help to explain this relation.

Finally, we suppose that an integration of the tables 3 and 5 in combination with government intentions helps us to clarify and globally predict the amount of firm migrations in future. Besides that we ignored the restraining impact of policy on firm migration, which was presented in table 3. This can be explained by the used method of analyzing articles concerning migrated firms. These articles logically stress the stimulating impact of government policy.

We argue that the policy lines of the Ministries of Housing, Physical Planning and Environmental Management, and Economic Affairs have a significant influence on firm migrations. According to the newspaper articles, the other policy lines have no or a limited impact on firm migration.

Related to the actual discussions in the Netherlands concerning the necessity of infrastructure investments, we conclude that this has a limited impact on firm dynamics.

Comparing the four important policy lines, we suppose that independent of the other two policies environmental policy and spatial economic policy together have a stimulating impact on firm migrations. We argue that when studying firm migration these two policy lines have to be included.

Table 3 illustrated that housing policy could have a decreasing impact on firm migrations. However, the analysis showed that our supposition of the probable decreasing impact of housing policy focused on inner parts of town, apparently was wrong. The phenomenon of advancing house building at the cost of businesses was very evident. In many cases firms were moved to built houses on their former locations. We conclude that despite all the actual policy intentions housing policy so far stimulate firm migrations. Finally, we suppose that physical planning in future will be focused on either the environment or the spatial economy. The analysis showed that on the one hand physical planning focuses on counteracting the inconveniences of centrally located firms. On the other hand physical planning focuses on concentrating firms on business areas or focuses supporting them to function in the built-up area.

Although the indicative results in table 9 will lead to severe criticism, we presume that it is a useful expedient to overview the impact of policies on firm migration. We conclude that firm migration probably will grow due to government policy. Besides that the Dutch Central Planning Office has predicted a continuing economic growth for the next years. Firms are thus willing to invest more money in their accommodation, or have enough money to finance a migration. We know that there is a positive relation between economic growth and firm migration (See also Kemper and Pellenbarg, 1997). Therefore, we suppose that the number of firm migrations will continue to grow until the year 2000 and thereafter. Finally, we suppose that in future scientific research increasingly will use sources on the Internet to collect empirical and background information. According to several network assistants of newspaper archives, in a few years all regional newspapers will be publicly accessible on the Internet. This will offer a useful database to collect business demographic data.

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Notes

¹ The Ministry of Economic Affairs (26th of June 1998) presented ideas to set up a basic firm register with public access to key facts about firms. It is, however, unclear in which way this will improve the registration of firm migrations.

These apparent modest data should be moderated referring to the study 'ruimte te over, ruimte tekort' (Sijtsma, et al, 1997). This study states that some so-called footloose industrial branches without the actual limitations such as government policy, would produce 250,000 jobs in the north of the Netherlands. Sijtsma et al. (1997, p. 77) calculated the number of the 250,000 jobs as follows: "the ¼-million scenario comprises of an initial impulse of 115,000 free located jobs in spatial-intensive, transport-intensive, and location free sectors, and 86,500 pupils, students, asylum, and pension migrants".