Firm migration in the Netherlands

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Abstract

This paper surveys what is known from various data sources about the process of firm migration in the Netherlands. The availability and quality of data sources concerning firm migration are discussed, just as the development of firm migration processes in the past decades, and the impact of firm migrations on regional economic structures and regional employment. This impact is then compared with the impact of other firm demographic components, i.e. new firm establishments, and firm closures. Then the regional patterns of firm migration are shown – to the extent that the data sources allow - with a focus on the movements in and out of the national economic core region (the Randstad). Especially for the sector of manufacturing industry we witness a gradual change, from a clear-cut core-periphery deconcentration pattern in the past to a more erratic pattern at present. This is related to a gradual change in the main migration motives, from labour market shortages to lack of space and accessibility, and from hard to soft location factors. Finally the paper addresses the role of government policies in guiding firm migrations to policy assisted regions and locations.

Key words: demography of firms, firm migration, firm relocation, relocation motives

Introduction

For demographers migration is an important subject, in fact one of the key variables needed to describe and predict demographic structures. Especially when it concerns small geographical units - such as municipalities - the balance of in- and outgoing migration usually is of great influence on the state and course of human populations. Basically, this can also be said for the birth, death and migration of populations of *firms*. Yet in firm demography migration traditionally receives less attention. Usually, the relocations of a strictly local character strongly dominate the total firm migration, and the state and course of the firm population at a regional and national level are therefore not strongly influenced by the migration component. This is one of the usual arguments for restricting reviews of firm population development to the firm founding and firm closure components. All the same, studies of firm migration are useful enough, especially from a policy point of view: the influence of firm migration patters is a traditionally favoured goal of regional stimulation policy. Next to this, studies of firm migration offer valuable insights into location choice processes, thus offering a basis for theorizing on firm location.

This paper shall begin with a closer look at the practical and theoretical backgrounds for any interest in firm relocation. After that an expose will be given about what has become known from firm migration studies (for the Netherlands) in the course of the past few decades, with a lot of attention for the problems with data collection that arise particularly with this aspect of firm dynamics. The second part of the chapter will look at the factors that play a main part in causing movement in firm migration, and the place those factors have in the (often time-consuming) decision making process of firms about whether and where to move. The role of the government will naturally also be examined, as will the possibilities of further research to gain better insights into the making of spatial-economic policy, which also benefits that same government.

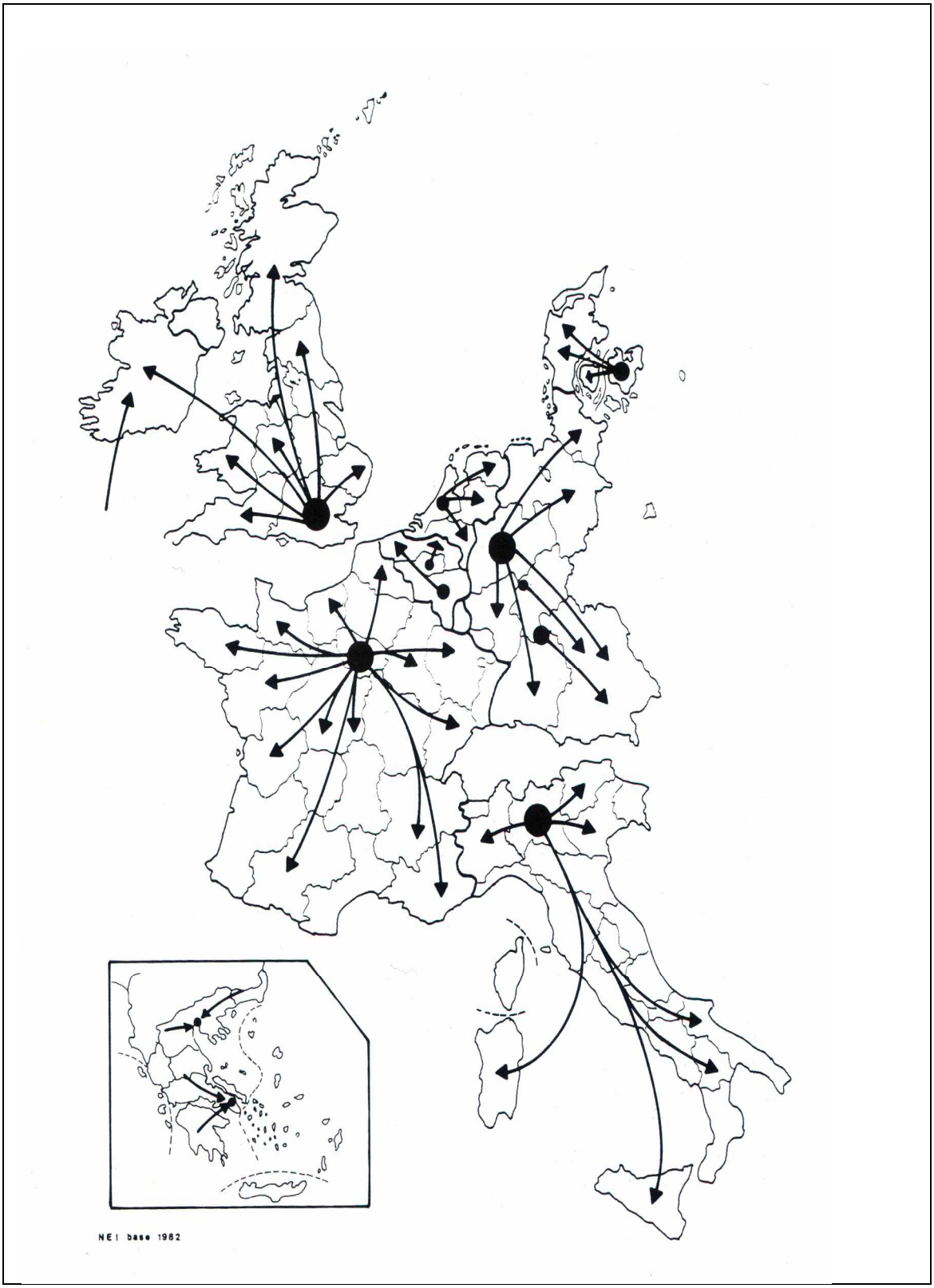
A short history of the research in firm migration

In order to survive, businesses must constantly adapt to new circumstances. Relocation (in part or complete) of a firm can be regarded as a form of this adaptation, in this case an adaptation to changes in the environment, or adaptation to the changing locational demands that result from changes in the firm's production method**s** or organisational structures. The phenomenon of firm relocation has always attracted economic geographers greatly, for both practical and theoretical reasons. *Theoretically*, firm relocation is interesting because it provides the best 'showcase' of entrepreneurial decision-making with regard to location choice, and therefore are the best source of knowledge upon which to build location choice theories - traditionally a central question in their field. *Practically*, firm relocations are ideal cases to serve as goals for regional economic development policy. After all, they form a tangible point of departure for (financial) impulses that try to lead the (re)location choices in the direction of the locations c.q. regions policy makers want to assist. The practical usefulness of insights concerning firm migration also applies to spatial planning policy, i.e. the strive for bringing 'the right firm to the right place', and to the modern city and region marketing policy, for which firms that may want to (or have to) move also form an important target group.

The practical impulses have been more important to firm migration research than the theoretical ones. After the Second World War regional development policies were introduced in many western countries, which inspired a great wave of firm migration studies in the nineteen sixties and seventies. The oldest well-known study of firm migration is *Why industry moves South* by McLaughlin and Robock (1949). They describe the shift of traditional industries of the northern US to the southern states, in which labour market relations (particularly lower wages and less union activity) play a main role. However, the main proponents of firm migration research appear in the nineteen sixties in England, where regional policy became a big issue and Luttrel (1962), Cameron and Clark (1966), Keeble (1968) and Townroe (1972) published very well-known studies of firm migration, in which the central question is whether or not and how firms react to policy efforts to direct more economic activity to government designated stimulation areas.

Inspired by the British authors, larger firm migration studies are carried out in the nineteen seventies in the US, France, Germany, Italy, Sweden, Denmark and theNetherlands. We mention the examples (one of each country) of Townroe (1979), Aydalot (1978), Bade (1979), Camagni (1976), Soderman (1975), Christiansen (1978), and Pellenbarg (1977), but we could name many more. The seventies were the absolute heyday of international firm migration research, a period when great numbers of regional economists, economic geographers and planners studied the subject. Klaasen and Molle published a good survey of all the European research into firm migration, from which we have used figure 1. In all European countries (except

Figure 1: Industrial firm migration in the countries of the European Community 1955-1975. Source: Klaasen and Molle (1983)



Greece), a deconcentration from central to peripheral regions seems to occur, at least for the industrial sector. In the seventies, firm migration in the service sector also increases, but this occurs on shorter distances. It takes the shape of economic suburbanisation around large urban agglomerations. This phenomenon is regarded with suspicion by both policy makers and researchers, for on the one hand it forms an inevitable side effect of the initiated urban renewal and fast growing spatial pressure and traffic congestion in the cities, but on the other hand it erodes the employment function of the cities, should the migration fail to be directed towards locations within the urban commuting area.

The firm migration authors cannot agree much on the influence of government policy on migration decisions, particularly concerning long-distance migration of central regions to peripheral regions. Some, like Keeble (1976), deem policy as an important or even crucial factor. But many follow the warning first given by Cameron and Clark (1966) that one should be careful with that conclusion because of the many indications to the contrary. Looking back, it seems that policy efforts have, also for the Netherlands, had particular effect in those periods and those areas where the natural tendency of firm migration already existed.

Frame 1: Firm migration and location theory

Why are firm migrations so interesting to the development of theories of firm location choice? The location theory concerns firm migration but also situations of firm start ups, which also imply location choice, after all. Yet newly established firms are a less interesting information source on how and where firms choose a location. When starting up a new firm, a location choice is not first and foremost on the mind of an entrepreneur. After all, other questions are much more important to the chance of success for the start-up firm: questions regarding financing, the product, possible sales, rules and licenses, possible staff. The problem of firm relocation is definitely secondary to these concerns in the start-up phase. All too often housing is found in the place of residence, often even the house of the entrepreneur. Also the housing and location of a spin-off firm is often the location and premises of the mother firm. Questions regarding location choice, in these cases, are of little use: locations were not really considered, but taken for granted. However, for already existing firms that want to move, location choice is of much greater importance. Firms that survive the start-up phase will sooner or later predictably outgrow their original location, necessitating a move to another, larger or better building or different location. In such a situation, location choice is no longer secondary. In fact, it becomes critical for the continuation of the firm! It is taken very seriously and alternatives are considered. And: questions that a researcher may pose concerning the course of decision-making and factors pertinent to the move can count on an answer based on reality. Conclusion: if you are searching for valid findings that will back up theories of location choice, you should look at movers, not start-ups.

Firm migration in the Netherlands: the problem of data

Compared to the two main components of firm migration ‘start’ and ‘stop’, the component ‘firm migration’ has the great handicap of a lack of good and complete data. In almost every country, including the Netherlands, there exists no really adequate registration of firms that change their location. It is, of course, no easy task to set up and maintain such a registration. For instance, consider the difference between entrepreneur E1 who moves his firm X from location A to location B, and entrepreneur E2 who stops his firm X at location A and then starts a new firm Y

at location B. Suppose that in the latter case the firm only changes its name (from X to Y) and otherwise remains the same, then it is not a case of a closure followed by a start-up, but in fact a move, even though it is not registered as such. The real possibility of this situation is illustrated by an analysis of Van Steen (2005) who in 2003 retraced only 1400 firms of an original sample of 2000 that existed in 1998, of which no less than 10% under a different name!

The casuistry of the changing firm can effortlessly be complicated by adding questions concerning the change of the legal status of the firm, the nature of production, or the internal organisation of the business units to the disappearance, appearance and relocation of firms. Even the street name and number assigned by the mail firm can be a source of misunderstanding regarding whether or not a firm has or has not moved. It goes without saying that these kinds of misunderstanding play a larger role in certain sectors than in others (in the industrial sector it plays a smaller role than for instance in retail or business services) and that smaller firms are faced with these problems more often than large ones - but unfortunately smaller and younger firms are exactly those that move often! As a firm gets bigger moving becomes more complicated. The firm will search for alternative solutions in order to adapt to the spatial surroundings most effectively, for instance through creating branch plants or the take over of other firms instead of growing internally after an integral move.

Until 1985, firm relocation in the Netherlands was not registered at all. The Central Bureau of Statistics naturally changes its general firm register when firms change location, but the relocation itself is not registered in a separate register of relocations. Only at the behest of the General Industry Statistics (Algemene Industrie Statistiek), such a registration existed for a while, namely until the AIS was integrated into the Statistics of Employed Persons (SWP: Statistiek Werkzame Personen) but that contained only data concerning firms larger than 9 employees. This data has been used for firm relocation research (see also Reinink 1970) and we will come back to that later in this paper. Aside from the AIS registration, various municipal and provincial firm registers are spread throughout the country, which are organised (or at least have been for a while) so that firm relocation can be deducted from them. But a complete picture of all sectors and the entire Netherlands was lacking until the joint chambers of commerce started with their so-called ‘mutation balance’ project (Kemper 1992) in 1985 that intends to offer a complete picture of all mutations in the firm population, and that intends to offer that picture in any desired manner, sorted by sector, region and time period. The addresses and names of started, stopped and moved firms can also be learned from this project, which of course, makes this register eminently suitable to empirical research. Of course this research always comes across problems having to do with larger or smaller mistakes made during registration of mutations as a consequence of mistaken interpretation of data provided by firms, or a mistaken application of the (sometimes complex) registration system.

This is most strongly felt with the registration of firm relocation. Ten Hoor (1998) estimates that, based on an extensive check on the Chamber of Commerce’s’ data on firm relocation, that approximately a third of the data is incorrect. The problems surrounding the correct registration of firm relocations led the Union of Chambers of Commerce in the Netherlands (VVK) to suspend official publication of the firm relocation data after 1995. In 1998 and 1999 the screening of basic data was improved. Based on data from the period of 2001-2002 Inbo Consultants researched office firms in 2003 (Inbo 2003). A sample survey of research of 1300 office firms made clear that 20 % had not actually relocated - less than Ten Hoor estimated, but a considerable number nonetheless. The 20% not actually relocated firms have been researched by the Union of Chambers of Commerce (VVK) again. They usually where Ltd’s,

often sharing one address. For this group of respondents it is often hard to ascertain what activity the researcher/questioner is talking about because these respondents do not think in terms of Ltd's but merely see activities. After the VVK made inquiries, it became clear that it often did concern the movement of activities in most cases, sometimes a part of the activities. Only 6% of the cases could definitively be regarded as not really having relocated at all, because it only concerned an administrative relocation. Keeping in mind the complexity of the matter, this margin of error not only is quite acceptable, but not easy to lower any further.

Compared to other countries, the availability of firm relocation data from the mutation balance system is still rather unique, in spite of the fact that the numbers have not been officially published. The data from the register remains valuable because tendencies with regard to growth, sectoral and spatial distribution of firm mobility can be deduced from it. We shall therefore keep using it hereafter. This is valid only when the registered numbers of relocations aren't given any absolute value, but are only regarded as developments and relations. After all, we can assume that the margins of error in the data aren't bound to specific periods or locations. Perhaps they are bound to certain sectors and certainly to firm size, so caution is advised in those areas.

Taking all the above into account, it remains a shame that apart for the period between 1985 and 1995, there exists no country wide picture of the relocation dynamics of Dutch business. Notably, we cannot show the *spatial pattern* of relocations anymore. For the Netherlands, apart from that one period, we have only accounts of *national totals* of firm relocation, and besides that just some (both older and newer) *partial* spatial pictures of relocations, constructed for separate sectors and regions, and partially made from other registrations than the Chamber of Commerce database. As if reconstructing an ancient Greek vase, we will have to reconstruct our story about firm migration pattersn in the Netherlands from bits and pieces that cannot be made into one smooth whole, but that can still give us an impression of what the whole looks like. This we shall attempt.

Firm migration in the Netherlands: the current situation

The total number of firm relocations (or "migrations", or "moves": we use these terms as synonyms) registered in the Netherlands by the Chamber of Commerce in 2002 amounted to 64,000, or 71,000 if one counts the 'business management' (zakelijk beheer) sector. The latter denominates mostly 'paper firms' that can easily relocate, but are not really comparable to relocations in other sectors of the economy.

Figure 2 shows the average number of firm relocations over the years 2001 and 2002. In the figure, relocation numbers are divided by sector and relocation distance: close or far. The chambers of commerce distinguish between relocations within their district and between districts. The relocations between districts generally concern longer distances and are far outnumbered. The relocations within districts are located in the column 'short distance' in the figure, and seem to occur four times as often as long distance relocations between districts. By the way: in the course of the nineteen eighties and nineties, the number of chambers of commerce has been reduced from 36 to 21, which has the effect of classifying a little more relocations as 'short distance' these days. When comparing data from 10 or more years ago, this should be taken into account.

The 64,000 firm relocations cover a total (again: on average over 2001 and 2002) of 231,000 employees. That is a significant increase compared to the years 1994 and 1995, the last two years wherein data was not only collected, but formally published (Kemper and Pellenbarg

1997). The same number of relocations were registered (in 1994 and 1995 respectively 63,000 and 67,700), but covered an annual average of only 180,000 employees. From these numbers can be deduced that the average size of relocating firms has increased, but is still small. In 2002, the average relocating firm has 3.6 employees; in 1994/95 they had 2.8. As is clear from figure 2b, the averages per sector differ. In the industrial sector this number is highest, with 6.5 employees per firm.

Not just in terms of numbers of employees has the stream of relocating firms grown since the middle of the nineties; the actual number of firms has grown as well, even though the comparison is not easily made because of the changes in the method of registration by the Chambers of Commerce. The figures for the period 1986-2002 (figure 3) are basically comprised of three separate and not directly comparable parts (see frame 2).

The broken dataset does not make passing judgment on the development of relocation activities of firms in this period any easier. Whatever the case, in the period 1986-1994 there has been a strong increase in relocation activity. Even if the absolute relocation estimates for this period are too high, the relative growth of the number of relocations was unmistakably large. The growing firm mobility was on the one hand a reaction on the postponed relocation and growth plans of the earlier years of recession, on the other hand a reflection of the new growth and relocation plans of firms in a growing economy. In the second half of the nineties, the number of relocations still increases, but less turbulently so. Growth of firm mobility now keeps pace with the growth of the firm population**,** and the relocation percentage does not grow any further. In the years after the turn of the century, the stabilisation seems to hold. The number of firm relocations still grows slightly, as does the entire firm population. The relocation percentage that is based on a more realistic registration now amounts to an average of 7.7%. The numbers for 2001 and 2002 seem to indicate a minor (relative) drop in mobility, which would not be very surprising with regard to the oncoming recession. Given the follow through of the recession in 2003 and 2004, a sharpened increase of this drop in firm relocation can be expected, but the numbers for this period are not available yet.

The latest (‘screened’) mutation balance figures for firm relocation of the Chambers of Commerce as given in figure 3 for the years after 1997 are one and half to two points higher than the relocation numbers provided by Van Steen (2005) with his sample of 2000 firms that he followed in the period between 1998 and 2003. After each consecutive year, respectively 5.8%, 5.5%, 6.3%, 5.5% and 5.3% of this group had relocated. The Chamber of Commerce’s mutation balance provides for the years 1998-2002 respectively 7.3%, 7.7%, 7.8 and 7.6%. The reasonably large difference can be explained by the fact that Van Steen calculates the mobility of the survivors, and as such systematically misses the relocations of the start-ups. The indication of the recession-burdened mobility of 2002 and 2003 is much stronger in Van Steen’s numbers than in the Chambers of Commerce’s numbers for 2002. Indirect confirmation of the decreasing relocation tendency of firms comes from data concerning the sales of industrial sites in the Netherlands. The decline of this already started earlier. 1999 was an exceptional year with a total sale of 1571 hectares. 2000 and 2001 showed a marked decrease to respectively 1341 and 947 hectares (DGR 2003). Numbers for 2002 were not yet available when this paper was written.

Figure 2: Firm relocations in the Netherlands by sector, on average over 2001 and 2002, short and long distance relocations; (a) number of relocated firms (b) number of relocated persons. Source: VVK 2003.

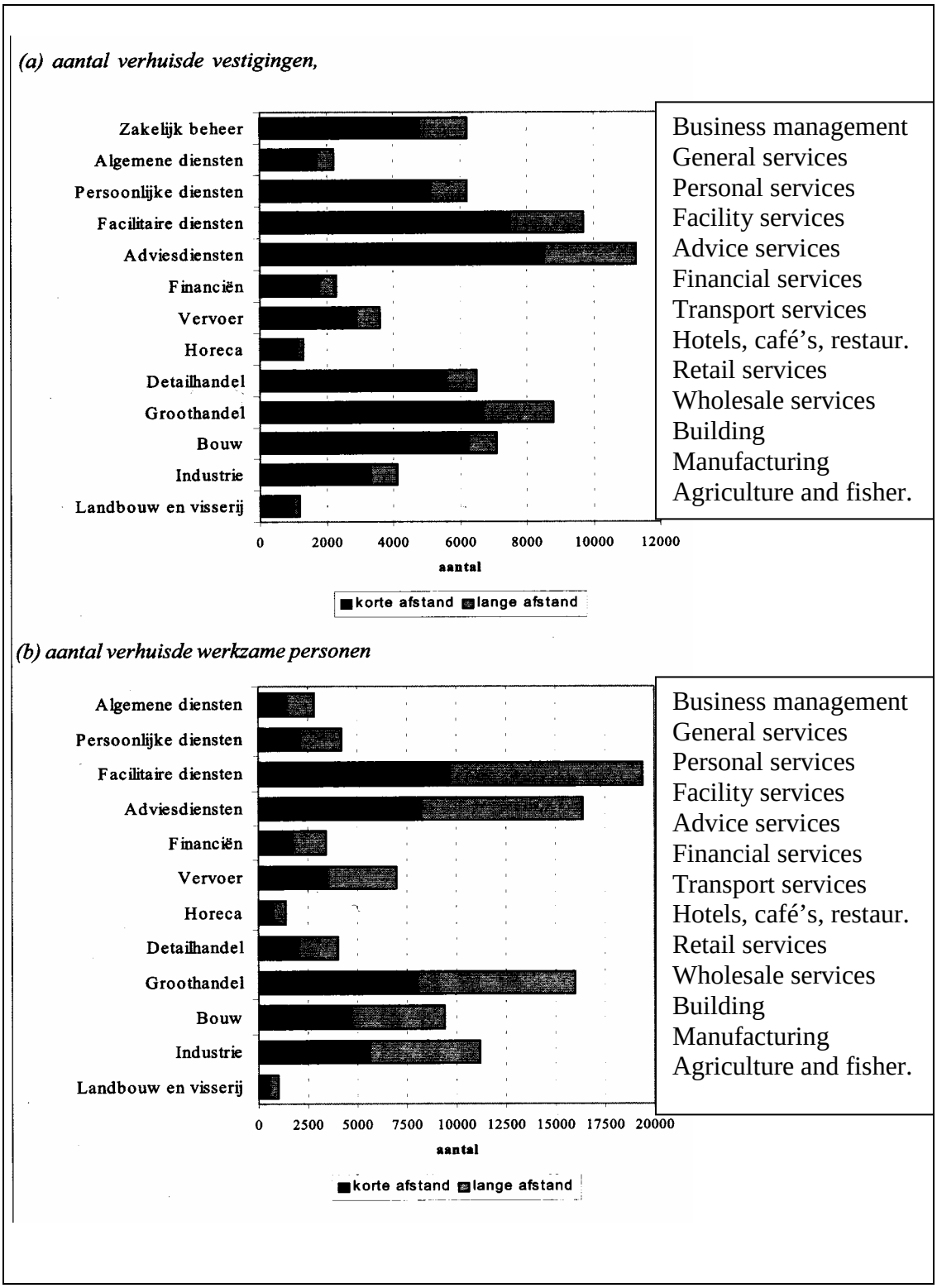
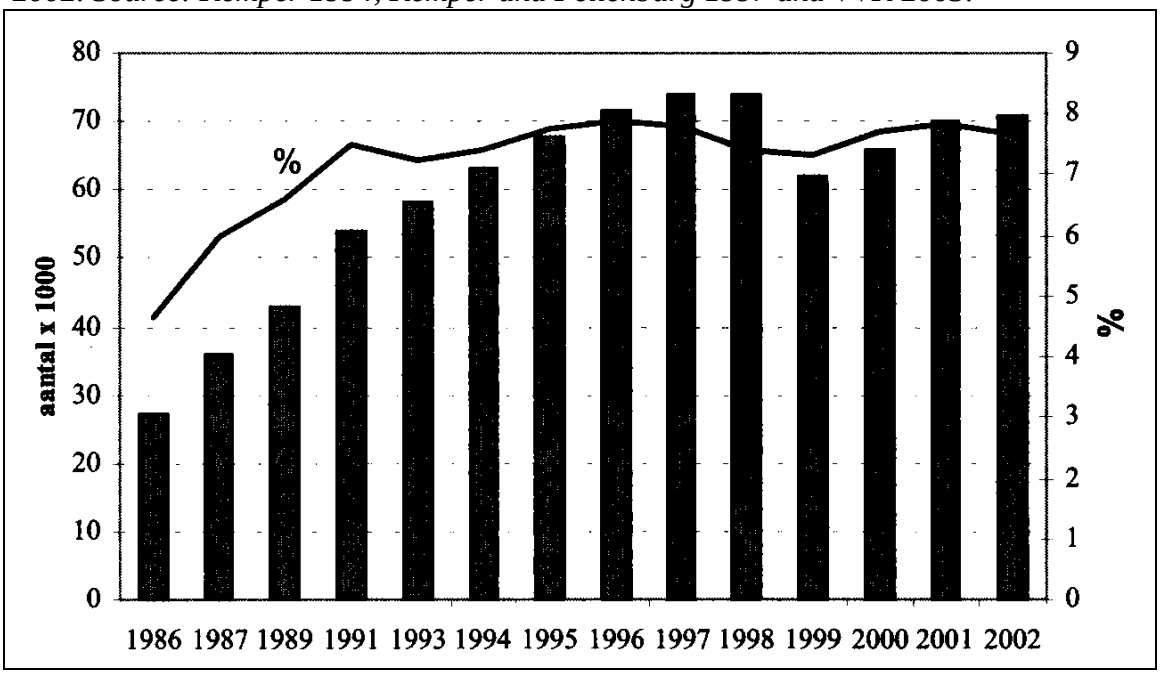


Figure 3: Number of relocated firms (left axis) and annual relocation factor (right axis), 1986-2002. Source: Kemper 1994, Kemper and Pellenbarg 1997 and VVK 2003.



Frame 2: Three periods of firm relocation registration by the Chambers of Commerce

1. *The period of 1986-1994 when no strong screening of registered firm relocations took place, which probably led to the estimates of the annual relocation percentage (then 6-7%) being too high.*
2. *The period of 1995-1998, when there still was no strong screening, but the register stock with which firm relocations are compared shrunk sharply because the sector Business management (comprising of 150,000-200,000 mainly 'paper firms') was removed from it. In order to make possible a more realistic comparison with the relocation percentage of the period 1986-1994, the relocation percentage has purposely been based upon the firm registry including the sector Business management in figure 3.*
3. *The period 1999-2002 when a more realistic picture evolves of both the absolute number of firm relocations – then already 70,000 per year - and the annual relocation percentage due to the stronger screening of the relocation cases and the exclusion of the sector Business management. Because the stronger screening of the relocation cases on the one hand, and the exclusion of the sector Business management on the other, have exactly opposite effects (after all, they respectively decrease the numerator and the denominator of the fraction with which the percentage is calculated) the outcome of both changes for the relocation percentage is very small: from 1991 onwards it remains steady at 7.5-8.0%.*

Figure 2 shows that business services are the most mobile sector. This corresponds to the data from Kemper and Pellenbarg for the period up to 1995, and also to the findings of Van Steen (2005). It also corresponds to what everyone who drives around the Netherlands can easily ascertain: particularly larger and smaller office buildings fill up the newly built business parks. Wholesale is also very mobile, and notably, the construction sector, that has become a lot more

mobile compared to the last published reports (for 1995). This can possibly be explained by the increase of one-man firms. Due to and during the period of the scarcity of construction labour, many have started their own business. This is also indicated by the large number of handyman-firms. Mobility of the industrial sector has further decreased compared to the mid-nineties. With regard to relocated employment, industry does still count, however.

The last piece of information that we can deduct from the Chamber of Commerce's firm mutation balance for 2002 is the relation between firm relocation and other firm democraphic components, especially the start-up and closure of firms. Table 1 shows these relations for both the numbers of firms as well as for employed persons. The components differ greatly in size, but are still in the same category: 91,000, 55,000 and 64,000. In terms of numbers of firms, the category start-ups is easily the biggest, but in terms of employment, relocations are the most important firm demographic component: 231,000 employed persons versus 126,000 for start-ups and 121,000 for closures. Less than a quarter (48,000) of the employees involved with firm relocation belongs to relocations over greater distances, from one Chamber of Commerce district to another.

Table 1: Firm migration as part of the total firm migration balance (excl. sector Business management) of the Netherlands, 2001 and 2002 average. Source: VVK 2003.

	New firms	Firm closures	Natural growth	Relocated firms	Of which long distance
Firm establishments	91,300	55,000	36,300	64,300	12,900
Employees	125,500	120,800	4,700	231,000	48,100

The spatial patterns of firm mobility

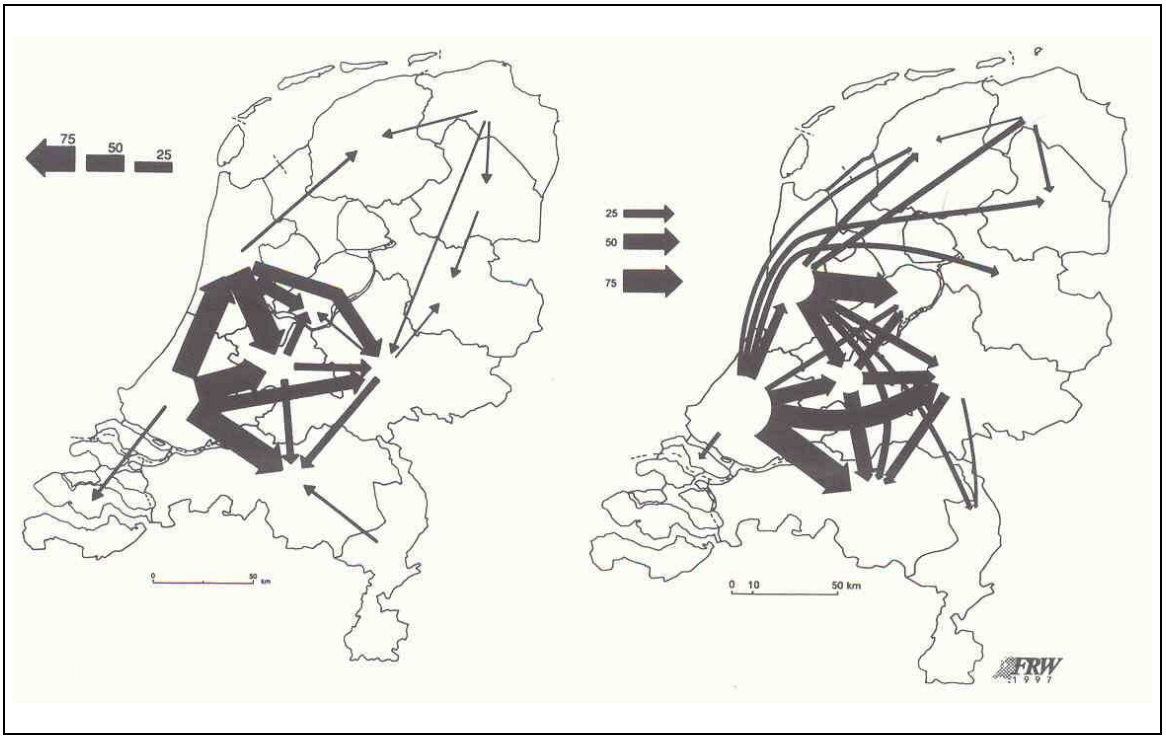
The data presented for firm migration over 2002 are unsatisfying, insofar that they provide absolutely no picture of the spatial structure of firm relocations. In which regions do the most relocations occur, and in which regions the least? How do the relocation streams flow when crossing regional boundaries? Though a minority, these long distance relocations are the most interesting moves, because they truly contribute to changes in regional-economical structures in the Netherlands. Since the Chambers of Commerce have stopped officially publishing relocation data, we really know nothing about the spatial patterns of relocations. The last charted provincial boundary-crossing firm relocations concern the years of 1990/1991 and 1994/1995 (Kemper and Pellenbarg 1993, 1997) and are pictured in figure 4.

The maps show a pattern of firms that have on balance moved away from the Randstad to the Intermediary Zone. This goes to particularly Flevoland, Gelderland and Noord-Brabant. A comparison of the maps and data for the early (left map) and mid (right map) nineties denotes an increasingly locational pressure in the Randstad the ensuing and increasing spread of firms that relocate to the provinces in the transitional zone and periphery of the country. The last only has an exception in Groningen, which remains in the negative.

Atzema and Lambooy (1999) later rediscuss this point of view, and come up particularly against the idea that the Randstad is a region oversaturated with firms and people, that cannot do otherwise but 'blow off steam' (by way of departing firms) to bordering regions. Based on data

from the Chamber of Commerce's mutation balance for 1992-1996, that is a year earlier than the series published by Kemper and Pellenbarg, they conclude that the loss of firms is beginning to slow down. Regrettably the comparison between the data series of the two author teams is not perfect: Kemper and Pellenbarg used firm relocations of all sizes in the maps of fig.4, but only in the industrial, retail and services sectors (where most migration occurs).
Atzema and Lambooy did count firm migration in *all* sectors, but left out migration of the smallest firms (<5 employed persons), and that category of little ones happens to be the greatest in numbers of firms. Of the smaller number of larger firms, they then ascertain that a larger number of relocations no longer moves away from the Randstad in 1995 and 1996, but moves to locations *in* the Randstad, locations that also happen to become available in that period. It must be noted that there can very well be a significant difference between the relocation patterns of firms larger and smaller that 5 ep, and that the difference is in a different direction than one would expect, that is to say that not the large, but in fact the firms smaller than 5 ep are the ones that relocate over the greatest distances. The latter has already been ascertained through research done in the nineties (Pellenbarg 1994) and can be explained by the fact that larger firms like to relocate over smaller distances so that the staff doesn't have to move with them. Small firms are usually one mans firms that are operated form a home and follow the relocation pattern of residential relocations, which sometimes occur over great distances. Because the whole of firm relocations is so dominated by smaller firms, the in- or exclusion of this group could have great consequences for the spatial image of registered relocations.

Figure 4 Interprovincial firm relocations (balance) in the industrial, wholesale and business service sectors in 1990/1991 (left) and 1994/1995 (right) on average per year. Source: Kemper and Pellenbarg 1993.



Firm relocations in the manufacturing industry sector

Since the late nineties, the discussion concerning spatial firm relocation patterns has taken place in an environment lacking data: the Chambers of Commerce will provide address information of relocated firms, but provide no regionally divided data in the mutation balance for use in formal publications. An exception was made for this book concerning the data of relocations of larger firms (with 10 or more employed persons) in the manufacturing sector. In this category the chances of registration errors seem smaller than in the entire firm population. This is, however, not entirely certain because the manufacturing firms in question sometimes are part of larger corporations, wherein things are sometimes administratively moved around in a way that does not do justice to what takes place in actual physical space.

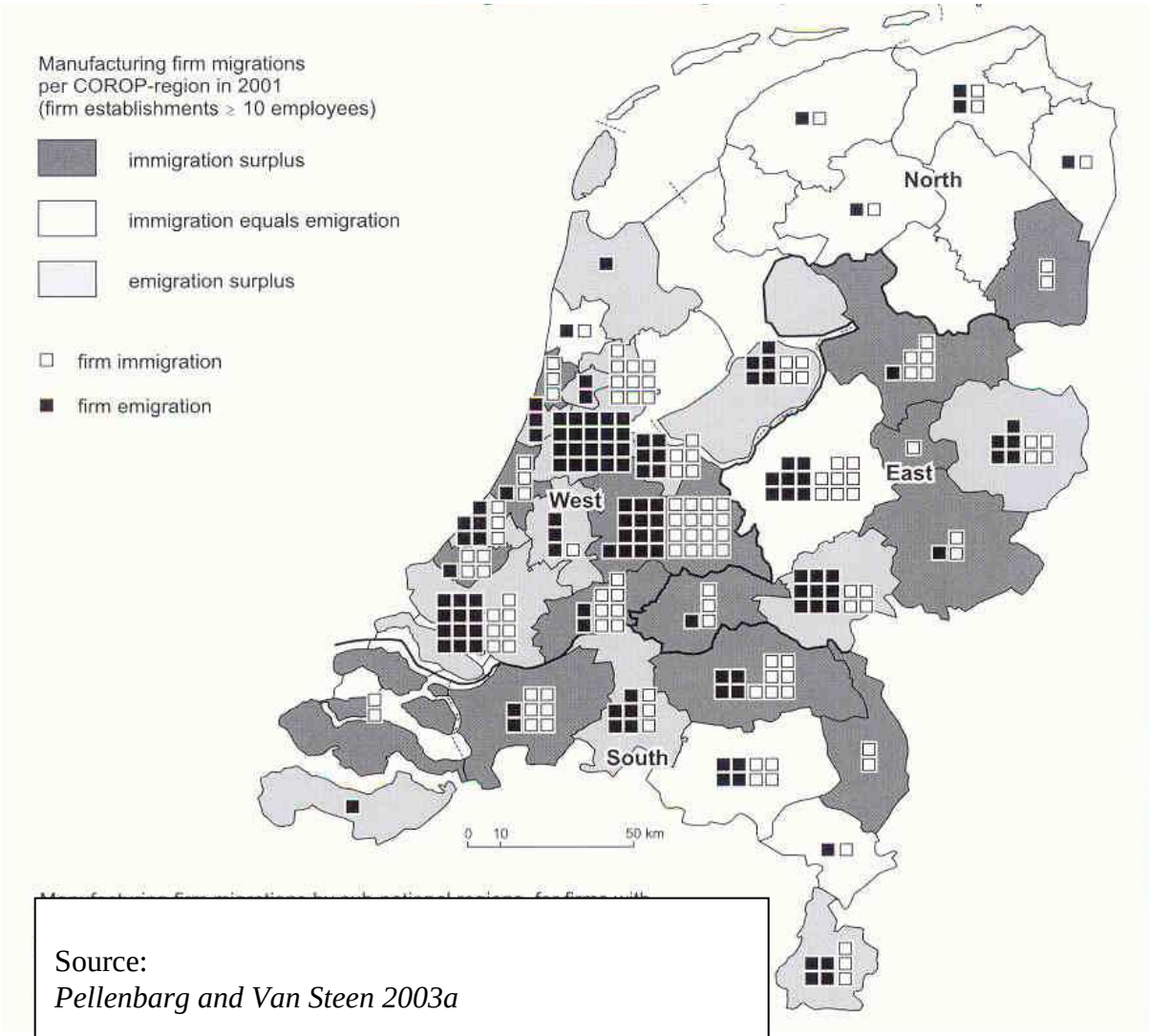
Figure 5 shows the pattern of the larger regional manufacturing firm relocations (in the year 2001) by showing regions that have on balance gained or lost firms. Also, all individual locations of origin and destination are indicated. The urban areas surrounding Amsterdam and Rotterdam book the greatest loss (many more firm emigrations than immigrations). The regions with establishment surpluses (more immigrations than emigrations) are to be found mainly in the Intermediary Zone. In total, there were 127 relocations of firms with ten or more employees in the Netherlands in 2001. Figure 5 does not show the relocation distances, although they usually were quite significant. Only half of all relocations went to immediately bordering COROP regions (relocations within those regions have not been counted here) and the other half to non-bordering regions. The latter is an indication of a larger relocation distance, which, as we know from the literature, occurs less often for relocations in general. But apparently manufacturing firms on average tend to make bigger jumps more often, especially compared to the service sector. The larger cities are the most important relocation suppliers but here also the movement does not indicate an 'urban overspill', but rather an increase of long distance relocation: two-third of the firms move further than the directly bordering regions

The Randstad in general provides at least half (70) of all relocations in manufacturing industry, but it is almost as often the destination region (60). Considering the types of industry and firm size, the Randstad shows no special difference between the in- and outgoing streams. If we leave out the occasional very large firm that relocated in 2001, the average firm size was 25 ep.

In light of figure 2, we have already noted that the manufacturing sector is not, or at least no longer the most mobile business sector. The data for the somewhat larger firms, which are not as mobile as the smaller ones anyway, confirm this impression. In 2001, the manufacturing sector counted 67,500 firms in total, of which 12,850 have 10 or more employees. The 127 relocations amount to barely 1% of that. Manufacturing industry firm relocation in the Netherlands seems to slowly come to a standstill. The era of great migratory steams from central cities to city edges and from the Randstad to the periphery has definitely past. Interesting, in this respect, is the comparison that figure 6 makes with the manufacturing industry firm relocations of 50 years ago, i.e. in the decade directly after the Second World War (1950-1962). For that period there happens to be a comparable data set available of the industrial firm relocations from the earlier mentioned in this chapter (and in the mean time closed down) General Industrial Statistics.

In the fifties, manufacturing industry migration streams were not only larger than the migration streams of the services sector (which still attached itself firmly to the cities then) but spatially was a lot more marked than it is now. The dominating migration tendency was a deconcentration of firms from the West of the country to all the other parts of the country: North, East and South. Fifty years later, the firm migration stream to the North has stopped completely, that of the West to the East has become much smaller, and only from the West to the South do

Figure 5: Manufacturing firm migrations, bij sub-national regions (firms with 10 or more employees) in 2001. Origin and destinations and COROP regions by migration surplus respectively shortage.



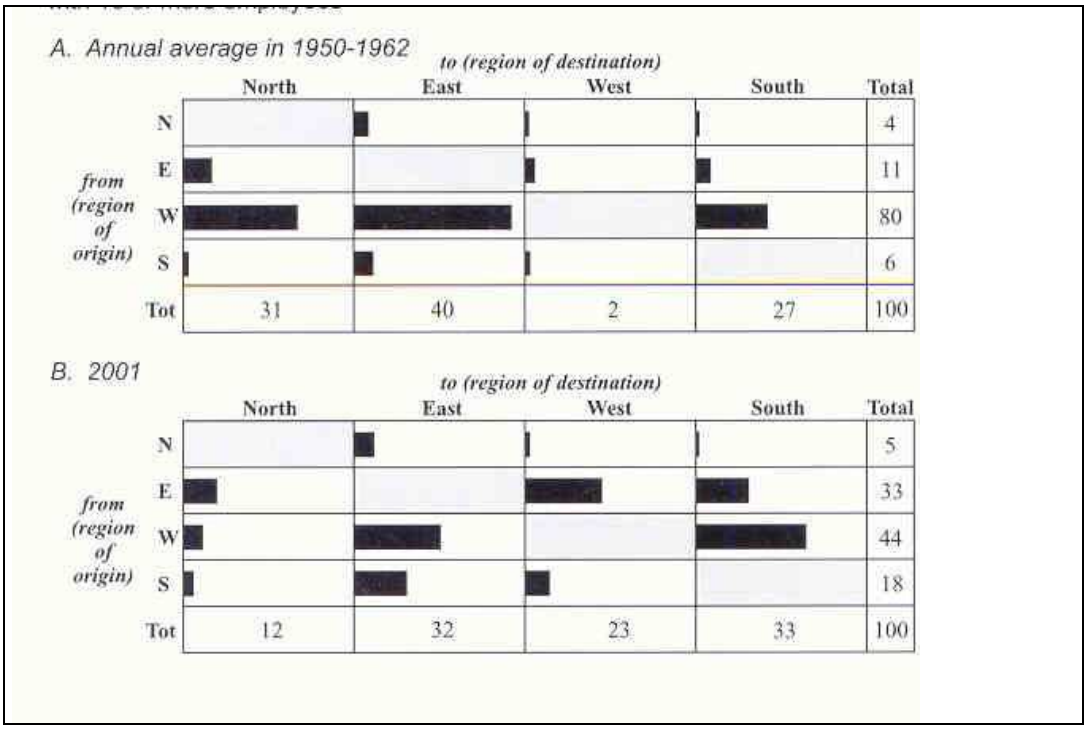
Source:
Pellenbarg and Van Steen 2003a

relatively many firm relocations take place. But interestingly, now there are opposing migration streams from South to East, from East to West and from East to South, contrast the older patterns. The earlier one-sided migration steam from the nuclear region to the periphery has changed into a pattern of back and forth movements, like water that no longer flows from an incline but finds its way on a flat surface. The pattern of industrial firm relocation has essentially come to a full stop (Pellenbarg and Van Steen 2003b).

That full stop concerns only the spatial scale on which we observe the movements, that is, within the Netherlands. For there are clear signs that an era of new industrial mobility on the international level is approaching. According to a recent report of Deloitte & Touche, no less than 30% of middle-sized firms (>50 ep) and large industrial firms in the Netherlands expect to move substantial parts of their production capacity abroad within two years. If one compares the

intentions of those same companies on this two years ago with what they factually do two years later, then it seems like their expectations might become true (Deloitte & Touche 2003). The new tendency of boundary crossing firm migration was also noted in the mid nineties (Van Eenennaam 1994) and is all the more noticeable because it no longer only concerns foreign investments of large multinational firms, but also independent medium sized firms. Cost reduction (particularly wages) is the foremost motivation in this kind of international relocation intentions**.** It does not, however, concern just production departments. R&D departments and service enterprises follow the trend. Very conspicuously, low wage countries in the Far East are no longer the main focus. At least as often, other West- and East-European countries are mentioned as destinations (Van Eenennaam 1994, Pellenbarg and Van Steen 2003b).

Figure 6: Manufacturing industry firm migration by sub-national regions, for firms with 10 or more employed persons (ep), as % of all migrations of industrial firms with 10 or more ep. Source: Pellenbarg and Van Steen 2003a.



Motives for firm relocation: space and accessibility.

In the course of the years, the research into firm relocation has known several schools (for inventarisation, see Pellenbarg 1985) all of which were focussed on different aspects of the issue such as counting moves, finding explanatory factors, discussing employment aspects, relation to government policy etc. etc. Aside from the purely inventarising and descriptive studies, the explicative studies have always been most numerous, and for a number of decades they took the shape of questionnaires and interviews with (possibly recently) relocated firms, wherein the motives for firm relocation were questioned. Many of these studies were done both in the

Netherlands and abroad, and questionnaire studies are still in use every time that new white papers concerning location planning or regional policy need to be backed up. As an example, in table 2 we show the results of a firm relocation research by Buck Consultants that was used for the latest government white paper concerning the spatial-economic policy (BCI 1998, Minez 1999). The first part of the table summarises the primary reasons that firms give for leaving an old location (push factors), the second part summarises the primary reasons for the choice of the new location (pull factors).

The great importance of the factor 'space' (for expansion) will be clear from the table, both for the decision to leave as in looking for a new location. This befits the fact that most firms are young and growing firms. Location and accessibility are a good second reason when talking about the most important relocation motivation (in the left column). They become even more evident reasons for relocation when explicitly asked for important secondary reasons for relocating (the right column). Almost all other factors are named not nearly as often, only 'representativeness' of the location stands out as both a pull and push factor with a relatively high score in the right column. Apparently this is a factor that comes into play quite often, but without playing a decisive role.

Table 2a: Most important push factors (in %) for relocated firms. Source: BCI 1998.

pushfactor	primary reason	Secondary reasons
Lack of space	41.5 %	12.7 %
Business economic reasons	16.3 %	10.8 %
Accessibility/location	10.2 %	24.9 %
Fusions/take-overs	6.5 %	1.8 %
Non-functional housing	4.9 %	11.8 %
Environmental policy	4.6 %	5.9 %
Ownership form	4.5 %	3.3 %
Housing costs	3.3 %	5.7 %
Representativeness	2.3 %	13.8 %
Commuting distance	2.3 %	3.9 %
Too spacious housing	1.8 %	1.3 %
Parking space	1.7 %	4.1 %
total	100.0 %	100.0 %

Table 2b: Important pull factors (in %) for relocated firms. Source: BCI 1998.

Push factor	Primary reason	Secondary reasons
Lack of space/growth possibil.	27.5 %	15.3 %
Market location	13.7 %	11.7 %
Accessibility	10.6 %	16.2 %
Regional embeddedness	5.9 %	6.1 %
Fusion/take-over/spin-off	5.7 %	0.8 %
Quick availability	5.7 %	3.2 %
Commuting distance	5.2 %	4.9 %
Price/quality rate	5.1 %	8.4 %
Representativeness	4.7 %	12.2 %
Housing facilities	3.9 %	6.5 %
Other locations nearby	3.8 %	3.9 %
Total	100.0 %	100.0 %

The primacy of the factors space and accessibility can be found in all research into firm relocation motives since the seventies. There are sometimes rather significant differences in factor scores, but these are caused by the differences in questioning. The list of factors presented to the respondents varies by the various studies, which has consequences for how is scored on the answers, of course. For example: a factor such as 'organisational/business-economic considerations' always scores high marks when presented, but does not seem to be missed if not. The different premises and questions in this kind of research make comparisons problematic, especially when it concerns looking into temporal developments that are significant. After all, we can expect the motives that concern firm relocation to change over time as a reflection of changing circumstances of location supply and demand, infrastructural facilities, job market, government policy and such. An opportunity to, nevertheless, gain an understanding of this, is provided by three studies spread over a period of time that were conducted in completely similar fashion, namely that of Pellenbarg in the seventies, Besselink *et al.* in the eighties and Kok *et al.* in the nineties. All three research projects consisted of in-depth interviews of fifty larger and smaller, recently relocated firms throughout the country from differing business sectors, and the questions were the same in both number and form. Table 3a and 3b show the same results, again distinguishing push and pull factors, of which the five most important for each period are noted, in order of weight in the relocation decision.

The tables 3a and 3b show that business space is and stays a dominant migration factor. But what is interesting is that it steadily becomes a more important factor on the push side compared to the pull side. As pull factor, the availability of business space has been surpassed by considerations of representativeness of the firms' premises**,** and the accessibility of its location. The rise of accessibility as push and pull factors in firm relocation cases can also be found in the analyses by Van Steen (1998), and is clearly a continuing trend.

Table 3a: comparison push-factors 1977-1988-1999. Source: Pellenbarg (1977), Besselink et al. (1988), Kok et al. (1999)

1977	1988	1999
Lack of space for growth	Lack of space for growth	Lack of space for growth
Organisatorial considerations	Organisatorial considerations	Not a representative building
Bad state of firm housing	Difficult local traffic situation	Bad state of firm housing
Expropriation/Rent termination	Optimistic perspectives.	Organisatorial considerations
not a representative area	Bad state of firm housing	Bad accessibility

Table 3b: comparison pull-factors 1977-1988-1999. Source: Pellenbarg (1977), Besselink et al. (1988), Kok et al. (1999)

1977	1988	1999
Possible expansion	Beneficial transport location	Representative housing
Organisatorial considerations	Possible expansion	Accessibility suppl&customers.
Presence of housing	Beneficial local traffic situate.	Possible expansion
Beneficial transport location	Price of new location/premis.	Beneficial transport location
Beneficial local traffic situation	Representative housing	Presence of housing

The role of the labour market and government

In the lists of most important migration factors as presented before, a number of factors are noticeably absent. In the first place this goes for the factor labour market that we cannot really

distil from the most commonly cited push and pull factors. That was quite different from the first two decades after the Second World War, when the labour market in the Netherlands gradually became saturated and the deconcentration of industrial firms from the Randstad to the other parts of the country was primarily driven by the search for available (particularly low-skilled) labour and lower salary levels. We can also find this result in the classic firm relocation study of the aforementioned data of the AIS from that period that ahs been conducted by the SISWO (Reinink 1970). After the sixties, the dispersal of routine production labour in affiliates of large industrial concerns continued beyond the national borders to other low wage areas around the world, causing firm relocation in the Netherlands to decline sharply. For the Netherlands, the case of the Philips concern is exemplary of this development. In our own time, the labour market driven migration across the national borders has gotten a new impulse, now that low wage areas have come so much closer in Central and East Europe, also drawing in companies of other sizes than just large multinationals. This has already been explained in one of the previous paragraphs.

But does the labour market in the Netherlands itself not play any role of importance then? That conclusion would be erroneous as well. She does play a role, but not as part of the push and pull factors. The labour market in the Netherlands nowadays primarily functions as keep-factor, that is to say that it offers mainly incentives for a firm *not* to relocate, or, when it is unavoidable, over as short a distance as possible. Firm relocation studies in the seventies and eighties (e.a. Pellenbarg 1985) emphasise the point that firms want to keep their employees as much as possible and are weary of relocations wherein a (large) part of their employees cannot relocate with them. Not relocating, or restricting the distance of the relocation to a maximum of several tens of kilometres then becomes an understandable strategy, because it allows them to maintain employees that cannot relocate as commuters to the new firm location. That vision remains essentially valid, and the great weight that Dutch entrepreneurs accord to the quality and mentality of labour in judgement of locations is evident from several large Dutch location studies performed in the nineties (Parker Brady *et al.* 1993, Sloterdijk and Van Steen 1994, Wittenburg *et al.* 1995).

Ever since the rise of the modern institutional approach in economic geography, the issue at hand has been regarded in a wider perspective (Pen 2002). The own employees form a part of the network of personal and organisational relations wherein the firm is embedded and through which it is tied to its location. Stam, who researched the most successful and fastest growing firms (also known as the Gazelles) in the Netherlands for his PhD dissertation, found that this group is not as mobile as one would think at all from the expectation that fast adaptation—of location also—to changing circumstances is a part of their success. This appears not be true at all. The ‘gazelles’ relocate frequently, but only over short distances: merely 4% appears to leave their own region where they can grow within and also because of their network of relations. The labour market relations are a vital part of that (Stam 2003). From a recent study by Hoogstra it stands out that the dominance of short range relocations is maybe even more extreme than earlier studies already showed (Hoogstra 2005). No less than a quarter of all relocations in the Northern provinces of the Netherlands stay within the range of 500 metres! In Hoogstra’s database, 50% of all moves stay within the range of one and a half kilometre, and three-quarter within three and a half kilometres.

Just as is the case with the labour market factor, the factor ‘government’ is frequently absent from research into firm relocation motives. One would expect to find signs of the influence of regional and spatial policy measurements in the location choice behaviour of firms. Spatial policy should stand out on the ‘push-side’ of firm relocations because it is a well-known fact that many

relocating firms often have to leave their old locations because environmental regulations or city/village renewal operations often prohibit further growth at old (often start-up) locations. And regional policy should particularly stand out on the pull-side of firm relocations, because location premiums and other facilities offered to firms in order to lure them to the policy dictated areas, would appear in the lists of factors that are considered in the relocation decision. Neither is the case, however. Only a few firm relocation studies are known to have accorded a somewhat larger role to government, and then it concerns the (negative) push-side of the story: the government that, through its environmental policy and land use plans - and her sometimes generally unsupportive attitude - 'scares' firms away from a location. Van Steen (1998) finds in his research 'Bedrijvenlandschap 2000+' that one in six (16%) out of a group of 1300 firms names these reasons as definite motivation for relocation, *should* they arise (for comparison: in the same group, 'spatial stress' scores 32%, and 'accessibility stress' 11%). Pen, who, in the late nineties, subjected 500 newspaper articles of firm relocations to a content analysis, found an even more telling indication: more than half of the relocations from those 500 newspapers articles had to do with spatial policy, usually of the municipality, in the area of spatial planning (15% of all cases), housing (18%), or environment (21%). Still, we do *not* find these numbers back in any of the many reports wherein firms are asked for their relocation motivation *after* their relocation. Apparently, upon arrival at their new location and asked about the push-factors in their motivation for moving, firms do not refer to government policy, but to their own growth and lack of space as most important reason. Basically these are two sides of the same coin, of course: the policy makes growth at a certain location impossible, forcing relocation. Which side of the coin is presented then depends on who shows the coin (in this case: the journalist or the entrepreneur)!

Would the absence of references to cost benefits or location premiums in the framework of a regional assistance policy in firm relocation motives also have to do with a certain feeling on the side of the responder, which brings them to refer to such a cost benefit differently? It seems unlikely. More logical would be to assume that the number of relocated firms that could actually be confronted by this was not very big in the first place. In the Randstad and the intermediate zone, where most relocations occur, this is not an issue, and in the areas where the stimulation measures of the mentioned kind are operative (nowadays only in the Northern Netherlands), most firms having to do with establishment benefits will make their choice for location dependent primarily on factors that influence running income and expenses, and not on a one-time single benefit. Firms that have been particularly attracted by this usually do not have a very long life at the location of the benefit. An infamous case in recent history is the establishment of the firm SCI (a subcontractor of the computer manufacturer Hewlett-Packard) in Heerenveen. The firm, ostensibly offering many hundreds of jobs (after a period of time even a thousand) chose for this location in 1998 after a heavy bidding war between several locations (Pellenbarg 1998) where, in hindsight, subsidies were doled out a little too easily. The European institutions for regional policy have criticised and corrected that. Within five years of deciding to establish the firm there, it was closed down. The investment made by the firm itself was relatively small, and an embedding in local and regional network relations did not develop. It is not hard for those who make decisions, and who are not part of the local management, to dissolve the firm from its location.

Phases in the relocation decision

The end goal of firm relocation motive research should ultimately be the construction of an explanatory model, wherein the primary driving forces behind the firm relocation process should

be included, and with which the future firm mobility by size and (particularly) spatial distribution can be predicted. The problem with the construction of such a model is that it has to distinguish a number of steps. In any case, the distinction must be made between the first model phase wherein a part of the firm population becomes mobile, and the second phase wherein the mobile part of the firm population spreads out to different new locations. This then corresponds to the distinction between *push* and *pull* factors. But it is very obvious to assume that there are more phases to be distinguished in the firm relocation process, wherein different aspects present themselves each time. A first indication of this is provided by the proponent of English firm relocation research Townroe, who had already come up with a five-phase model of firm relocation decisions in the seventies. He distinguishes the phases 1) stimulus, 2) problem definition, 3) search, 4) formulation and comparison of alternatives, and 5) choice and action. The choice phase he then proceeded to divide, once again, into eight parts.

In the middle of the nineties, Louw has attempted to give a better grounding to such a phase model in his PhD dissertation on the relocation behaviour or large offices in the Netherlands. He distinguished the phases 1) orientation, 2) selection, and 3) negotiation, which roughly corresponds to phases 3, 4 and 5 of Townroe (Louw 1996). His research shows that the 'spatial factors' (location, accessibility, parking, presence of public transportation, availability of services, quality of surrounding area) play a particularly important part in the first two phases, while financial and contractual considerations strongly dominate the third phase, when the primary concern is to reach a concrete negotiating result (table 6.4). The dominance of spatial factors is strongest for buyers on the location market, and much less so for renters.

Table 6.4: Factors in the location choice, named by the deciders (% of all mentioned factors, per search phase). Source: Louw 1996.

Factor	Phase			
	Orientation	Selection	Negotiation	Total
Engineering factors	15.2 %	12.3 %	7.1 %	11.9 %
Functional factors	19.4 %	18.4 %	7.1 %	16.1 %
Technical factors	3.1 %	4.2 %	2.0 %	3.4 %
Financial factors	12.2 %	14.2 %	52.5 %	22.5 %
Location factors	43.9 %	36.0 %	12.1 %	32.3 %
Other factors	6.1 %	14.6 %	19.2 %	13.8 %
Total	100.0 %	100.0 %	100.0 %	100.0 %

The dissertation of Pen continues in the line of Townroe-Louw, and eventually establishes that (based on extensive questionnaire among more than a thousand firms) the number of phases in the firm relocation decision varies from three to seven, with five as the average number. The seven most occurring phases are problem identification, problem diagnosis, strategy finding, search, choice, development and implementation. The order of the phases is not always the same! Identification, search/choice, and implementation are clearly the main phases. Personal considerations always play a role, but larger firms do in general deal with the decision-making process more rationally than small ones do. There is no link between rationality and the length of the process. Notable is the fact that the greater or smaller number of phases bears a relation with the weight of the factors that play a part in them. With a short process with few phases, the problems surrounding the business processes dominate. When there are more phases, the

orientation on the business environment becomes more pronounced. With five phases, the earlier mentioned focus on representativeness and image (table 6.3b) comes strongly to the fore, but when the number of phases increases beyond that it diminishes again and problems with staff, for instance, become more important (Pen 2002). These kinds of results increase our understanding of decision-making processes, but on the other hand also show that the construction of realistic mathematical models to predict firm relocation movements is as good as impossible.

Conclusion

In this paper, we have focused on the firm relocation movements in the Netherlands. Nonetheless, it is interesting to see to what degree the firm migration patterns (and underlying causes) in the Netherlands are comparable to those in other European countries. That went for the survey that Klaassen and Molle made of the period of the sixties and seventies, but as much for our own time. Very striking, for instance, is the comparative survey of firm migration in the Netherlands and the UK, derived from the work of Mariotti and Van der Steen (2001). Elsewhere, Mariotti describes that the same patterns are also to be found in Italy (see frame 6.3).

What stands out from an international comparison is the breach of a trend in the seventies throughout Europe. The post-war period of national industrial deconcentration ended, and a period of strong growth and mobility of the service sector took root. In the first instance, especially wholesale become mobile within the service sector, and ensuing, the business services. The spatial scale of the firm relocation movements becomes smaller: it now is 'suburbanisation' of services instead of 'deconcentration' of industry. The offices wherein those services are housed can be seen particularly at the edges of cities in the Netherlands since that time. Because offices are much more frequently rented than industrial buildings, and because little is invested in product specific installations, the service firms occupying them can move all the more easily. Firm mobility increases every year in the eighties and nineties. And when after a while, location pressure in the Randstad starts to build, the spatial scale of the firm relocation movements expands again**.** Firms increasingly relocate to locations at the edge of the Randstad, or to the bordering Intermediary Zone. Not just the cities, but the entire Randstad suburbanises.
How this process continues, particularly the spatial patterns of firm relocation movements, is at this point still uncertain. Detailed data is unavailable, and researchers have differing views. But it is certain, however, that the economic recession that started in 2002 has decreased the level of mobility drastically.

Apart from the absence of some spatial relocation patterns, more unanswered questions remain in the mean time, and demand further investigation. For example, the state of things concerning the international relocation of small and middle-sized independent firms that we have noted above as a new trend needs attention. At the other end of the relocation spectrum, the under-researched inter-municipal relocations demand our attention (Van Dijk and Pellenbarg 1999a). But the most important current research question concerns the role of institutional factors in the relocation process and how the principle of local and regional 'embeddedness' works that is so central to the institutional approach. This primarily concerns a follow-up of the research of Stam (2003) that emphasised the embedding of firm activity in the local and regional networks of relations: relations with suppliers, customers, other market parties, governments and other institutions and the personal network of relations of the entrepreneur him/herself. Stam found that these networks link firms to the region and therefore can be a factor in the success of a firm. Deeper insights into the nature and workings of these networks should provide the basis of 'anchoring strategies' of local and regional governments that strive to bind firms (especially

successful ones) to their location. The problem of such 'anchoring strategies' of the government always seemed to be that when they concerned location, the firm's interests did not always run parallel to that of the government (Lagendijk 1999). With regard to the conclusions of Stam, that must be seen as less problematic than initially assumed, if the firm's interests are adequately met. The core of a more successful tuning of firm and government strategies can be found in an increase of attention for a better understanding of what goes on within firms. Under the influence of neo-classical theories concerning location choice, the economic-geographic research of the past decades has focused too much on the importance of spatial conditions as selection criteria for firms that are looking for a good (new) location. Of course those spatial conditions are of great importance. But new research into firm relocation, wherein relocation plans are linked to all sorts of internal and external firm factors by way of logit analysis shows that the importance of internal firm developments is much greater than previously thought (Van Dijk et al. 1999b; it was also earlier noted by several authors, see for example Ortona and Santagata 1983). Shortly summarised: The search for the best location starts at the *firm* that is looking for a new location and not at the *location*!

Frame 3 Firm relocation in the United Kingdom and the Netherlands

United Kingdom	***The Netherlands***
The sixties *Industry is the most mobile sector. A third of industrial firm migration is 'short distance overspill' (small firms) and half is long distance migration between the nuclear region (South east England) and the periphery (primarily larger firms). Short distance overspill occurs due to lack of space and due to transportation difficulties. Migration over longer distances due to labour market problems.* *(Board of Trade Statistics, Keeble 1974, Keeble 1976, Sant 1975).*	*The sixties* *Industry is the most mobile sector. Industrial firm relocation accounts for roughly half of the 'industrial suburbanisation' (small, independent firms) and half of the relocation is in fact a deconcentration of the Randstad to other national regions (primarily larger firms, affiliates). Lack of space and accessibility cause suburbanisation of firms. Deconcentration to other national regions is caused by staff shortages.* *(AIS firm registration, SISWO 1967, Reinink 1970)*
The nineties *80% of all firm relocation is now relocations of smaller, independent firms over short distances. Almost 50% of all firm relocations now primarily within Southeast England, primarily from London to directly bordering regions, particularly in the M4-corridor. Business services are by far the most mobile sector.* *(CREDO database, Mariotti and Van der Steen 2001)*	*The nineties* *Vast majority of relocated firms is small (a few employees). Relocation distance is small. 90% of all migration stays within the provincial borders. Concentration in N- and S-Holland and Utrecht. Much migration from and within the four large cities. Strongest firm migration surplus in the Intermediate Zone. Particularly business services are mobile.* *(VVK Mutatiebalansen, Pellenbarg en Kemper 1999)*

Closer research into the modern institutional research tradition and a focus on the internal firm developments can shed more light on the exact relation between the business-demographic

'events' of birth, growth, innovation and migration of firms. Such research must employ a process approach, because these four 'events' are actually not 'happenings' in the sense that they are not bound to any specific point in time. The founding of a new firm, its growth in terms of turnover and employees, the innovations of its products and services, the changes of its location; they are all 'events' that play out over a long period of time - not seldom years - and can be divided into phases, and the better that is understood, the better these 'events' can be guided, accommodated and indeed even predicted. The latter remains the final goal of firm relocation research. If the nature of firm relocation movements can be predicted with greater accuracy, location policy of the government can be made more attentive to the location desires and needs of the firms in question.

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