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Spatial Economic Impacts of Developing International Top Office Locations: A Case Study for Amsterdam South

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Abstract

A strong competition takes place between large European cities for attracting international head offices in especially the services sector. This paper investigates the spatial economic and employment impacts of developing such a top location. First, a theoretical overview is presented on generative economic growth and the locational behaviour of companies. Then attention is paid to the potential employment and spatial economic impacts (both distributive and generative) of such a project. In the second part of the paper, a case study is presented for Amsterdam South, which the local government wishes to develop as an international top office location. It appears that there are indications of generative employment impacts, but that there may also occur distributive effects, e.g. relocation of firms from the city centre towards the new location. It is concluded that both psychological factors and a careful planning are very important for the development of top locations. When a project is successful, new employment may be generated, but undesirable distributive impacts may be substantial.

1 Introduction

The demand for office locations has been growing rapidly during the last decades. This has been the consequence of several important developments in the economy. A first development is that technological developments in the manufacturing sector have favoured the substitution of blue collar jobs by equipment. As a consequence, white collar jobs have become more prominent. In addition, production processes have become more complex so that the control function has gained importance.

Long run trends in the economy have led to a shift away from the manufacturing sector to the service sector. For example, knowledge production has become a very important activity in developed economies and most of knowledge production takes place in office buildings. Other dynamic sectors with a strong demand for office space are banks and insurance companies and various business service activities.

In addition to the quantitative growth of demand for office locations it is important to note that demand for office space has received a stronger international orientation. This is the consequence of a trend of decreasing transport costs and of reduction in trade regulations (EU, NAFTA, ASEAN) giving firms a stronger international orientation (Dunning and Norman, 1987). A related development is the growth in the number of international organizations that need office space.

Larger cities try to attract these national and international companies and organisations, by offering high quality - so called top-office - locations (Funck, 1996). In this way they aim at stimulating local and regional economic growth and development, and attracting new employment. This has led to a strong competition between cities; many cities have developed plans for high quality locations. Also internationally there is an increasing competition between cities for attracting companies, often supported by national governments by giving tax exemptions and the provision of high quality infrastructure.

A top office location is defined as 'an area with a strong concentration of advanced office activities, situated in a major metropolitan region with a highly developed urban economy and specialized and sophisticated services' (Korteweg and Lie, 1992). In such locations knowledge and information-intensive activities are carried out, in which economies of scale and an advanced infrastructure provide an attractive climate for such activities.

In this respect it is an interesting research question what the impacts of the development of top office locations are. The *distributive* effects may be consider-

able: successful cities attract large numbers of jobs for office workers that would otherwise have gone to another city; also within cities such impacts may occur. Furthermore, *generative* effects may occur: due to the positive locational factors extra productivity gains may be achieved and new activities may start or be attracted.

This paper investigates these factors as well as the regional economic impacts of the development of a top office location. First, a concise review of location theories and regional economic growth is presented in Section 2. In Section 3, a methodological framework is developed for analyzing the economic and employment impacts of the development of (top) office locations. Next, this methodological framework is applied to the impacts of the development of Amsterdam South as top office location in Section 4. In Section 5, finally, some conclusions are drawn and policy recommendations are given.

2 Locational Theories and Regional Economic Growth: A Literature Review

Theories on the locational behaviour of firms go back to the first half of the previous century. The first well known theory is from Von Thünen (1821) for the agriculture sector; this was followed later by e.g., Weber (1909) for the manufacturing and Lösch (1940) for the services sector. Transport costs play an important role in the locational behaviour of firms according to these theories. Limitations of these early theories are that urbanization economies, economies of scale, social and cultural aspects as well as subjective perceptions of companies do not play a role. In addition, dynamic aspects are absent in these theories. Therefore, several new theories were developed, offering other explanations for locational behaviour and in addition explaining why certain regions and locations are more successful than other ones.

Well known, for example, is the growth pole theory (Perroux, 1958) which assumes that economic growth does not occur equally spread in time and space, but in a discontinuous way. Economic growth starts in so called growth poles, from which economic development spreads from. These poles are characterized by clusters of companies, which create positive synergy and large economics of scale. As a result, economic growth is created. In this respect also characteristics of the labour market, the presence of services and the social-cultural infrastructure play an important role (Pellenbarg, 1985).

Another theory is that of ‘cumulative causation’, which relates economic growth and the circumstances in which production occurs (Myrdall, 1957).

Growth in production on a location results in increasing quality of the production circumstances which again attracts new companies. This process repeats continuously, resulting in cumulative economic growth. Later in time economic development may spread, due to a lack of e.g. space and labour (Pellenbarg, 1985; Poppelaars, 1993). The notion of cumulative causation may indeed be quite relevant for top office locations.

Porter (1990) identifies four main location factors which explain the economic success or failure of a certain location, region or country; he describes these as mutually dependent corner points of a diamond:

* *factor conditions:* the presence of resources, capital, labour, infrastructure;
* *demand conditions:* the composition, size and growth of national demand and the export possibilities;
* *clusters:* the presence of interconnected sectors which are competitive on the world market;
* the *economic organisation.*

In addition to these factors, factors like 'coincidence' (e.g., inventions, technical breakthroughs, exchange rate changes, wars etc.) and governmental policies (which can influence the above mentioned factors) are important locational factors in Porter's theory.

Storper (1997), explains the success of certain regions by the concepts of 'technological learning' and 'conventions'. The latter relates to institutional and cultural issues, in which every region is different and which play a decisive role in the economic development and success of a region. Such conventions relate e.g., to ancient trade history, the development of finance centres etc., and are often historically determined.

The theories on the economic success of regions have clearly seen a shift from explanations based on cost factors, to theories which put emphasis on social-cultural explanations. A similar trend can be found in theories and research on the factors influencing the behaviour of firms. Funck (1996) makes a clear distinction between 'hard' and 'soft' locational factors; the hard factors are:

* the geographical location and topographical specifications;
* access to infrastructure establishments of various kinds (e.g., R & D, educational, health), their capacity and quality;
* the position in transport and communication networks;
* utility supply and waste disposal systems;
* structure of the labour market;
* sectoral, size and control structure of existing economic activities.

The soft locational factors are:

* the intensity, diversity and level of quality of cultural activities and recreational offers;
* the quality of natural and man-made environment;
* the creative climate;
* the identification of local citizens with their city or region, based on historical and cultural motivation, and future aspirations.

Clapp (1993) mentions as important reasons for a company to choose for a certain location: the existence of agglomeration advantages, factor costs, transport costs, political factors and the living climate for the management.

Locational behaviour and top locations

Louw (1996) discusses office location in the context of a communication theory: exchange of information is important for offices which can be seen as information demanders and knowledge intensive activities. Offices tend to locate therefore on locations with a high 'information density', where contacts can most easily be made and information exchange is the cheapest. In addition, Louw (1996) presents some theories on the decision making process within a firm, we will not elaborate on this any further.

Also empirical research shows the importance of soft locational factors. Price Waterhouse (1991) for example, investigates the importance of the above mentioned locational factors for international companies and found high scores for the soft locational factors (see also Poppelaars, 1993). Interestingly, when we compare various types of activities, it are head offices and R & D institutes which attach the highest scores to these activities: those activities on which top office locations mainly focus. Top office locations should therefore not only score positive on the hard locational factors, but also on these factors to attract these dynamic sectors.

In addition also perceptions and other attitudes play an important role in the success or failure of a top office location development. For example, only 40% of the firms around Schiphol Amsterdam Airport is a regular user of the airport, but because of status and image many companies prefer to locate there (Kramer, 1990). For the success of a top office location, it is therefore very important that the location has a deluxe image. Several factors are important in this respect:

* the presence of an important and well-known *image determinator;* the development of La Défense in Paris, where the new Arc de Triomphe acts now as determinator, is an example of this;

* selectivity with construction requests; the architecture of the building and the image of the demanding firm are important. In addition, also the price per m^2 is important for the image;
* *avoidance of over-supply;* the notion of scarcity is important for a high quality image.

Lie and Korteweg (1992) mention furthermore the next characteristics of top office locations:

* *mass and concentration:* a critical mass of prestigious offices is required, the top location should also be surrounded by several other locations;
* the activities performed are most *prestigious,* e.g. administration activities are often separated and located in cheaper office locations (a division occurs between 'front' and 'back' offices);
* there is a strong relationship between the office location and its *investment characteristics*. Risk avoidance is often an argument to invest in these locations: there is a long term stability in incomes (also because the firms located here are very solvent) and the value of the land is high and will probably stay high.

It can be concluded that for developing office locations not only 'hard' locational factors, but also 'soft' locational factors, perceptions and the image of a location play an important role. This observation holds even to a larger extent for top office locations; when such a project succeeds there may indeed be large generative economic impacts.

In the next sections we will investigate to what extent investments in top office locations may have an impact on locational behaviour of firms and on broader spatial economic development.

3 Methodological Framework

For analyzing possible impacts of the development of a top office location, we will use employment impacts and movements of offices as indicator for economic developments. We have two reasons for this: first, policies are often more focused on jobs creation and employment effects than on economic growth, and second, there are more data available on employment growth and office shifts than on economic growth figures.

The theories discussed in Section 2 mainly relate to explaining generative growth of a region or location and several success and failure factors follow from this analysis. One should however acknowledge, that the development of top office locations may also have unexpected interlinkages with other parts of the regional or even national economy. A typology of spatial economic impacts is presented in Figure 1.

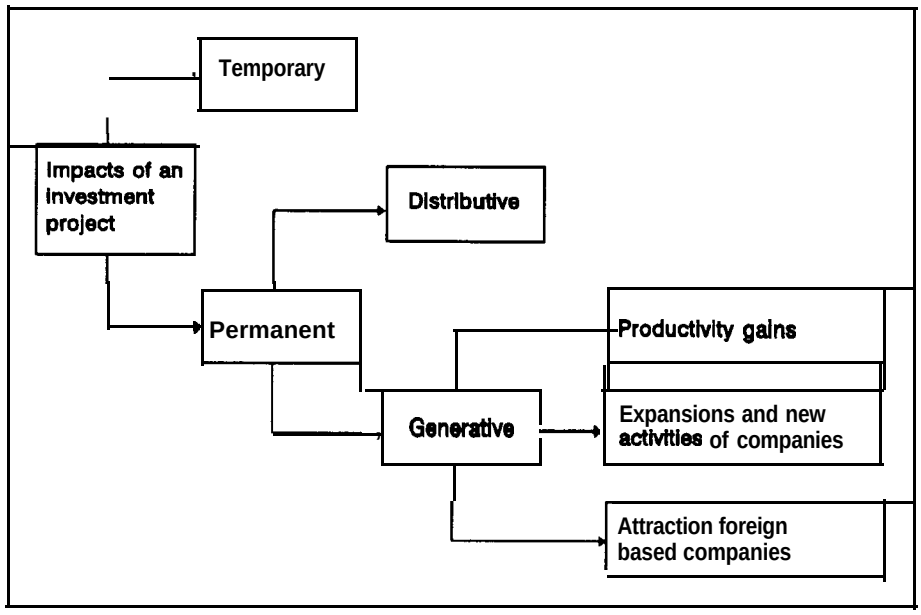

Figure 1 Typology of employment impacts of an investment project

First, a distinction should be made between temporary and permanent impacts. Temporary employment growth will occur in the construction stage of a project, and will in the first place occur in the construction and related sectors. In addition, several multiplier effects will occur, so that also employment is created in other sectors of the economy. Two types of multipliers can be identified (Bruinsma et al., 1996):

* incomes of employees increase, which has a positive impact on the economy and especially in the region where the employee is living;
* with the suppliers of the construction sector extra employment could be created.

When the construction is finished, permanent employment impacts may occur. A first important distinction to be made is between distributive and generative employment growth (Armstrong and Taylor, 1986; Rietveld and Bruinsma, 1998). Distributive impacts will result in a shift of employment from

other locations towards the newly developed location; in some cases this shift may be regarded as desirable, in other cases this will be undesirable from a urban development or social perspective. It should be acknowledged that these impacts are not specific for a particular project. When the same amount is invested in another project, similar employment impacts can be expected. Nevertheless, these effects are important: the economic potential of an area can be affected when much employment shifts to somewhere else. This may also have adverse effects on the quality of life. In addition, traffic flows may change, resulting in changing demands for infrastructure.

Generative impacts will result in entirely new employment; this will be the main reason for the development of a top office location in most cases. Generative growth may occur for various reasons:

* *productivity gains* may occur, due to the positive 'hard' locational factors in such a location or because of positive synergetic effects at this location;
* due to the inspiring environment and positive synergies, existing firms may start *new activities* or entirely *new firms* may be established;
* due to the positive locational features, *foreign* - both from other regions or other countries - companies may base *affiliates* at the new location, which creates entirely new employment.

When analyzing these impacts, one should acknowledge that generative impacts at e.g. the local level, may often be distributive impacts at a higher scale level. For example, a company may decide to relocate out of a region into another region due to the development of a top office location. In this case, the host region achieves generative employment growth, but at the macro-level only distributive impacts occur.

In theory, these impacts are easy to identify. In practice however, it is more difficult to make a distinction between the various impacts, and to make a distinction between autonomous developments, distributive and generative impacts at various scale levels. In addition, also spatial planning policies largely influence the locational decisions of companies. Finally, also the availability of data on movements of companies and newly based companies may cause problems.

In the next section, we will present a case study on the impacts of the development of a top office location in Amsterdam South. The analysis is mainly based on Rienstra (1996).

4 A Case Study for Amsterdam South

4.1 Introduction

The economic policy of Amsterdam has three main focal points. First, the national airport Schiphol should grow rapidly and become an international mainport and the fourth largest airport in Europe. Therefore the airport and the infrastructure around the airport will be expanded, while also airport related activities will grow rapidly. Secondly, the harbour area in the northwest of Amsterdam should expand and attract new industrial activities. Thirdly, the south of Amsterdam should become a top office location for services sectors, with a focus on national and international financial and business oriented companies (Rienstra and Nijkamp, 1997). Here we will focus on the impacts of the third objective; the research area is presented in Figure 2.

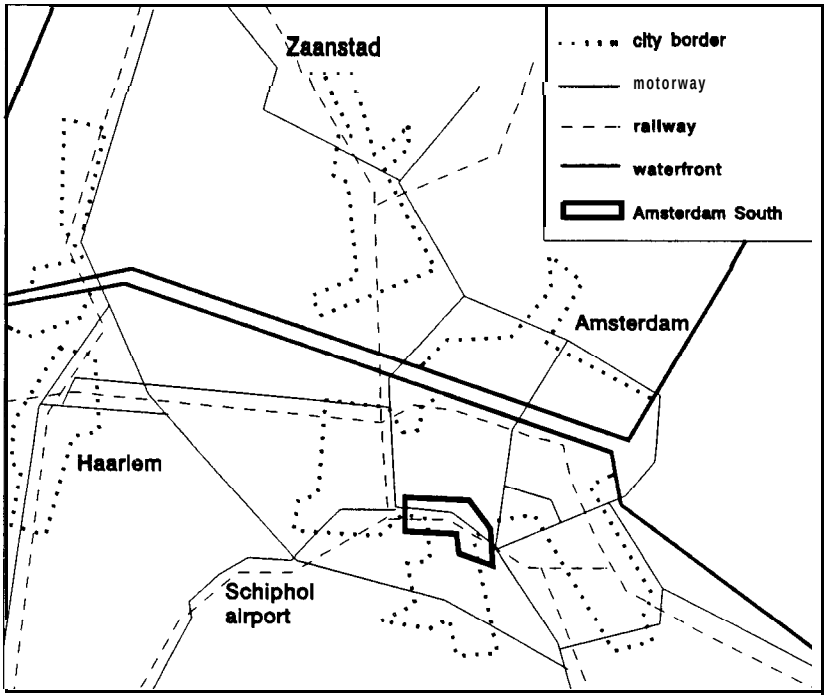

Figure 2 The research area

Up to now there was no integrated municipal policy for developing this area. The policy focused on developing locations in the North and West of Amsterdam. Market developments however, indicate a preference to locate in Amsterdam South, which already resulted in the construction of several head-offices of

internationally oriented offices. The municipality intends now to develop this area in an integrated way.

The plans indicate a development of 15.000-30.000 m^2 office space per year; in addition space is reserved for incidental demand of individual companies. These offices should have prices in what is called the top segment of the market, which is defined as rental prices of more than $f400,--$ per m^2. The plans include also a large scale expansion of transport infrastructure to this area: the highway may be extended and will be roofed in, a metro will be constructed to the city centre and the present train station may be developed to become a second terminal for High Speed Trains.

The potential of the area seems to be very good. The market demands for this location, Schiphol airport - which is the fourth biggest airport in Europe - is very nearby, the accessibility via highways and high quality public transport is very good, there are two important image determinators (World Trade Centre and the new ABN-AMRO bank head office) and a university and national/ international congress centre are already present in the area.

It is however questionable, whether the plans of the municipality are not too ambitious. The Municipal Real Estate Company (1995) for example, gives the forecasts for future demand as presented in Table 1.

Table 1 Yearly demand for newly built office space (19952005)

	m^2 per year
Careful ***scenario***	
- total demand	***90.000***
- top segment (20%)	18.000
- sub top	12.000
- absolute top	***6.000***
Positive scenario	
- total demand	130.000
- total top segment	***26.000***
- sub top	17.250
- absolute top	***8.750***

Source: Municipal Real Estate Company, 1995.

From these forecasts it becomes clear that demand is limited and the ambitious plans for developing Amsterdam South would imply that nowhere else in the city, top segment office space should be constructed. It is questionable whether this is feasible (and desirable). At several sites new offices are under construction, while e.g., the city centre also may have more developments in the future. It seems therefore necessary to attract foreign based companies, which

would not have been located in Amsterdam when this area would not be developed. To investigate whether this is feasible, we will now analyze the international competitive position of Amsterdam in this market.

4.2 The international competitive position of Amsterdam

The international position of Amsterdam has strong and weak points. On the national market, Amsterdam is not as dominant as e.g. Paris in France. Traditionally, the Netherlands has several big cities having their own specialization, e.g., offices of the national government are mainly located in The Hague. In addition, the Netherlands does not have large state-owned companies which have their offices located in the capital. Furthermore, the domestic market is not as large as in bigger European countries, so that it is more difficult to achieve economies of scale. This is reinforced by the fact that Amsterdam is a relatively small city: for example, the total office space in 1990 was 5,200,000 m^2; which is very small compared to cities like Paris (35,000,000 m^2) and London (25,000,000 m^2) (Korteweg and Lie, 1992).

Also European economic trends may not be in favour of Amsterdam: economic activities tend to shift southwards, therefore Amsterdam's geographical location becomes less preferable. An indication of this is that rents in Amsterdam are low compared to other European cities (Korteweg and Lie, 1992).

There are however also various positive features of Amsterdam. Since old times Amsterdam has a tradition of coordinating and controlling trade flows (due to the colonial past). As a result, there is a good competitive position in these sectors, which recently attracts many European distribution centres. Secondly, there are relatively many multinational companies based in the Netherlands. Therefore, there is an international orientation, also the fiscal authorities are used to deal with multinational companies. Thirdly, the international accessibility of Amsterdam is valued very high since it is located near the centre of Europe. Fourthly, the Dutch labour force is well qualified and has a good knowledge of foreign languages.

Despite this, it is expected that Amsterdam South will compete more with other middle large cities, like Brussels, Dusseldorf, Frankfurt, etc. than with the absolute top locations (Paris, London). Nevertheless, when Amsterdam develops its top location - which is lacking up to now - several smaller foreign based companies may choose for Amsterdam; this holds especially for companies having (European) distribution centres. In this way, demand for office space may increase and become larger than is expected in the above forecasts. Therefore,

developing Amsterdam South to a top office location could be feasible.

Now we will analyze the employment and spatial economic impacts of the development of Amsterdam South, by discussing impacts to be expected as discussed in Section 3.

4.3 Temporary employment impacts

The number of temporary jobs created during the construction stage will mainly depend on the amount of investments. Jansen (1993) indicates that in the construction sector the average sales per job are f252,000, so that an investment of f1 mln will result in the creation of four jobs; about the same holds for investments in transport infrastructure. The multiplier for investments in transport infrastructure as calculated by Bruinsma et al. (1996) is 1.7. When it is assumed that the same multiplier will hold for office investments, an investment of f1 mln will result in the creation of 6-7 jobs (the same holds for infrastructure investments). The current plans indicate investments of f3-4 bln in office space and fl-2 bln in transport infrastructure, so that in a construction period of 10 years 26,750 - 40,000 temporary man year jobs are created (see Table 2).

Table 2 Temporary employment impact in a ten years period

	Minimum	**Average**	**Maximum**
Investment: Offices	3 bln	3.5 bln	4 bln
Infrastructure	1 bln	1.5 bln	2 bln
Direct man years	16.000	20.000	24.000
Indirect man years	10.750	13.500	16.000
Total man years	26.750	33.500	40.000

It should be acknowledged that this does not mean that unemployment in Amsterdam will decrease with the same number of people. In 1992 only 13% of the labour force in the construction sector was living in Amsterdam and 25% in the larger Amsterdam agglomeration (O+S, 1992). Most of the temporary impacts will therefore occur outside the Amsterdam region.

4.4 Permanent generative employment impacts

When the offices are in use, generative impacts may occur because firms may perform better here than at other locations or due to the location of foreign based firms. Here we will focus only on the impacts of a better performance of

companies. It is not yet possible to analyse these impacts: this is only possible in an ex post analysis. Some indications can however be given by analysing data from two sources: employment data and data regarding the use of offices.

Employment developments

An indication whether favourable locational features will result in generative employment growth is the development of employment in those companies, which are already located in this area. In this respect it is important to acknowledge that moving firms are the most dynamic and fastest growing, which might locate wherever space is available. When these companies are also taken into account, one will find the largest growth at locations where most office space is available; therefore, we will not use data on these companies. The employment growth in companies in the service sector in the Amsterdam region and in Amsterdam South is presented in Figure 3.

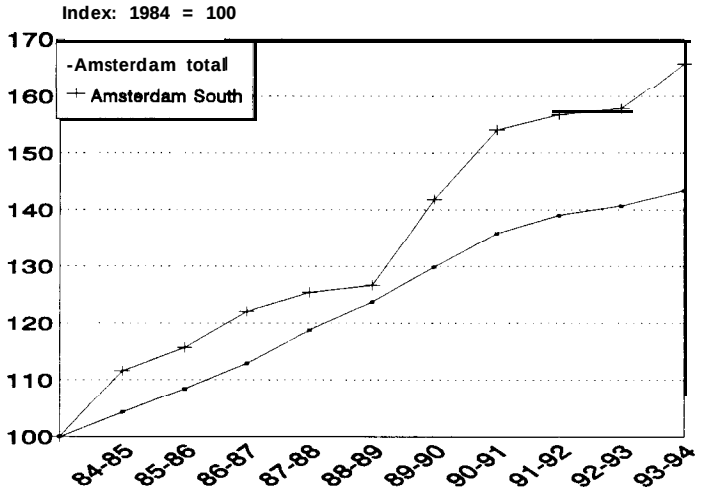

Figure 3 Employment growth of existing companies in the service sector
Source: Own calculations based on Chamber of Commerce (ERBO) data.
Note: Amsterdam South is defined here as the zip code areas: 1076-1078 and 1081-1083.

It appears that employment growth in existing firms is clearly higher in Amsterdam South than in Amsterdam in total. It is striking that this difference has become larger: in the observed 10 years period the annual growth was on average 1.6% higher; this difference was however mainly achieved in the last five years (Table 3). This is even more striking when it is acknowledged that there is very limited supply of office space in this area, which often forces companies to move to another area when they need more space (see Section 4.5).

Table 3 Average employment growth existing firms in the service sector

	Amsterdam (%)	South (%)
1984/85 - 1993/94	3.68	5.26
1989/90 - 1993/94	3.02	5.63

Source: Own calculations based on Chamber of Commerce (ERBO) data.

It should be acknowledged that also other features (e.g., the average year of a firm's birth) may play a role in these figures. It can be concluded in any case, that there are indications that developing Amsterdam South might result in generative employment growth compared to developments elsewhere, which may be due to the favourable locational features in Amsterdam South.

Data on office use

Also other indications of generative employment growth can be identified:

* location of *firms coming from outside Amsterdam,* which would not have been located in Amsterdam without developing the location;
* *expansions of current companies* which would not occur without the development of the top location;
* *new activities* which would not take place in another location.

It is very hard to predict whether these impacts will occur and whether these are caused by the positive locational features. An indication may however be the performance of the location compared to the performance in Amsterdam as a whole; these figures are presented in Figure 4. Striking is especially the high share of Amsterdam in attracting new companies (in comparison to the share in the existing stock). It is clear that Amsterdam South generates in this way a employment growth in the city. When it relates to international offices which otherwise would not locate in the Netherlands, even a generative impact on the macro level is achieved.

Furthermore, the share in new activities and expansions is higher than the urban average. These shares are not exceptionally high however, which may be explained by the relative lack of space and the high rents (especially for back offices). Amsterdam Southeast on the other hand has abundant space and low rental prices, which makes it easier for firms to expand.

From both data sources it can be concluded that there are clear indications that a generative employment growth can be expected due to the development of a top office location. Now we will turn to an analysis of potential distributive impacts.

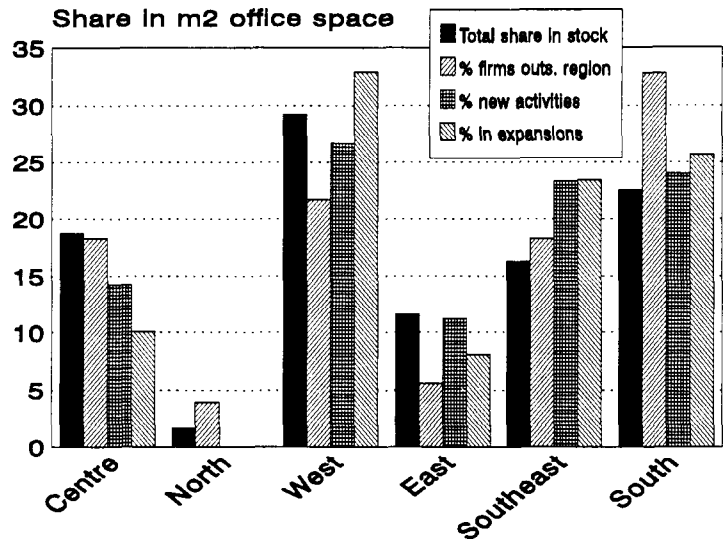

Figure 4 The share of distinct city parts in the total office stock, incoming companies outside the Amsterdam region, expansions and new activities
Source: Own calculations based on De Boer, Den Hartogh, Hooft, 1996.
Note: Amsterdam South is defined here as the city quarters South and Buitenveldert.

4.5 Distributive impacts

The potential distributive impacts will be analyzed by investigating competing locations (which will face a loss in offices when Amsterdam South is developed) in the rest of Amsterdam and an analysis of future expectations of the office market.

Analysis of competing locations

The supply on the market (both new and empty existing offices) is changing rapidly, this holds both for total supply and the supply per location. When analysing potential distributive impacts, especially competing locations are relevant. These locations should offer now also supply in the (sub)top segment of the market. When Table 4 is analysed, it appears that Amsterdam South has by far the highest share in the top segment of the market (rents above f400 per m^2): 21% of the offices in Amsterdam South are in this segment, whereas in all other quarters this segment is virtually absent (the centre is the only area in which also some top segment offices are found). Also in the subtop segment the dominant position of Amsterdam South is striking. It can be concluded that Amsterdam South in the first place competes with the city centre of Amsterdam.

Table 4** Average yearly office **space rented (1985-1 994)

	Abs. top (%)	Subtop (%)	Middle (%)	Base (%)	Total (abs.)
Centre	1	10	58	31	43.364
West	0	2	62	36	40.574
South	21	33	38	8	39.532
Southeast	0	1	89	10	50.569
East	0	0	49	51	8.589
North	0	0	46	54	930
Total	5	10	63	22	183.558

Source: Municipal Real Estate Office, 1995.
Note: Rents per m^2: absolute top: > *f*400; subtop: *f*300-400; middle: *f*225-300; base < *f*225.

Another indication of distributive impacts are the moves companies make between the distinct areas. In total the net inflow of office space was negative in both Amsterdam South and the city centre, because of the low supply of new offices here, while newly developed locations in Southeast and West attracted a good number of users. Nevertheless, some interesting conclusions can be drawn by investigating data on these movements (see Figure 5).

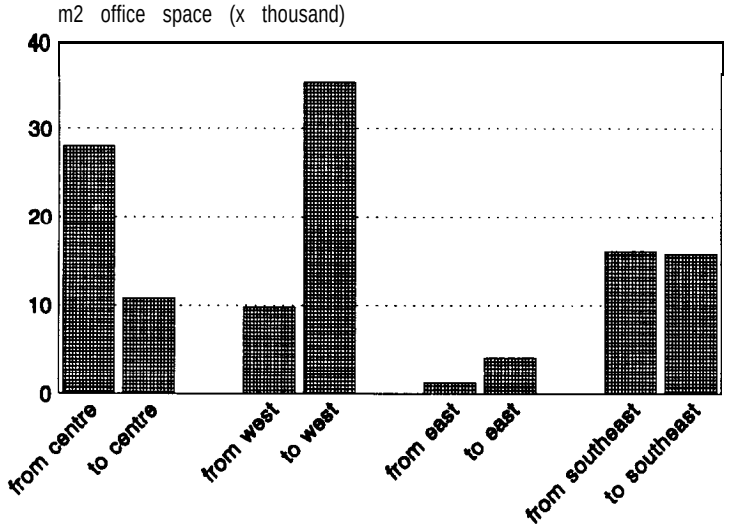

Figure 5 Shifts of companies (measured in m^2 office space) from and to Amsterdam South (I 991-I 995)
Source: De Boer, Den Hartogh, Hooft, 1996.

It appears that Amsterdam South mainly attracts firms from the city centre, which may partly be explained by the worsened accessibility and the parking problems there. Furthermore, in the city centre most companies are found which also rent in the top segment of the market (financial and business services etc.). The shift to Amsterdam West can be explained by the large supply of new

offices in the period analysed; the net shift from and to the other areas appears to be limited. It should be acknowledged, that also many offices shift towards locations near Amsterdam (Amstelveen, Schiphol area); Amsterdam South will also likely compete with these locations in the future.

5 Conclusions

There is an increasing competition between cities at the national and international level to compete for the location of offices of companies, which are most rapidly growing like business and financial services, European head offices etc. As a result, cities tend to invest huge amounts of capital in infrastructure and the development of (top) office locations. It is clear that a successful development of such a location may have positive impacts on employment levels and local economic growth, it is however uncertain whether and under which conditions such impacts may be achieved.

In addition, such a development may also result in shifts cf activities towards this newly developed location, which may have negative and undesirable impacts on other parts of a region or city. It is therefore necessary to carefully analyse the potential spatial economic impacts of such investment projects.

In this paper a case study is presented on the potential impacts of developing Amsterdam South as top office location. This location is already having the highest rents in the Netherlands, while most locational factors are very good and valued very high.

When investigating the potential impacts of such a development, there are clear indications that generative employment growth may occur. Companies already present here, show an employment growth which is clearly higher than the average, while they also start relatively many new activities; the area also attracts relatively many new companies. When the current plans continue, these impacts may be reinforced, leading to generative economic and employment growth. These impacts may be positive at all spatial levels, especially when Amsterdam South succeeds in attracting foreign based companies.

Within Amsterdam, a shift may occur out of the centre towards Amsterdam South, because many offices already move outside this area, while a newly developed location in Amsterdam will mainly aim at those sectors which are currently located in the centre. When incidental demanders have to choose for a location, they may in the future also locate there instead of in the centre or other parts of Amsterdam or the Amsterdam agglomeration.

When developing such an investment project, one should however always acknowledge that often not-planned and psychological factors play a decisive role in the success or failure of such a project; these factors are difficult to steer. For a successful further development of the Amsterdam South area, it is therefore in the first place important to avoid a negative image of the location (e.g., preventing over supply, a selective policy of accepting firms), even when as a result the development of an area may take longer than expected beforehand.

Acknowledgement

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