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FIRM MIGRATION

The paper presents the process of enterprise migrations, which exert a significant impact on national, regional and local development. The topic of migrations also informs debates on the functioning of the European Union. This paper touches on the problems of measuring enterprise migrations; cost and other factors associated with migrations, links between migrations and the size and age of enterprises; the importance of employees' qualifications; the impact of public authorities on enterprise migrations; and relocation resulting from "ethical" and fiscal dumping. Moreover, the article presents other aspects of this process discussed in the related foreign literature, such as the interdependence between the value of a firm and information on an enterprise's migration, or decision-making processes concerning a firm's relocation.

Keywords: location, migration, relocation, delocation of enterprises, relocation factors, changes in enterprises' location in the EU, impact of public authorities on firms' relocation, costs of relocation.

INTRODUCTION

The spatial systems of every scale created by places of certain characteristics and flows between those places are never of a static nature. Three types of factors (Fischer et al. 1987) influence changes occurring continuously in these systems:

- external factors on a large, even global scale, such as defined legal regulations within the framework of international economic associations, growth in oil prices in the world market, or decline in international trade turnover resulting from a slump in the economies of those countries which generate this turnover;
- internal factors which result from changes in attitudes and behaviours of people, enterprises, institutions and households in response to external factors;
- instruments of national, regional and local authorities policy applied in order to achieve their specific objectives.

There is a feedback between the new (changed) states of a system and the factors causing those changes: impact of factors leads to response to factors creating a new state of the system, which leads to new impact of factors in the changed system. This is most visible as regards the impact of internal

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factors where the response is most frequently immediate and direct. Observation of these processes in order to become familiar with their mechanisms is of vital importance for territorial authorities of each level.

One type of behaviour exerting a very strong influence on changes in spatial socio-economic systems is the location behaviour of enterprises. Apart from the location of new enterprises, the process of their migration becomes more and more significant for at least two reasons. Firstly, both the inflow and outflow of enterprises from a given territory can have an essential impact on economic and social changes. Secondly, the intensity of this phenomenon is increasing both on a regional and also on global scale. Therefore, the observation and analysis of the process of firm migrations are an important part of studies of the location behaviour of enterprises. Another choice of the place for a firm's operation is in a sense a more "aware" choice, one based on previous experience and taking into account the new conditions that influenced the change of location.

The term "migration" is frequently replaced by such expressions as: moving, change of location, delocation or relocation of enterprises. While the first two terms (moving and change of location) have the same meaning as migration and raise no doubts, the other two have a slightly different meaning, depending on the context. If according to word formation principles, the prefix "de" means reduction, deprivation of something or separation, and the prefix "re" means repetition or recurrence, then delocation means the process of emigration of enterprises from a given place, and relocation, on the other hand, means return, coming back to a given place (Dictionary.... 1996). Therefore while analyzing changes which take place in a region, one can distinguish between these two notions when conducting detailed studies. In this article, however, as in most other articles, all the above-mentioned terms are considered to be unambiguous and therefore, used interchangeably.

Apart from the concept of migration (moving, delocation, relocation) there also exist such concepts as offshoring and outsourcing. In my opinion, these terms are broader than migration. Migration of an enterprise means explicitly a transfer of the existing operations to another place (either within the country or abroad). Therefore, it involves liquidation of the existing jobs – at the time of writing, a politically sensitive and much-discussed issue. Offshoring and outsourcing do not indicate explicitly (although the term "transfer of activity" is used interchangeably here) whether the already existing operations are transferred; or whether new workplaces are created; or whether the production of new or additional goods and services is commissioned in a country/region other than that of the mother company. In

the latter case, potential workplaces are lost. Different approaches to the meaning of the quoted terms may influence the results of studies as well as evaluation of the extent and significance of the analyzed processes.

The aim of the article is to present the research trends concerning firm relocation which most frequently appear in the related literature. The author takes into account changes in location crossing the borders of territorial units, i.e. regions, countries and the European Union. No account was taken of relocations taking place within the borders of cities and urban agglomerations; this is due to their specific nature.

Theoretical grounds for the processes of relocation, as well as for the location of enterprises are provided by three main theories: the neoclassical theory of location, behavioural theory and institutional theory (Brouwer 2004, p. 338). The main factors which explain spatial behaviours of enterprises are respectively: market and location conditions of a country/region; accessibility of information and the firm's capability to relocate, connected with age, size and organizational structure – the so-called internal factors and networks of links, takeovers, mergers, etc. – external factors. Observations of decisions concerning location and relocation show that in both cases the factors of location attractiveness are more or less the same; however, they may differ in their relative significance.

1. MOBILITY OF ENTERPRISES

Contemporary enterprises are more mobile than they used to be, which comes as a consequence of changes occurring both within the enterprises themselves and in their environment. This concerns both already existing and potential firms, i.e. those looking for location. Setting-up a new plant for the first time as an expression of enterprise mobility is assumed here in the context of increased location freedom. To adjust to changed external and internal conditions, including the policy of public authorities, an entrepreneur can choose from several strategies. These may include (New location... 1993 Van Dijk et al. 2000; Pen et al. 1999; Mariotti 2005):

- setting-up a new plant;
- expansion of the existing enterprise by increasing the range of its impact;
- establishment of branch plant, merger or acquisition of another enterprise or its part;
- shrinking an enterprise's activities;
- migration/relocation, including:

– integral migrations (entire enterprise moves to another place) or partial migrations (part of activities is moved to another place) (Brouver et al. 2004, p.336; Mariotti 2005),

– permanent or temporary migrations (an enterprise or its part is transferred to a different location for the period of restructuring),

– vertical relocation (an enterprise moves from a large city to the surrounding area or to a smaller town) or horizontal relocation (a firm moves to another city or area of the same rank);

– intraregional, interregional or international migrations;

– plant liquidation.

All these behaviours may constitute a life cycle of an enterprise during which a company's location needs and requirements undergo changes. The stage of migration may appear at any point between the setting up and the closing down of a firm.

Relocation, however, does not always appear in the life cycle of an enterprise. One of the reasons is that the costs associated with a possible change of location are perceived as too high; another reason may be small changes in the business environment, allowing a company to adjust to the new situation at its primary location. The third reason may be simple inertia, most frequently observed in industry (Todd 1983). Inertia may result from the balance of positive and negative sides of relocation or from conservative behavioural traits of decision makers – no initiative, avoidance of risk, lack of knowledge about alternative locations or reluctance to break off long-lasting business, social, cultural or personal ties. The negative effects of inertia can be reduced or even eliminated in three ways:

- through specialization of enterprises which remain in the former locations and thus adjust to the changing environment; each site is assigned a particular product line to realize economies of scale unattainable with multi-product output from each site;

- through concentration of activities in one or several “old” locations, once again taking advantage of economies of scale;

- through the application of innovative solutions to technological processes and company organization.

Nevertheless, as has already been mentioned, contemporary enterprises reveal a high degree of mobility. Mobility, understood both as the location of a new plant or its subsidiary, and as migration of the already existing enterprise, can be considered in the following aspects:

1. Actual relocations – i.e. the total observed relocations and new locations. These relocations may be described using the coefficient of real relocations, which is the relation between the number of observed changes to the number of enterprises in the region out of which, in which or to which relocation takes place;

2. Potential relocations, also known as propensity to move or proneness to relocate. In this case, the question is whether the features of a typical enterprise of a certain sector make it relatively easy to move in the short or medium term. Attention is paid, inter alia, to a given enterprise's access to natural resources, its capital outlays, its ties to suppliers, the market conditions under which it operates, etc.

It is very difficult to measure actual relocations due to problems related to direct observation of the phenomenon, particularly in large areas with a considerable number of enterprises. Therefore, substitute measures of relocations between regions are suggested (New location... 1993 Van Dijk et al. 2000):

- change in the volume of capital in a region – it is assumed that the location of a new enterprise or relocation of an already existing one is usually accompanied by substantial capital expenditures;
- change in the level of employment within a region.

Such an approach, however, is an oversimplification. None of the suggested indicators makes it possible to distinguish between mobile and non-mobile activities. As is the case with changes in the volume of capital, significant growth or decline in unemployment may reflect processes unrelated to the change of location, i.e. not resulting in changes of the spatial systems. Moreover, slight changes in employment may be a (net) effect of significant relocations, i.e. inflow and outflow of enterprises from a certain region, so they can be of key importance for the economy of a given area (Neumark et al. 2005). They will cause strong effects on the local scale. On the other hand, relocations within a region, significant for a given place but not exerting any influence on the size of employment in the region as a whole, will not be registered.

2. REASONS FOR RELOCATION OF ENTERPRISES: FACTORS INVOLVED IN SELECTING A NEW LOCATION

Decisions as regards enterprises' relocation and location of new firms stem from various decision-making processes related to the life cycle of an enterprise. Over the course of time, conditions which influenced decisions about the primary location of a given enterprise change, as do firms'

concerning requirements their development. In such a situation alternative locations are quite frequently more attractive than existing ones.

In general terms, it is possible to say that the main reason enterprises change their location is their desire to increase revenues or decrease costs. Answering the question of what conditions make it impossible for them to achieve this at a present location, at the same time we examine various factors involved in selecting a new location. Most frequently it is assumed a priori that these factors clearly reflect the motives which influenced a decision to relocate an enterprise. So, it is difficult to point out factors which always act only as the factors pushing a firm out of a given place – motives for relocation, pull factors only – factors of selecting a new location or factors which keep the enterprise in place. These factors frequently perform these functions simultaneously; or their tasks differ, depending on the type of a firm.

For a long time the main motive for enterprise migration was a desire to expand and not, which frequently happened before, only a willingness to reduce costs, or a general, imprecisely defined lack of satisfaction with the performance in the current location (Van de Vliet 1997; McMorrow 1999; Cohn 2000; Park 2000; Van Dijk et al. 2000; Brouwer et al. 2004, p. 336; Holl 2004). The factor of expansion – understood as the growth of scale or the range of enterprise's activities – is exemplified, first of all, by small firms in the early phase of growth. These firms are not "stuck" in a given place by costly investments and well-established networks of relationships.

Apart from the willingness to expand, the most significant factors of enterprises' relocation are:

1. Insufficiently large space at the current location (Engle 2005; Hutchinson et al. 2005; Schaidle 2000; Brouwer et al. 2004, p. 336). The lack of space may be absolute, when actually there is no free space for new activities, or relative, when there is no space of certain type, e.g. space with technical infrastructure (sewers, gas pipes etc.);
2. Insufficient spatial accessibility of the current location due to poor development of transport infrastructure which does not satisfy the enterprise's growing needs and results in high spatial congestion (J. Park 2000; Rehtin 2005; Van Dijk 2000; Holl 2004). Firms are looking for sites where they can travel easily in all directions, avoiding the traffic. The need for increased spatial accessibility of the market and supplies and reduction of transportation costs may cause a concentration of enterprises, resulting in economies of scale and agglomeration. Further reduction of transportation

costs and increase in spatial accessibility may once again result in a dispersion of economic activities;

3. Accessibility of market – a factor influencing above all the relocation of enterprises operating in competitive conditions (the firms which remain in protected markets are significantly less mobile). Capital intensive firms, those rendering high quality services, and those for which supplies at a given time are essential or for which shortened delivery time is crucial (Manning et al. 1999), move towards the markets. Market-oriented enterprises are also those for which labour costs are less important due to advanced technologies or outsourcing. More important, on the other hand, is the possibility of direct recognition and current observation of the market, facilitating rapid changes of production and adjustment to changing demand (Ruffine 2005). An advantage of a firm's location in the market it is operating in is the fact that it is perceived as a local firm, which frequently provides access to market instruments "reserved" for its "own" enterprises. Local firms are also often perceived by the customers in a different way (Manning et al. 1999);

4. Changes in legal, financial and organizational conditions, e.g. changes in requirements of environmental protection standards which apart from their economic and environmental dimension, may also be considered from the viewpoint of ethics. High ethical standards on the one hand and the so-called "ethical dumping" of the developing countries on the other hand may be the reason for delocation of enterprises (Grolleau et al. 2004). In connection with this factor, three generations of location changes are mentioned. The first generation manifested itself in the pressure exerted on the governments of countries or regions in order to raise the ethical standards of firms' activities. This resulted in migration to places where environmental requirements were lower. The second generation was directly oriented against firms, resulting in their relocation. Most often they returned to their home country where they implemented adequate instruments of environmental protection. The third and latest approach is cooperation with firms. The effects of these activities as regards changes in enterprise location, however, are still unclear;

5. Stability and certainty of operations. When considering the risk of relocation, entrepreneurs take into account these two specific factors, which are under the influence of not only political decision-makers but also of social partners (Opinia... 2005);

6. Business environment – a factor which is important and at the same time difficult both to interpret and to take into account in a decision-making process. Business institutions most frequently include: financial institutions;

administrative authorities at various levels; organizations for regional and local development; centres of innovation and entrepreneurship; consulting, marketing, insurance, scientific and R&D institutions (Słodowa-Helpa 1998). However, an understanding of this notion by enterprise relocation decision makers can include still more definitions. Business environment is also understood as a “general climate for business, attractiveness of an area to employees who are relocated along with an enterprise, a possibility to establish cooperation by an enterprise, presence of suppliers” (Van de Vliet 1997);

7. “Desire to exchange environment for a more friendly one (...) facilitating and making one’s stay in a given area more attractive also outside work” (Globalization... 2003). This factor, also defined as quality (conditions, frameworks) of life has become much more visible in recent years. This is caused by the increasing income of the population, expanded leisure time and better education of employees, which changes opinions and values regarded as crucial;

8. Labour market – one of its elements, becoming more and more important in the process of enterprise migration, is access to skilled labour force (Globalization... 2003; Van de Vliet 1997; New location... 1993; Van Dijk et al. 2000; Karakaya 1998). The concept of quality – skills of workforce – is one that consists of many elements. The different weights ascribed to them may be a significant guideline for both the labour market and educational policy. According to studies conducted in Great Britain, the ability to work in a team was the most important skill for entrepreneurs (Table 1).

Table 1
Relative significance of workforce skills

Skills determining quality/qualifications of workforce	% of responses recognizing a given skill as most important*
1. teamwork	47
2. literacy and numeracy	41
3. job-specific skills	37
4. basic, non-specific skills	36
5. ability to work well with others	36
6. communication skills	31
7. customer-care skills	28
8. computer literacy/IT ability	22
9. management skills	17
10. foreign-language skills	2

* Respondents pointed out three elements considered as most important

Source: A. Eliot, London calling, “Management Today”, London, Oct. 1996

The above-presented evaluation, considered in the light of the process of enterprise relocation, may indicate a change in tendency observed recently in the labour market where creation of new jobs was connected mainly with a demand for workers with low or very high vocational qualifications. At present, three skills – teamwork, interpersonal skills and ability to communicate with customers – are becoming more and more significant as the factors indispensable for the proper and effective functioning of an enterprise;

9. Modern technologies which allow an enterprise to become independent of a large labour market, raw materials supply or costly investments with a long period of amortization.

The other factors which influence enterprise relocation are as follows (Van Dijk et al. 2000):

- Organizational structure (relocation of activities between plants of one company, spatial concentration or dispersion of a firm's activity) (Manning et al. 1999). Corporations with a vertical, global structure of production, making full use of their production capacities and "just-in-time" deliveries (Edwards 2003, p. 28) are less relocation-prone.
- Change of ownership. Very frequently mergers and acquisitions are accompanied by relocation (Brouwer et al. 2004, p.339; Houlder 2005).
- Management (knowledge about new location sites and perception of alternative locations).
- Financial reserves (access to funds in order to cover enterprise relocation costs).
- Size and structure of firms' investments.

3. INFLUENCE OF PUBLIC AUTHORITIES ON RELOCATION OF ENTERPRISES

Specific factors causing enterprise migrations, classified as external factors, include the activities of national, regional and local authorities. The realization of economic and spatial policy objectives carried out by central authorities and those of lower levels depend, among other factors, on certain locations which enterprises are either forced to choose or are encouraged to relocate to. In the 1970s, the aim of public authority activities and the subject of scientific research was the relocation of enterprises from the centre of the country to peripheral areas (Mariotti 2005). At present, the aims whose accomplishment is most clearly linked

with migrations of enterprises include (Pen et al. 1999): 1. the revival of cities, including city centres, 2. the restructuring of old industrial regions, 3. the activation of less developed regions, e.g. peripheral ones threatened with particularly high unemployment or depopulation, 4. environmental protection.

Instruments influencing the location changes of enterprises, being the tools of spatial policy, can be divided into “push” and “pull” instruments. Although by definition these instruments seem contradictory they frequently appear at the same time because of the diverse character of the objectives carried out by public authorities at different levels. These objectives belong to a superior objective, i.e. creation of inhabitants’ welfare and satisfaction of their needs. For example, relocation of a firm may be a prerequisite for the desirable restructuring of a given area, for avoiding spatial congestion, etc. (Van Dijk et al. 2000). On the other hand, migration of an enterprise, particularly of a large enterprise, may lead to a considerable loss of jobs, severance of cooperation links and, when administrative borders are crossed, to a decrease in budget revenues for a country, region, city or local community. Temporary difficulties, lasting frequently for a long time, can cause unfavourable economic and social repercussions. Therefore, simultaneous activities are conducted in order to attract new firms of a different profile, size, external and internal links to compensate for the losses resulting from the relocation of the original enterprises.

Studies on the link between enterprise migration and activities of authorities of different levels distinguish seven fields of such activities which may have the strongest impact on the size and directions of firm relocation. They are: physical planning; environmental management; housing policy; spatial structure of the economy; transport and infrastructure; and other activities resulting from the specific character of a large city (Pen et al. 1999). The analysis of over 500 enterprises which decided to change their location showed that four fields influenced their decision most strongly, namely: physical planning; housing policy; environmental management; and spatial structure of the economy (Table 2). Moreover, the results indicate that the impact of factors at local authority level is much stronger than those at regional or national levels. However, it should be remembered that local and regional factors reflect to a large extent national factors.

Table 2

Areas and levels of impact on enterprise migrations

Area of impact	Level of impact			Total	
	National	Regional	Local	Amount	%
Physical planning	0	9	65	74	15
Environmental management	0	14	74	88	18
Housing policy	2	7	95	104	21
Spatial economic structure	1	26	174	201	40
Transport and infrastructure	3	2	18	23	4
Green space and recreation	0	2	8	10	2
Large cities and the urban economy	0	0	0	0	0
Total	6	60	434	500	100
%	1	12	87	-	100

Source: C.-J. Pen, P.H. Pellenbarg, March 1999

Relocation of firms as a result of public authority activities may also be considered from the viewpoint of financial regulations – e.g. payments for firms forced to relocate. Refinancing of relocation costs and setting up a company in a new location are precisely regulated, e.g. in the United States by the “Uniform Relocation Assistance and Real Property Acquisition Policy Act “ at national and state levels (Chappell 2005, National... 2002). This act defines the types and amount of costs to be refinanced as well as the extent of assistance for the relocated enterprises provided by certain institutions. This is particularly significant for small firms which would not be able to cope with relocation without such assistance. Polish legislation regulates this problem, although to a smaller extent, by the Act on Real Estate (Act... 2000).

When considering public policy as a factor of enterprise mobility, above all as the factor which attracts firms looking for a new location, the following three types are distinguished:

1. Open policy (direct) – conducted by authorities at all levels searching for possibilities to stimulate the growth of certain places and areas through incentives in the form of subsidies, tax reliefs, credit guarantees...;
2. Hidden policy, exerting indirect impact on spatial behaviours of enterprises through creating opportunities resulting e.g. from implementation of national transport, agriculture and customs policies...;
3. Derivative policy – also defined as “individual” policy of the regional and local governments, resulting from their own individual approaches to economic and spatial processes in the region. This policy cannot be contradictory to the above-mentioned two activities (Pen et al. 1999).

4. RELOCATION VS SIZE AND AGE OF ENTERPRISES

The stage in a life cycle of an enterprise, its size and the extent of its knowledge about alternative locations all exert a strong influence on the weighting of the factors taken into account when a business is considering relocation (Brouwer et al. 2004, p. 339). During its growth, an enterprise tends to obtain more and more information about alternative locations. This can happen through increasingly numerous contacts and a wider range of activities; alternatively, it can pay others to obtain this information (Holl 2004; Alli et al. 1991 p. 596). Older and above all larger firms are frequently less dependent on the local market and thus can be more prone to migration. On the other hand, it has been pointed out that networks of co-operational links, both on the demand and supply sides, that have been developed thanks to hard work and significant expenditure are important for said firms. Breaking those contacts, including the informal ones, may be disadvantageous for an enterprise.

Studies conducted (amongst other places) in Portugal have verified part of the above-mentioned assumptions and made it possible to unequivocally determine the dependence between relocation and the firm's size and age (Table 3 and Table 4).

Table 3
Enterprise relocation by number of employees

Number of employees	Number of relocated plants	Share of relocated plants
1 employee	212	6.07
2 – 4 employees	698	19.99
5 – 9 employees	761	21.79
10 – 49 employees	1338	38.32
Over 50 employees	483	13.83
TOTAL	3492	100.00

Source: A.Holl, 2004, Vol. 83

Table 4
Enterprise relocation by age cohort of firms in the years 1997-1999

Age	Relocation propensity (%)	Number of observations
Under 30 years	9	2603
30-80 years	8	1787
Over 80 years	7	1178

Source: Elaboration on 1999 Cranet Survey. After: A.E.Brouwer., I. Mariotti., J.N. van Ommeren, The firm relocation decision: An empirical investigation. The Annals of Regional Science vol. 38, 2004.

The studies confirm that the mobility of firms diminishes in relation to their size and age (Huisman et al. 2005).

A new location factor, connected with the age and size of an enterprise, is the degree of diversification of the economy. It was discovered that for larger firms with a defined production process, specialized areas are more attractive, i.e. where enterprises of a similar production profile operate. New firms, most frequently small ones, are more willing to find locations where the economy is more diversified and which favour the diffusion of knowledge and information; this is important in the initial stages of an enterprise's growth (Holl 2004).

Large firms (either in their entirety or only their headquarters) move to big cities more frequently than small ones. Such places are very attractive as regards location because of their modern, well-developed infrastructures (Alli et al. 1991, p.597). Higher costs of rent or purchase of land and buildings are of lesser importance.

5. COSTS OF RELOCATION

Enterprise migration is defined as moving an enterprise from one place to another (Hillstrom et al. 2000) or as a process of adjustment to the changing conditions of the environment, during which one location is replaced by another one in order to better satisfy the needs of an enterprise willing or forced to migrate (Pen et al. 1999). While accepting the definition's emphasis on improving the conditions of a firm's functioning, one should not forget costs incurred in the course of this process. Generally it is believed that relocation is profitable if the final benefits obtained at the new location exceed the marginal costs of moving. More detailed considerations indicate that the advantages obtained as a result of migration should over the shorter or longer term at least balance the costs resulting, *inter alia*, from: production losses during preparation for and the process of migration expenditures connected with purchase or rent of the new premises; moving or leaving part of the machinery and equipment; entering a new market; recruiting new employees and/or migration of the former ones.

Taking these into account, economic consultants and advisors present a long, very detailed list of activities which should be undertaken above all by small and medium-sized enterprises before making a decision to relocate. These activities concern the assessment of the impact of relocation on firm's productivity and financial flows; expectations and estimation of all

migration-related costs; and checking if the firm can bear these costs (Hillstrom et al. 2002).

Firms specializing in providing assistance for the relocating enterprises present a no less detailed list of activities which should be performed in order to avoid or minimize the costs of relocation and to start operating in the new location as soon as possible. These activities include negotiating the conditions of terminating the leasing contract; reservation of new telephone and fax numbers or transferring the previous numbers; preparation of new company headed notepaper, visiting cards, leaflets etc.; notifying the post office of the change of address; terminating the agreements for the supply of electricity, water and gas as well as preparing the new ones; selection of documentation to be transferred or destroyed; and employing workers to load and unload machinery and equipment (Dratch 1999).

Relocation costs are included in the equation of locational changes. If profit maximization is the aim of a firm, it may also be assumed that a firm's migration decision is one among many other factors that influence profitability. For the profit maximising firm i in region j the following profit function results (New location... 1993; Van Dijk et al. 2000):

$$E_{ij} = E(X_i, Z_j, \varepsilon_{ij})$$

where:

E – advantages achieved by a firm,

i – firm belonging to a specific sector of the economy,

j – region, X_i – denotes observed firm-specific or market-specific factors,

Z_j – are observed specific factors of location in region j ,

ε_{ij} – are unobserved firm-location specific effects, which are assumed to be randomly distributed across industries.

A firm which belongs to economic sector k , reacts to the inequality:

$$E_{ij}(X_i, Z_j, \varepsilon_{ij}) < E_k.$$

Enterprises make decisions to migrate in order to achieve profits higher than E_k or assume that with another location values X_i , Z_j and ε_{ij} will be sufficient to achieve at least value E_k . When analyzing the relocation process, the costs of moving an enterprise to another location are presented

as present value calculated for each point in time t and expressed in the following way:

$$PV_i(t) = \int_t^{\infty} (E_{ij'} - E_{ij}) \cdot r^{-t} dt - C_{ij'}$$

where:

j' – denotes a new, competing location,

r – shareholder's discount rate

$C_{ij'}$ – updated value of relocation costs.

6. FIRMS RELOCATION IN THE EUROPEAN UNION

As results from the studies of the UN Conference for Trade and Development state: “four out of the ten largest European firms have already moved part of their operations abroad. A further 39% will do so soon” (Wielgo 2004). “During the last three years every fifth German firm shifted some part of their production and workplaces abroad and within the next three years such a step is planned by every fourth entrepreneur. 80% of the German population are afraid that due to EU enlargement this trend will intensify” (Rubinowicz-Grundler 2004a, p. 34). “Enlargement of the EU will intensify the process transferring part of industrial activities from the old countries to the new ones due to accessibility of educated workforce” (Sołtyk 2004, p. 34).

The phenomenon of enterprise relocation in Europe has grown so much that it has become a key topic of discussion on the functioning and the future of the European Union. Already Sapiro's 2003 Report concerning EU instruments of economic policy contained a statement about the high probability of firms relocation from old to new member states (Władyniak 2003, p. 33). In July 2005, the European Socio-Economic Committee issued a statement on the extent and effects of company relocation (Opinia... 2005). According to this statement, the growth of competitiveness of enterprises through their relocation is a process which favours the accomplishment of one of the main EU's objectives formulated, among other places, in the Lisbon Strategy: maximum competitiveness of the EU on a global scale. However, such a situation occurs mainly in the case of so-called internal relocation, i.e. the complete or partial transfer of an enterprise's activities to another member state.

In the case of internal migration, the main recipients of relocating firms are the new member states from the latest wave of enlargement, not only because of the lower costs of doing business there but also due to their geographical location and high cultural similarity to the “old” member states (Evans 2005). The cost of the labour force is never the only factor influencing a decision to relocate. It is, or at least should be, taken into account along with other factors, productivity in particular.

But alongside the positive effects for the Community as a whole, the process of migration causes negative effects for member states and regions when firms are relocated to non-member states. “The phenomenon of relocation of enterprises not only leads directly to jobs being lost; it may also involve such problems as increased costs of social benefits incurred by the government, social exclusion, and slower economic growth caused by a general decline in demand” (Opinia... 2005).

Today, the main direction of external delocation is South-Eastern Asia (Fig.1). The main factors which attract firms to the countries of that region are: cheaper supplies, access to new markets, modern technologies and lower labour costs.

Business relocation concerns firms of different sizes, belonging to different sectors of the economy. More and more frequently, small and medium-sized firms change their location, “particularly those with high technological value added; they set up subsidiaries in other countries or outsource part of their tasks abroad” (Opinia... 2005).

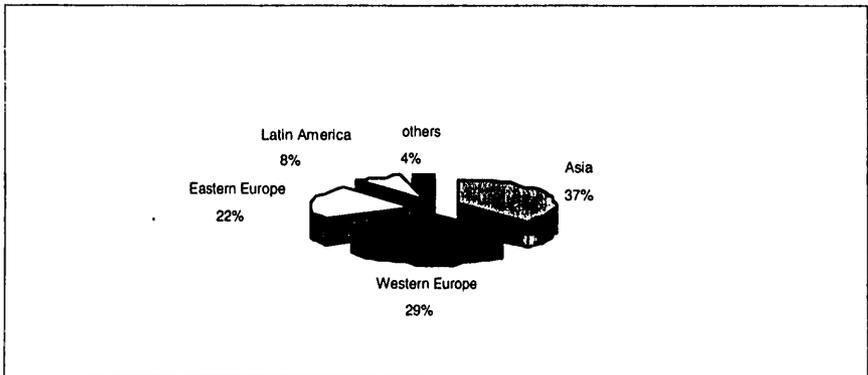


Fig. 1. Main directions of business migration

Source: M. Wielgo, 2004

According to the European Centre for Monitoring Changes, since the year 2000 the most frequently relocated firms belong to the following sectors: metallurgical, telecommunications, automobile, electrical, textile, food and chemical. However, changes in location are not limited only to sectors of high labour intensity. Those changes appear more and more often in high-tech sectors where R&D centres and services change their locations. This tendency causes much concern because it mainly involves external relocations. The main recipients of such investments are China and India.

Business relocation, particularly that of an external character, may cause the following negative phenomena in the European Union:

- loss of competitiveness of firms operating within the EU (loss of market position in world trade);
- loss of innovative capacity of firms resulting from smaller investment in R&D;
- loss of jobs and deterioration of job opportunities on the labour market;
- slower economic growth.

Another aspect of firms migration considered by the Commission is changes in the structure of the economy. As a result of business relocation and other factors occurring in the business environment, the industrial sector of the European Union is undergoing a process of restructuring. In this situation, one of the main aims of EU industrial policy in the member states is to support firms which will largely invest in development and innovations instead of competing only on costs or taxes. At the same time it is possible, or sometimes even recommended, to relocate enterprises inside the EU in order to make best use of all the factors of production. This concerns mainly the transferring of West European firms (EU-15) to the new member states. On the other hand, in order to keep enterprises in their primary locations, strengthening of regional incentives is postulated.

Discussions taking place in many European countries, highlight high taxes – along with high labour costs – as one of the main factors leading to business relocation (Cywiński 2004; Grybauskaite 2005). The fact that most countries joining the EU had low tax rates caused another discussion on harmonizing the national taxation systems in the Community in order to avoid “fiscal dumping”. However, countries with low taxes, e.g. Ireland, believe that they are right to encourage firms to locate in their area because of this. Differences in taxation are particularly important for those countries which only slightly differ in other location factors, such as infrastructure, political stability, labour market or business environment.

7. FURTHER DIRECTIONS FOR RESEARCH

One of the rarely mentioned aspects of delocation is its influence on the value of enterprises on the stock exchange (Manning et al. 1999, Alli et al. 1991). Results of studies conducted in the USA indicate that the reaction of the market to news about business relocation is not uniform, depending to a large extent on the content of information released (Manning et al. 1999). A strong positive reaction, causing growth in the value of shares of the relocating firm, occurs when people are informed that as a result of relocation the operating costs of the firm will decrease (Bhabra et al. 2002, p. 346). A weaker but also positive reaction takes place when people are informed that as a result of the change of location an enterprise expects higher incomes. When the information about relocation does not mention either a decrease of costs or an increase of incomes, the reaction of the market is most frequently negative, resulting in the decline in the value of the firm. Such a decline is also observed when the anticipated decrease of costs is regarded as too small to balance the costs of moving or to compensate for the expected decrease in sales revenues. A negative reaction is also caused by information about uneconomic (from the viewpoint of the market) factors of relocation, such as an improvement in the business environment or by a generally weak justification for the decision to relocate (Manning et al. 1999).

Another aspect of the migration of enterprises is changes of employment in the region or country connected with the creation and liquidation of workplaces (Neumark et al. 2005, Edwards 2003). One of the most important tasks for labour market research is to establish a database to help monitor how enterprises go through subsequent phases of their life, including the phase of migration. Studies conducted in California using a database created specially for this reason yielded unexpected results. They proved that relocations of enterprises, i.e. migrations to and from the aforementioned state, had (contrary to expectations) a very small, in fact negligible impact on jobs. In the years 1992-2002, a mere 0.9% of all jobs in California were created as a result of the inflow of firms, whereas only 1.6% of jobs were lost due to emigration of enterprises to other states. The main source of creation and liquidation of jobs was the setting up and liquidation of enterprises (over 60% of work places) (Neumark et al. 2005). Studies conducted by the European Monitoring Centre on Change show that only 7.3% of redundancies carried out by European enterprises resulted from business relocations, out of which 1/3 were the result of relocation abroad

and 2/3 due to outsourcing in another country (Walewska 2004). According to the Government Institute of Economy INSEE, fewer than 5000 jobs were lost in the 5 years (2000-2005) in France as a result of business relocations; these were above all to the new EU member states in the East. Moreover, at the same time, as a result of cooperation with Poland, only 150 thousand new jobs were created: French enterprises that relocate to Poland very frequently use subcontractors and materials from France (Bielecki 2004; Bielecki 2005; Bielecki et al. 2005).

According to studies in Germany conducted periodically on approximately 1,500 firms, the tendency to relocate enterprises abroad has become weaker (Rubinowicz-Grundler 2004b, p.35). In the years 1999-2001, 21% of the surveyed enterprises transferred a part of their production abroad. At the same time, however, 7% of those firms returned to Germany. A favourable (for Germany) effect of relocating enterprises to other countries was the fact that the German employees agreed to work longer without extra remuneration, which influenced the competitiveness of German products (Walewska 2005). Since 2002, Great Britain has lost less than 150,000 jobs as a result of delocation (Niech... 2005).

The authors underline that in such a situation regional and local authorities should concentrate on creating the conditions for the location of new enterprises and on assistance for already existing firms so that they can function better, and expand.

Another area of studies on the theme of relocation concerns the process of decision-making (Van Dijk et al. 2000; Pallenborg et al. 2002). According to one of the models formulated by P. M. Townroe one can differentiate 5 phases of this process: 1/ stimulation, 2/ definition of a problem, 3/ research, 4/ formulation and comparison of alternative locations, 5/ selection of the new place and actions. The last phase was divided into 8 subsequent steps. Therefore, it is a complicated model, difficult to apply in empirical studies. In the 1990s, E. Louw suggested a simplified model with the 3 following phases: orientation (recognition), selection and negotiation. This roughly corresponds to phases 3, 4 and 5 of Townroe. In the first and the second phase, all spatial factors of location are significant – geographical location, spatial accessibility and accessibility of space, quality of the environment, etc. In the third phase, financial factors become significant as well as the factors related to signing contracts and agreements. In this phase, real estate agents, developers, consultants, construction firms and removal assistance firms all participate as well as authorities at the regional and local levels. All

these institutions exert an influence on making a decision to relocate, which makes the analysis of this process even more difficult.

Migration of employees is another significant problem connected with business relocation. As a result of globalization, the increasingly intensive international migrations of employees has become more and more significant. Globalization and business relocations are often regarded by employees as a threat (Evans 2005; Ten Years... 2005). New problems arise because it is necessary for employees and their families to adjust to living in different cultures. In the years 1999-2004, the most frequent destinations for employee migration were Great Britain, the USA and China, which jumped from sixth to third place. Regions containing cultures different from the European one, such as China, India, Mexico and Brazil, have noticeably strengthened their positions. In connection with this, service firms have been established to help employees and their families to acclimatize to the new place, to arrange all the required formalities and to adjust to the new conditions.

The operation of enterprises specializing in corporate removals is yet another dimension of business and employee relocations. Such firms may be specialized, e.g. such as the above-mentioned ones, taking care of employees migrating along with their firms; and complex ones, i.e. providing information on many different potential locations, planning relocation separately for each firm, assisting in removal, installing the firm in a new place (Strutt et al. 2004).

The relocation of headquarters of growing multinational corporations has been appearing more and more frequently as a distinct problem within the field. Until now usually corporate headquarters have not changed their locations even if the major part of production was transferred somewhere else. They usually remained in their primary locations, and discussion has concerned the reasons for such behaviour (Baaij et al. 2005). One of the reasons may be the fact that headquarters perform different functions which are dependent on different location factors.

FINAL REMARKS

The breaking down of barriers to the flow of people, commodities, services, capital and information has become, among other things, the reason why (apart from internal relocations of enterprises directed from the centre to the peripheries), the phenomenon of international migration, which partly replaces them, has become more intense. The increased intensity of this

process is responsible for the growing interest in business relocations, both in the EU and in other countries. Analyses and empirical studies on the migrations of firms deal with different aspects of this process. This diversity underlines the fact that these studies are significant, both from the viewpoint of enterprises and space – inhabitants, and national, regional and local authorities – where the process of relocation takes place.

One of the important elements of the studies is the evaluation of the observed processes, which is not a simple matter. Migrations can exert both a positive and a negative influence on e.g. the economy of the regions between which companies migrate. Positive effects may appear on the labour markets of the areas receiving the migrating enterprises; negative effects may appear in the regions vacated by these enterprises. The possibility that an enterprise might migrate may be perceived by its employees as a threat, but at the same time as an opportunity for expansion, reorganization or cost reduction by its management. The negative effects of business migrations – loss of jobs – frequently have social and political repercussions. This can be observed in the European Union, which has already taken some steps to restrict business migrations and to assist people and regions affected by job losses (Małuszyńska 2006). Migrations of businesses have become a source of income for many service-providing firms which help enterprises and their employees to relocate. Migrations may also result in the growth or decline in the value of the firm on the stock exchange, in the restructuring of the region's economy, or in increased competition for the enterprises in the regions, which receive the relocated firms.

Today, with the world market becoming more and more open, the process of business migrations cannot be stopped. According to experts analysing and anticipating directions of development of the manufacturing industry in the EU up to 2020 and beyond, a substantial part of production “will be subsidized or almost completely moved outside Europe, mainly due to more and more restrictive environmental requirements” (Dreher et al. 2005). Therefore, one should analyse (which is already reflected in the related literature) various aspects – the reasons for, and above all, the consequences of this process. This will facilitate undertaking certain steps/actions which will eliminate, if possible, the negative effects of business migrations and which will strengthen the positive effects through appropriate activities undertaken at the level of groups and organizations, states, regions and cities.

It should be underlined that there is no unambiguous, exhaustively justified evaluation of the process of business migration. The reason for this is above all the lack of data. A wide review of the related literature, however

such as the one undertaken here, justifies the statement that the net effect of international migrations of enterprises is positive both for the host country and for the home countries. Recommended directions of further studies should include above all: internal factors of delocation of enterprises; influence of the migrations on the size and structure of the labour market; influence of internationalization of enterprises on the countries of Central and Eastern Europe (Mariotti 2005).

Foreign literature concerning business relocations is rich; however, it is still not well-known in Poland. In the Polish literature and scientific research these problems are still very rarely discussed.

REFERENCES *

- Alli K.L., Ramirez G.G., Yung K., *Corporate Headquarters Relocation: Evidence from the Capital Markets*. AREUEA Journal, Vol. 19, No. 4, 1991.
- Baj M., Van denBerghe D., Van den Bosch F., Volberda H., *Rotterdam or Anywhere. Relocating Corporate HQ*. Business Strategy Review, Vol. 16, issue 2, June 2005.
- Bhabra H.S., Lel U., Tirtroglu D., *Stock Market's Reaction to Business Relocations: Canadian Evidence*. Canadian Journal of Administrative Sciences, Vol. 19(4), 2002, pp. 346-358.
- Bielecki J., *USA – miejsca pracy [USA – workplaces]*. „Rzeczpospolita” 1.04.2004.
- Bielecki J. *Skuteczny sposób na bezrobocie [Effective means against unemployment]*. „Rzeczpospolita” 15.07.2005.
- Bielecki J., Stankiewicz A., *Na Unii nikt nie stracił (rozmowa z J. Kulakowskim) [No one was ruined in the EU (Discussion with J. Kulakowski)]*. „Rzeczpospolita” 26.04.2005.
- Brouwer A.E., Mariotti I., van Ommeren J.N., *The firm relocation decision: An empirical investigation*. The Annals of Regional Science, Vol. 38, 2004 pp.335-347.
- Business relocations not incentive driven?* Facilities Design & Management, February 1999.
- Chappell L., *Tennessee chips in for Nissan's move*. „Automotive News”, Vol. 80, 11/28/2005.
- Cohn J., *RewordsPlus leaving city for county workers*. „The Sun”, October 21, 2000.
- Cywiński P., *Związek Socjalistycznych Landów Niemiec [German Socialistic Lands Union]*. „Wprost”, 16 maja 2004.
- Dratch D., *Business relocation checklist*. News & Advice, Bankrate, 1999.
- Dreher C., Armbruster H., Schirrmeyer E., Jung-Erceg P., *ManVis Report 2. Preliminary Results from the 1st Round of the ManVis Delphi Survey*. Fraunhofer Institute for System and Innovation Research, Karlsruhe, April 2005.
- Dziennik Ustaw 2000 No. 46, p. 543: *Ustawa o Gospodarce Nieruchomościami z 21 sierpnia 1997 [Act of Parliament on Real Estate, August 21, 1997]*.
- Edwards R., *Plant Relocation: When is it Viable Threat*. The Journal of Industrial Relations, Vol.45, No.1, March 2003.
- Engle P., *Old warehouse, new space*. Industrial Engineer, Vol. 37, issue 12, 2005.

- Evans J., *Jobs and globalisation. Promise or threat*, "OECD Observer", No. 249, May 2005.
- Fischer M.M., Nijkamp P., *From static dynamic discrete choice modeling*. Regional Science and Urban Economics, Vol. 17, No. 1, February 1987.
- Globalization from the Top Down*. Futurist, Vol. 37, Nov/Dec. 2003.
- Grolleau G., Lakhali T., Mzoughi N., *Does Ethical Activism Lead to Firm Relocation?* "KYKLOS", Vol. 57, 2004.
- Grybauskaite D., *Negocjacyjny bluff [Bluff in the negotiations]*. "Rzeczpospolita" 28 lutego 2005.
- Hillstrom K., Hillstrom L.C. (eds), *Relocation. Encyclopedia of Small Business*, Vol.2. Detroit, Gale 2002 (Gale Virtual Reference Library).
- Holl A., *Start-ups and relocations: Manufacturing plant location in Portugal*, in: Papers in Regional Science, Vol. 83, 2004.
- Houlihan V., *Podatek od dochodów firm. Stara Europa czuje powiew zmian [Income tax. Old Europe feels a breath of change]*. "Rzeczpospolita", 15 grudnia 2005.
- Huisman C., van Wissen L., *A model of internal firm relocation in the Netherlands*. Paper prepared for ERSA conference, Amsterdam, 23-27 August 2005.
- Hutchinson H., *Reconfiguring everything*. Mechanical Engineering, Vol. 127, 2005.
- Karakaya F., Canel C., *Underlying dimensions of business location decisions*, in: Industrial Management & Data Systems, 98/7.
- Maluszyńska E., *Delokalizacja przedsiębiorstw [Business relocation]*. Wspólnoty Europejskie, nr 3(172), marzec 2006, s. 3-12.
- Manning C., Rodriguez M., Ghosh C., *Devising a corporate facility locational strategy to maximize shareholder wealth*. The Journal of Real Estate Research, Vol.17, Sacramento, 1999.
- Mariotti I., *Firm relocation and regional policy. A focus on Italy, the Netherlands and the United Kingdom*. Bibliothek Dissertations, University of Groningen, 2005. <http://dissertations.ub.rug.nl/faculties/rw/2005/i.mariotti/>
- Mc Morrow E., *Moving? We thought so*. Facilities Design & Management, New York, February 1999.
- Neumark D., Zhang J., Wall B., *Employment Dynamics and Business Relocation: New Evidence from the National Establishment Time Series*. Institute for the Study of Labor, Discussion Paper No. 1774, September 2005.
- New location factors for mobile investment in Europe*. Regional Development Studies No 6, Commission of the European Communities, Brussels, 1993.
- Niech żyje delokalizacja [Long live delocalization]*, "Rzeczpospolita" 9.05.2005.
- Opinia Europejskiego Komitetu Ekonomiczno-Społecznego w sprawie zakresu i skutków delokalizacji przedsiębiorstw [Opinion of the European Economic and Social Committee on the scope and effects of company relocations]*, Europejski Komitet Ekonomiczno-Społeczny, Bruksela 2005. CCM/014.
- Pallenbarg P.H., Van Wissen L.J.G., Van Dijk J., *Firm migration*. in: *Industrial location economics*, ed. P. McCann. Edward Elgar Publishing Limited, 2002.
- Park J., *ChemStation building \$600K Bessemer facility*. Birmingham Business Journal, Hoover, October 2000.

- Pen C.J., Pellenbarg P.H., *Firm migrations, theory and practice; an analysis of empirical studies concerning the impact of government policies*. Paper at the conference at the University of Lodz. March 1999.
- Rechtin M., *Toyota assures employees they will stay in L.A.*. Automotive News Vol. 80, issue 6179, 12/5/2005.
- Rubinowicz-Gründler A.(a), *Wyprowadzka z Niemiec [Removal from Germany]*, "Gazeta Wyborcza", 13 kwietnia 2004, p.34.
- Rubinowicz-Gründler A.(b), *Trend do emigracji wcale się nie zwiększył [Trend to migration is not bigger]*, "Gazeta Wyborcza", 13 kwietnia 2004, p.35.
- Ruffine A., *Boart Leaves Johannesburg for Salt Lake City*. Engineering & Mining Journal, Vol. 206, 2005.
- Schaidle C., *Company may move workers*. Journal star Peoria, III, November 23, 2000.
- Słodowa-Helpa M., *Wpływ instytucji otoczenia biznesu na rozwój społeczno-gospodarczy województwa gorzowskiego [Influence of business environment on the socio-economic development in the Gorzowskie Voivodeship]*, in: *Uwarunkowania i kierunki rozwoju społeczno-gospodarczego województwa gorzowskiego. Koncepcje rozwoju [Conditions and directions in the socio-economic development in the Gorzowskie Voivodeship. Concepts of development]*, ed. Parysek J.J., Gruchman B., Vol. 3, AE Poznań 1998.
- Słownik wyrazów obcych [Foreign words and expressions dictionary]*. Wydawnictwo Naukowe PWN, Warszawa 1996.
- Sołtyk R., *Dobra szkoła [Good school]*, "Gazeta Wyborcza", 13 April 2004, p. 34.
- Strutt M., Lawrence T., *Low Pain, High Gain*. Manufacturing Engineer, Vol. 83, issue 4, 2004.
- Ten Years of the Global Relocation Trends: 1993-2004. GMAC Global Relocation Services 2005.
- Todd D., *Industrial Inertia versus Relocation: A Shipbuilding Illustration*. Professional Geographer, Association of American Geographers, Vol. 35(3), 1983.
- Walewska D., *Na przenoszeniu produkcji skorzystamy wszyscy (rozmowa z A. Gummich) [A migration of production is opportunity for all of us (interview with A. Gummich)]*, "Rzeczpospolita" 11.09.2005.
- Walewska D., *Nadchodzi boom inwestycyjny [Boom of investments is coming]*, "Rzeczpospolita", 6 października 2004.
- Wielgo M., *Emigracja korporacji [Emigration of Corporation]*. "Gazeta Wyborcza", 16 June 2004.
- Władyniak A., *Polityka gospodarcza UE w ocenie niezależnych ekspertów. Główne tezy Raportu Sapira [Economic Policy of the EU. Evaluation of the independent experts. Main theses of the Sapira's Report]*. Wspólnoty Europejskie, Instytut Koniunktur i Cen Handlu Zagranicznego, 10 (144) 2003, pp. 30-33.
- Van de Vliet A., *Urban pulling power. Management Today*. London, September 1997.
- Van Dijk J., Pellenbarg P.H., *Firm relocation decisions in the Netherlands: An ordered logit approach*. Papers in Regional Science, Vol. 79, 2000.

* Foreign journals - <http://atoz.ebsco.com/home.asp>

Received: January 2006, revised version: July 2006