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ACRE report 7.7

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Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

Amsterdam 2009
AMIDSt, University of Amsterdam
ACRE
ACRE is an acronym of the international research project ‘Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union’.

The project is funded under the Priority 7 ‘Citizens and Governance in a Knowledge-based Society’ within the Sixth Framework Programme of the European Union (contract no 028270).

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EXECUTIVE SUMMARY

The overall aim of this report is to understand the drivers behind the decisions of highly skilled transnational migrants to settle and work in the Munich region. To reach this aim the empirical research was to answer the following questions: What kind of skilled migrants can be found in the Munich region? How successful is Munich in attracting highly skilled transnational migrants? Why do they come to Munich? Where do they live and work? What do they like and what do they dislike about their life here?

The empirical research consisted of 26 in depth interviews with highly skilled migrants and five interviews with representatives from the area of public administration, university employees who are in charge of foreign scientists and students, as well as relocations services.

Current economic and social trends point to labour shortages in certain sectors in Germany. Several major economic and social trends in Germany influence both the demand and supply of labour in Germany and in the Munich region: the development of an increasingly knowledge-based economy and demographic changes which will lead to a shrinking labour force. These trends might create acute shortages of skilled labour. It can be assumed that the region of Munich might even be more severely affected by labour shortages than other regions in Germany. The high skill level of the population and the sectoral composition of the regional economy, which is very knowledge-based, point to the fact that the region of Munich is more dependent on highly qualified workers than other regions are.

However, due to the fact that the legal framework affecting the movement of highly skilled workers is composed of legislation at both the EU and national levels, the scope of Munich’s municipal government to influence the numbers of transnational migrants – and especially of third-country nationals – is rather limited. Furthermore, the regional migration policy of Munich focuses on migrants from lower social classes and their problems on the labour and housing market. There are no special programs or contact persons at the city council for highly skilled migrants.

With a share of 23 percent of the total population (2007), Munich has the highest proportion of foreigners of all German cities. The largest proportion of foreigners in Munich (city) is made up of citizens from former “guest-worker countries” like Turkey, Croatia, Greece and Italy, as well as from neighbouring Austria. Concerning the skill level of the foreign population, foreigners are underrepresented in skill-intensive occupations. The proportion of foreign employees with university degrees out of all employees was 10.9 percent in 2007 in the region of Munich. This relatively high number of highly skilled foreign people (in comparison with other German cities) reflects the advanced internationalisation of the Munich economy.

One important empirical result of this study is that neither simple push and pull models are able to explain migration to Munich nor is it sufficient to focus primarily on the meso level of firms and institutions because in this case the growing heterogeneity of migrants in respect to their socio-economic background and their motives for migration remains hidden.
The main motives of transnational migrants for coming to Munich are either job- or family related. The important role of networks was confirmed in this study: Many of the discussion partners had contacts to people or a partner living in Munich who helped them with finding a flat or a job. Especially for those migrants who followed their partners to Munich, contacts via social networks proved to be the most important resource to find a job in the new city.

Albeit the fact that the highly skilled workers are in general very satisfied with the high quality of life in the Munich city region, soft location factors do not play a major role for their decision to migrate to Munich. Hard factors like the Munich labour market e.g. in form of concrete job offer and personal trajectories e.g. a marriage to a German partner proved to be more important.

One important finding concerning soft and hard location factors is that hard factors such as jobs, and personal trajectories such as a partner in Munich, draw transnational migrants to Munich, while soft factors such as the high quality of life make them stay.

It became clear during this study that transnational migrants do not all belong to a form of elite migration, and that their opportunities and conditions on the Munich labour and housing market show considerable differences. Four different types of highly skilled migrants emerged from analysis of the empirical material: researchers, entrepreneurs / self-employed as well as advantaged and less advantaged highly skilled migrants. The groups differ in respect to their available social and economic capital and if they are able to maintain or improve their social and economic status through migration.

In general, the overall satisfaction with the city is very high among all groups of migrants. Important soft location factors are the area surrounding Munich and cultural opportunities. Especially the two factors of security and cleanliness are very pronounced among the transnational migrants, above all among the migrants with children. Another positive aspect of Munich for many transnational migrants is that it is a human-scale city, the public transport system is very well developed and it is possible to get around on foot or by bike.

Concerning the location of residence of the interviewed migrants, the majority lives within the city limits and the majority prefers inner city locations due to the availability of public transport and short journeys to work. The ownership rate is high among the interviewed highly skilled migrants.

Two major problem areas for transnational migrants could be detected: the unavailability of affordable housing as well as the lack of affordable international schools and the lack of full-time childcare in the Munich city region. Furthermore, the segment of furnished residences as well as serviced accommodation which is especially requested by expatriates is not well developed on the Munich housing market.
1 INTRODUCTION

1.1 Highly skilled foreigners in the Munich region: Structure of the report

“Germany is lagging behind other major industrial countries in its efforts to attract skilled workers. While other nations see highly qualified immigrants as a benefit, Germany regards them more as a threat – and is setting the hurdles as high as it can”, writes Michael Sauga in the year 2007 in the German news magazine “Der Spiegel”. Although there have been minor changes in the immigration laws since that year which have modestly lowered the barriers for the highly skilled, German policies on foreign highly skilled residents are still very restrictive. Experts warn that this policy could have detrimental effects on the German economy, as with its population shrinking and ageing, Germany might face severe skill shortages in the coming years.

While national policies have set high hurdles for skilled transnational migrants, German cities have remained rather passive in this debate: they have ignored or still ignore highly skilled migrants as an important group for their regional labour market, despite the fact that today a positive urban regional development is largely dependent on the availability of highly qualified and skilled workers. Today, regional development is highly dependent on the potentials and capacities of metropolitan regions in the field of knowledge-intensive and creative economic activities. In these sectors, skilled human capital is the most valuable factor in production, as productivity and competitiveness depend - more than ever before - on human knowledge and skills. Furthermore, innovation has become crucial for productivity and growth in a global economy which is characterised by short product cycles. The importance of knowledge, creativity and innovation implies the need for personnel with relevant qualifications as well as the ability to adjust to rapid technological change. Consequently, metropolitan regions could find themselves in the medium and long term relying on educated and highly motivated immigrants because they might play an important role in helping to maintain the region’s prosperity for many years to come.

In a similar way to municipal policies which have for a long time concentrated or still concentrate solely on labour migrants of lower social classes, highly skilled migrants have only recently become a prominent topic in migration research. While many studies have focused on transnational elites migrating between global cities (e.g. Beaverstock 1996, 2002), recent studies point to a new heterogeneity of expatriates: this heterogeneity concerns their socio-economic background as well as their motives for migration (e.g. Scott 2006b; Verwiebe, 2008). In the conception of Richard Florida (2002, 2003), highly skilled migrants are not only important to fill labour gaps but also because they contribute to the attractiveness of a city. They contribute to the ethnic-cultural and social diversity of a city, and this in turn makes the city more attractive to other highly qualified and creative people.
What kind of skilled migrants can be found in the Munich region? How successful is Munich in attracting highly skilled transnational migrants? Why do they come to Munich? Where do they live and work? What do they like and what do they dislike about their life here?

These are the questions we want to address in this report, which is structured as follows:

In the following chapter the study region will be presented in brief. The second chapter gives insights into the theoretical background of this report and focuses on theories of migration which are especially concerned with highly skilled migrants. In the third chapter major economic and social trends in Germany are briefly presented which influence both the demand and supply of labour in Germany and in the study region. The fourth and fifth chapters are concerned with background information on migration in Germany and the Munich region. Major subjects of these chapters are migration history, German policy on migration as well as facts and figures on the foreign population.

In the sixth chapter, the research design and the methodological procedure, from the development of the interview guidelines to the execution of the research, are explained. The core of the report, namely the presentation and discussion of the results of the interviews, viewed against the background of current theories and compared with the results of other studies, are contained in chapter 7. A summary and a discussion of the most important results as well as some policy recommendations are contained in chapter 8, which is also the concluding chapter of this report.

1.2 Introduction to the region

Munich lies in the south of Germany and is the capital of the Free State of Bavaria. The city is the sole centre of the administrative district of Upper Bavaria (Nuts-2 region). Upper Bavaria belongs to the most dynamic regions of Europe in economic terms. Its economy is characterised by a strongly diversified economy and a high concentration of high-tech oriented firms as well as knowledge-intensive, business-oriented services. In contrast to many other regions in Germany, it shows also a positive demographic development resulting from migration, due to the wide-ranging employment opportunities of the region.

With a current population of approximately 2.4 million inhabitants, the Munich region has developed into one of the most dynamic and economically prosperous urban agglomerations in Europe. The region of Munich that is formed by the planning region 14 of the Bavarian planning regions encompasses not only the city itself, but also the surrounding administrative districts (Landkreise) of Dachau, Ebersberg, Erding, Freising, Fürstenfeldbruck, Landsberg am Lech, München and Starnberg (see figure 1.1 and 1.2). With a surface area of 5,504 square kilometres, it is the second largest of the 18 Bavarian planning regions. It is also one of the most densely populated regions in southern Germany. The region is strongly oriented toward the state capital.

The city of Munich, with a surface area of 310 square kilometres, makes up only 6 percent of the planning region, but almost 50 percent of the regional population. 1,337,030 people (July 2007) live in this area. Approximately 60 percent of the total workforce (according to figures for those paying social insurance contributions) of the region has its place of work inside the city limits (1,026,330 workers).
The Munich region takes – compared to other German agglomerations - a leading position in economic aspects. The purchasing power as well as the GDP per capita rank among the highest in Germany: Today almost one third of the whole GDP of Bavaria is generated in the Munich region. In the year 2006 this has been 52,772 Euro per capita in comparison to Germany with 28,194 Euro. In 2007 Munich had with 5.2 percent the lowest unemployment rate of all German metropolitan regions.

There are 1.56 million employees in the region of Munich (1.08 million of them subject to social insurance). If one looks at the employees differentiated according to economic sectors, the high level of tertiarisation is reflected here: three quarter of all employees (subject to social insurance contribution) were working in services, one quarter in the industry. An over-proportionate number of employees are to be found in knowledge intensive services to business, such as consultancy and planning, which were able to create the most new jobs in the last years. Nevertheless, manufacturing continues to be of great importance, with almost a quarter of jobs in the Munich region (LH München, 2008). However, these are foremost jobs in the high-technology industries which are R&D intensive (Sternberg & Tamásy, 1999).

At the same time, Munich is one of the most important centres of research and development, of the high-tech industry as well as the media in Germany.

One part of Munich’s strength as a business location is based on the diversity of its economic structure and the mixture of global players and SMEs. This modern and balanced economic structure is often referred to as ‘Munich Mix’ (Münchner Mischung). This term not only refers to the mixture of big and small enterprises, it also refers to the sectional structure of the economy. Another part of Munich’s economic success can be attributed to the existence of numerous clusters like biotechnology and pharmaceutical industry, medical technology, environmental technology, ICT, aerospace, the media and finances. They form the innovative growth poles of the city region. The clusters are not only made up by links among enterprises...
of the respective branches but also by links to the numerous research institutions in the Munich area, by the networks of SMEs and large enterprises as well as links to commercialisation protagonists.

Being a prosperous region, the Munich region as a whole still records a positive population development. Concerning intraregional differentiation, an over-proportionate growth of the population takes place in the surrounding areas, with growth rates over 10 percent per year, in contrast to growth of less than 0.5 percent in the city. In the period between the 1960s and the early 1980s the percentage of the population living in the suburbs increased form around 37 to 44 percent. This statistics continued to climb to almost 48 percent in 1993 and in the year 2006 more people have lived in the region (51 percent) than in the city.
For a better understanding of trans-national migration in creative and knowledge intensive industries in the city region of Munich it is important to have a look on recent international migration research and its theories. Migration to Europe in the past 20 to 25 years differs in form and consequences from earlier population movements across national borders. New types of migration and new forms of trans-national migration can be observed in most countries in the EU, including Germany. Older approaches of migration research do not seem to describe current migration processes properly. Especially the migration of highly skilled workers shows specific characteristics which require new descriptions.

There is no consistent theory of migration; on the contrary, migration research is characterised by a wide range of theories. Classical approaches basically deal with economic factors to explain migration processes on the macro-level or decisions to migrate on the micro-level. But the changes of migration processes since the 1990s cannot be described appropriately by classical theories. Hence new approaches try to explain contemporary migration structures. They point out the embeddedness of migrants in social networks and try to focus on the meso-level of migration in form of exchange processes between social spaces. In this chapter classical approaches of migration research and new theories will be described which focus on labour migration in general. Afterwards there will be a description of approaches which deal with migration of highly skilled in particular. This also includes Florida’s account of the ‘creative class’. His perception of this ‘class’ as being ‘hyper-mobile’ is one of the most contested elements of his creative class thesis. Finally it will be discussed which approaches are appropriate to describe the movement of highly skilled migrants to the Munich region.

2.1 Classical theories of labour migration

Classical theories of migration interpret migration processes which are seen as unidirectional with definite countries of origin and destination areas. Migration processes are explained as a consequence of economic disparities and adverse conditions on which individuals react and decide to migrate.

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1 This section has been written by the ACRE Leipzig team (Bastian Lange, Juliane Schröder and Kornelia Ehrlich, Leibniz Institute of Regional Geography) and Amsterdam team (Marco Bontje and Heike Pethe, University of Amsterdam). The section is common to all ACRE reports within Work Package 7.
2.1.1 Push-pull-model

The emergence of international migration can be explained by correlations between countries of origin and host societies. Everett (see Lee, 1972), worked out a push-pull-model which states that there are push-factors in the regions of origin and pull-factors in the destination area, which encourage migration. There are also intervening factors like spatial distance or migration laws and personal facts which influence decisions to migrate. This approach considers not only economic factors like economic disparities but also social factors like conflicts or the attempt to escape from danger (Bürkner & Heller, 2008, p. 38; Haug, 2000, p. 8; Kneer, 1996).

2.1.2 Neoclassical theories

Neoclassical theories are based on the push-pull-model. Macro-economic approaches focus on economic factors like economic growth (see Lewis, 1954, see Todaro, 1976). It is assumed that disparities between places of production and labour markets – namely disparities of wage level as well as labour supply and demand for labour – lead to migration. Migration is seen as the attempt to reach a macro-economic equilibrium. Countries with work intensive sectors are characterised by low wages and countries with capital intensive sectors by high wages. These wage differentials cause migration to the areas where the income level is higher. Thus the labour supply lowers and wages increase in ‘poorer’ countries while labour supply increases and therefore wages lower in ‘richer’ countries. At the same time economic and human capital flows towards the ‘poorer’ regions, which are beginning to develop capital intensive sectors. Migration abates when economic disparities vanish. This disregards that there are other factors like the establishment of migrant communities in host societies which may encourage further migration (Haug, 2000, p. 2f, 11f; Bürkner & Heller, 2008, p. 38f).

Macro-economic theory has its counterpart in micro-economic approaches. Here the focus is on the individual migrant. As individuals they opt for migration by rational cost-benefit calculations. Migration is interpreted as investment in order to maximise economic utilities. Individual features, social conditions or technologies which lower the costs of migration enhance the probability of migration. The amount of the expected benefits determines the extent of migration flows. The higher the income level in the destination area in comparison to the earning in the home region, the lower the costs of migration, and/or the longer the remaining years in professional life, the higher the probability of migration. This implicates that there is a higher incentive to migrate for workers with less human capital if the expected income level is low. By contrast high skilled workers are encouraged to migrate if the expected income is high. Otherwise they tend to stay because they can take advantage of their human capital in their home country as well (Massey et al., 1993, p. 456; Haug, 2000, p. 5f, 13f).

But neoclassical theory disregards international political and economic contexts and decisions as well as social boundaries. Furthermore the implicated assumption of homogeneous professional abilities in countries of origin and destination areas as well as the assumed trend to global macro-economic equation are controversial.
2.1.3 New migration economy

The new migration economy approach also focuses on an economic factor: the income. But it also considers the social embeddedness of individuals in households. Individuals are interpreted as acting collectively. Hence the approach focuses on families and households. According to this approach households try to maximise the expected income and to minimise risks for their economic wealth. The job migration of a household member is a form of reassurance because the migrant is independent of local economic conditions of the household. Furthermore international migration and the associated money transfer from abroad can be used as capital for an increase in productivity of the household. Usually it is a matter of temporary migration. It is claimed that adjustment of wages does not stop international migration. Even if there is no strong incentive, households try to diversify their economic risk by migration of family members. Migration is seen as a risk lowering strategy (Haug, 2000, p. 7f).

2.1.4 Dual labour market theory

Neoclassical migration theory as well as new migration economy assume that migration is a result of rational decisions of individuals or families. In contrast the Dual labour market theory suggests that migration is an effect of political and socioeconomic constellations. The reasons for labour migration are not seen in a trend to a labour market equation but in the segmentation of the labour market. Advanced industrial societies develop a dual economy with a capital-intensive primary segment and a labour-intensive secondary segment. The latter is characterised by insecurity and low wages. Native workers usually do not have any motivation to accept these jobs, which also mean less prestige and low promotion prospects (Lebhart, 2002, p. 13 f). Hence advanced economies demand foreign workers for the secondary segment. This causes migration (Haug, 2000, p. 3f; Lebhart, 2002, p. 13ff).

2.1.5 World system theory

This migration approach deals with the idea of the clash between capitalistic industrial- and developing nations. It is assumed that the origin of migration lies in institutional and sectoral disparities which are evoked by the integration of nations into the worldwide capitalist system. This approach divides the world into three zones: core, semi-periphery and periphery. To explain the patterns of migration the reciprocal dependency of these zones as well as direction and constitution of flows of capital and goods are analysed. It is presumed that international labour migration follows the international flows of capital and goods in the opposite direction. This intends that first of all migration is detectable in Global Cities, which attract migrants from the periphery and not industrialised societies.

Therefore migration is seen as a logic consequence of the globalisation of the economy which causes the emergence of the capitalistic market in developing countries. This implicates that international migration primarily appears between former colonial powers and its colonies because of already existing relations in economy, transport, administration, culture and language (Lebhart, 2002, p. 16ff; Haug, 2000, p. 4f; Bürkner & Heller, 2008, p. 40f).
2.2 New theories of labour migration

The 1990s confronted the migration research with new migration forms which cannot be described as unidirectional processes with definite countries of origin and definite destination areas. The classical micro- and macro-analytic migration theories failed to apply to these forms. There was a missing link: the connection between individuals and society. New approaches in migration research pointing out the importance of social networks as the missing link were required.

2.2.1 Theory of migration systems

The theory of migration systems assumes that the intensive exchange of information, goods, services, capital, ideas and persons between specific countries causes a stable system. Migration is one of these exchange processes. Thereby several countries of emigration can be connected with one region of immigration, just like one emigration country can be characterised by migration flows to several destination areas (multi-polarity). Migration systems are variable social arrangements (formal and informal) including individuals and institutions of both countries. The participation of social ethnic networks, multinational firms, educational institutions or other corporations - as mediations between macrostructures and individuals as well as between the different countries - in shaping the migration system plays a crucial role. Therefore this approach concentrates on macro-, meso- and micro-structures. It considers the economic, political, social, demographical and historical context of migration systems and focuses on both ends of the migration flow, on disparities and interdependencies. But it does not say much about the genesis of migration systems.

In contrast to other theories the relevance of spatial proximity is denied. Instead it points out the influence of political and economic relations on migration systems. As political, economic and communication relations are adjusted by feedback and modulation mechanisms, migration systems, although stable, are not static but dynamic. The processes in and between countries change. New migration systems emerge, countries drop out or join a system, interdependencies transform and migration flows alter in shape (Haug, 2000, p. 17ff; Bürkner & Heller, 2008, p. 44ff; Lebhart, 2002, p. 29 ff; Fawcett, 1989, p. 671ff).

2.2.2 Theory of migrant networks

As seen the migration system approach points out the very relevance of ethnic networks built by migrants and their family and friends. In contrast to old micro- and macro-analytic approaches, new migration theories focus on the meso-level of migration. The social network approach also stresses the influence of social networks on migration. Migration networks shape social and spatial paths of migration provide new migrants with information and resources\(^2\) and therefore facilitate their migration. In short, they lower the costs and risks of

\(^2\) For example supporting finding a residence and a job or providing financial security.
migrants. On the other hand they smooth the process of keeping in touch with the home region and influence the integration process of the new migrants into the host societies.

Therefore it is assumed that personal relationships which connect migrants, former migrants and non-migrants in the home countries and host societies increase the probability of international migration and can lead to chain migration and sustained migration flows. That means there is no strong correlation between migration flows and wage and employment disparities because of the positive effects of migrant networks. These networks develop an own dynamic which can hardly be regulated.

The effects of social networks on migration are not clear yet. Surely, social relationships influence the decision to migrate by providing information and support or the opposite. Strong social ties in the home countries can inhibit migration. Less social ties can promote the movement. Migrant networks can produce security but also dependency, liability, little integration in the host society and therefore less freedom. This could frighten people. Thus respective contexts have to be considered in order to correctly interpret the relationships between social networks and migration (Haug, 2000, p. 20ff; Lebhart, 2002, p. 20ff; Bürkner & Heller, 2008, p. 42ff).

2.2.3 Theory of social capital

The network perspective can be specified by the term social capital. As already mentioned, personal contacts to friends, relatives and compatriots facilitate migrants to find jobs and housing and can offer financial support. The motives for providing resources might vary. While some act simply by ethical reasons (value orientated) or feel a group identity and therefore act by solidarity (bounded solidarity); others act strategic (reciprocal transfer) or in awareness of their position in the group (status orientated) (Haug, 2000, p. 22ff; Bürkner & Heller, 2008, p. 45f).

That means that besides the benefits of social capital there are also restrictions like conformity pressure, obligation to share and limitation of contact with other persons which do not belong to the social network. Making contacts outside of the community could be seen as an assault to the group identity and cause punishment. So individual getting ahead could be inhibited.

In consequence it depends on the community in which the migrant is situated and its openness if social capital is next to economic capital a beneficial element in the migration process.

2.2.4 Trans-national migration

Migration systems and processes have changed since the 1980s. They can be described as circular movements with specific social structures and mobile lifestyles. This new patterns are called trans-national migration as a special form of international migration. New forms of communities emerge, producing specific social spaces by the socio-cultural practice of trans-national migrants. These spaces are neither bounded in the home country of the migrants nor in the host society but between and therefore are interpreted as being trans-national social spaces.
“[…] trans-national social spaces are pluri-local frames of reference which structure everyday practices, social positions, employment trajectories and biographies, and human identities, and simultaneously exist above and beyond the social contexts of national societies” (Pries, 2001, p. 65).

Trans-national migration is characterised by spatial movements that can be nomadic and pluri-local, but these movements are not de-territorialised. This leads to hybrid identities and practices. Trans-national migrants can benefit from opportunities of their home countries as well as of their current domicile. They are able to create flexible strategies of sojourn. The possibility of gaining power in their country of origin by i.e. transferring economic capital to their country of origin and simultaneously gaining more power in the host society as political actors, as “voices for the minorities”, is a specific feature of trans-national migrants (Bürkner, 2000, p. 302).³

Trans-nationalism is explained by the process of globalisation and its linked modern communication, transport and labour forms. But as Bürkner points out, there were migration forms in history which showed trans-national characteristics before globalisation began.⁴ Furthermore economic and socio-cultural processes of globalisation as well as processes of transformation on a national level appear to be not more than framing conditions for a collectivisation around an individual or a little group. The relevance of economy for the emergence of trans-national spaces is disregarded (Bürkner & Heller, 2008, p. 46ff; Bürkner, 2005, p. 113-122; Haug, 2000, p. 16ff; Pries, 2007, p. 20ff.).

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³ Glick Schiller et al. (1992) showed the phenomena of trans-nationalism in the case of the migration of workers from Central America to the US.
⁴ Bürkner refers to the early shaping of migration paths by ethnic communities in the USA at the beginning of the 20th century (Bürkner 2000, p. 302).
2.3 Theories of highly skilled migration

Besides old and new migration theories which try to explain labour migration in general (see 2.1. and 2.2.) there are new approaches which focus on migration of highly skilled workers in particular. Besides the concept of Brain Drain where movement of highly skilled is interpreted as unidirectional, other theories think this migration form as circular and oscillating and connect them with the new shaping of capitalism.

2.3.1 Brain drain

The brain drain approach normally is applied on migration of highly skilled workers between different countries. Country of origin and destination area are seen as clearly defined containers with separated social systems. The embeddedness of migration processes into flows of capital, goods, communication and information is only of marginal interest.

The concept of brain drain assumes a unidirectional and permanent migration between ‘more’ and ‘less’ developed countries. Again economic factors like the higher income level in the destination area are claimed to be the main reason for migration. Seen from the perspective of dependency theory developing regions are characterised by a loss of human capital while highly industrialised societies benefit. In consequence it is said that the emigration of highly skilled obstructs the economic progress in developing regions and as a result keeps them in economic dependence (Meusburger, 2008, p. 31; Meusburger, 2008, p. 51f, Pethe, 2006, p. 5f). But this approach does not consider that emigrated highly skilled workers might return to their home countries. This would be brain gain since highly skilled workers improved their qualifications abroad and therefore could push the development in their home countries. Instead of speaking about brain drain, it is more likely that there is brain circulation (Pethe, 2006, p. 9). We will now discuss the gradual shift in migration literature from ‘brain drain’ to ‘brain circulation’ and the possible negative and positive impacts on the countries of origin in some more detail.

In the social science literature, three approaches are prominent which discuss the mobility of the highly skilled professionals. In the 1960s, the issue of brain drain discussed the negative outcomes of the emigration of talent of third world countries to industrialised countries. Often graduates originating from developing countries took advantage from the large income differences and better working conditions in Western states (Schipulle 1973; Adams 1968). Although many European countries refused to give labour permits to third world graduates, the US became the favourite destination for this group of mobile highly skilled migrants. As a

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5 It is also possible to use this concept for different regions in one country. This is the case when migration processes between the old West German and the newly-formed German states are focused. There are not two separated social systems but yet the different history causes different economic and social conditions.

6 Dependency Theory assumes a stratification of countries in an international system and resulting power and dependency relations between dominant societies and countries in a lower position. Here migration is seen as a specific form of interaction between states, which is caused by structural disparities in dependent societies and provides a benefit to dominant countries (Bürkner & Heller 2008, p. 39).
result, more than 40% of the highly skilled persons in all OECD countries who are resident outside their home country lives in the US. Although the brain drain perspective is still present in the political arena, it lost its prominence. Firstly, the geographical pattern of mobility changed in the 1980s due the increasing trans-nationalisation of the companies and the economy (Findlay, 1988; Salt, 1988; Findlay & Gould, 1989; Beaverstock, 1990; Findlay & Garrick, 1990). Secondly, researchers like Annalee Saxenian pointed out that the emigration of highly skilled can lead to a return migration of highly skilled after several decades, which has a positive impact on the economies of the developing countries. In her book ‘Silicon Valley’s new immigrant entrepreneurs’ (1999), she explained how India, Taiwan and China profited from the economic activities of their ‘diaspora’. In her latest book ‘The New Argonauts’ (2006) she describes also the positive effects of international mobility of highly skilled migrants for the regional development. She has observed the impact of foreign talent and entrepreneurs in Silicon Valley in the last decades also points out the openness to foreign creative talent is also one of the key factors for the success of Silicon Valley and in the home countries of the migrants. Saxenian proposes that the successful development of the ICT industry in Israel, Taiwan and to a lesser extent in China and India is caused by the mobile talent who stimulates innovation, investment and trade between the countries. The exchange of knowledge, she concludes is that the foreign experts ‘welcome the openness, diversity and initiative that have built Silicon Valley’. The connection which is constructed by the mobile ICT engineers is the basis of the economic success of these industries in their home and host countries.

Thirdly, country and regions in industrialised countries have become aware that highly skilled home nationals are also increasingly mobile and migrate to foreign destinations. Some of the earlier mentioned studies, like the work of Beaverstock, address expatriate communities from advanced capitalist countries to other advanced capitalist countries or to rapidly developing countries, like the British communities in New York City and Singapore. In our own empirical analysis we will also demonstrate that a significant part of the highly skilled migrants coming to European city-regions are coming from other European city-regions, and that they are often either on the move to yet another European city-region or plan to return to their city-region of origin. This is again an example of ‘brain circulation’, a form of circular migration we will discuss in more detail now.

2.3.2 ‘Brain circulation’: circular migration

Since the 1980s labour migration changed. As empirical studies showed (i.e. Wolter, 1997) an increasing movement of highly skilled workers has emerged. Often this migration is temporary and can be described as circulation between industrialised societies as well as a migration from ‘more’ to ‘less’ developed countries. Circular migration implicates the return of the migrants to their home regions after one or more migration steps and is linked to trans-

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7 It has to be pointed out that circular migration is not only a phenomenon which describes the movements of highly skilled. It also applies to less or unskilled workers (Smith & Guarnizo 1998, p. 18).
nationalism (Vertovec, 2007, p. 3f). Even though the region of origin firstly suffers a brain drain by losing highly skilled workers there is also a brain gain by foreign highly skilled or a brain re-gain by returning highly skilled, who might have improved their qualities. So it we could speak of brain exchange between the different regions (Schultz, 2008, p. 52f; Pethe, 2006, p. 7ff).

This new form of migration of highly skilled is attributed to internationalisation and economic interdependences. Therefore the perspective of research focuses primarily on the meso-level like firms and institutions. In the 1980s, the international financial market was deregulated and many industrial producers moved their production units outside their home markets. The world economy began to internationalise. Many trans-national production and service companies developed which lead to the ‘brain exchange’ of highly skilled professionals within these large international organisations. The expertise of the highly skilled employees was needed to control and supervise the new sales offices, production units and bank branches abroad (Boyle et al. 1994, Findlay 1995). These so called expats were typically seconded to a foreign branch for two to five years. Although they were privileged compared to those professionals who came from third world countries a decade earlier, and they were compensated for their international assignment with relocation service and a salary above the home level, the seconded professionals had little choice to select their country of destination. They were are part of the international stream of investments and trade which was allocated due to the outcomes of international investment opportunities. I.e. the expats accompanied the foreign international direct investments streams and, in the case of newly erected production units, the trade of foreign goods and services. Wolter (1997) showed the interrelation between investment and international migration for the case of the European Union in the 1980s.

Beaverstock, who investigated the mobility of these professionals in the financial service sectors over two decades, points out that the geography of their mobility is often related to the geography of the global cities (Beaverstock 1994, 1996, 2002). Global cities are metropolitan regions with a large concentration of high range services and international headquarters which command and control international investment streams (cf. Friedmann 1986; Sassen 1996). The Globalization and World Cities Research Network in Loughborough mapped out the position of cities in this international urban system by looking at the connectivity of the international organisation in the urban regions (Globalization and World Cities Research Network, 2009). In addition to the circular movement within the industrialised countries, Beaverstock and others also describe a movement from the North to the South. Compared to the previous mobility which was described as brain drain, the brain exchange connected industrialised countries more strongly or describes mobility from industrialised countries to less industrialised countries. Due to its strong economic embeddedness, the brain exchange is influenced by economic circles with a large increase of international mobility in the period of economic upturn and a decrease of international migration in the period of the economic downturn.

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8 As Fassmann points out that the distinction between circular and trans-national migration is problematic, if migrants keep up their social and functional relations to their home society on a large scale (Fassmann 2008, p. 23).
The brain exchange perspective was criticised recently for approaching the international migration of the highly skilled mainly from an economic perspective and neglecting the agency of the individuals (Scott 2006b). Before the role of the individual migrants will be discussed below, it should be mentioned that the economy has also changed in the last decade, and the organisation has also influence on intra-company mobility of employees. Large vertically integrated companies were typical for the Fordist age. These differentiated units did not only comprise various production and administrative units, they also began to allocate each function at the most suitable location. Due to the internationalisation of their organisations, highly skilled migrants were seconded between the different parts of the companies. Typically they were sent from the head quarter to peripheral locations. Due to the reorganisation of trans-national companies in post-fordism (Cormode, 1994; Koser & Salt, 1997; Wolter, 1999), hierarchies were reduced and activities were outsourced. Not only is the size of the companies reduced, but also the expensive international career opportunities for employees. The companies in the creative knowledge industries tend to be very small. A large share has less than 5 employees. On the one hand, this particular structure of the sector makes it less likely that intra-company mobility is a common feature in the creative knowledge sectors. On the other hand, the technological progress enabled small actors to be mobile internationally, because the international communication and transport become cheaper and easily available. Instead of being seconded within a large company, it appears to be more likely that highly skilled individual change between small and medium companies now on their own steam.

2.4 Florida’s conception of the international mobile creative class

“Regional economic growth is powered by creative people, who prefer places that are diverse, tolerant and open to new ideas”, writes Richard Florida in his book “The rise of the creative class”. The attractiveness of cities, its quality of life and its diversity of cities are pivotal for the future development of cities. A good people climate will draw new creative people to those places and will lever the economic success of regions. Using this imagination Florida describes conditions which are strongly related to the inward mobility of creative talent as a precondition and an effect for regional economic success of metropolitan regions. Diversity which is described as heterogeneity in terms of ethnicity, sexuality and lifestyles is seen as a precondition for the inflow of new talent. People from various backgrounds will be attracted to these spaces which will again lead to an even larger diversity of people. In the first texts, Florida does not distinguish between national or international migrants, but his later book ‘The flight of the creative class’ uses examples which indicate that he does not only have national migration, but also international migration in mind.

Florida mainly focuses on the ability of places to attract foreign creative, when he writes: “Today, the terms of competition revolve around a central axis: a nation’s ability to mobilise, attract, and retain human creative talent”. The attractiveness of regions is important, because the economic success will increase with the inflow of talent. This is the most important formula which Florida uses. A detailed description in which ways foreign migrants contribute to the host economy is difficult to decipher in his work. Several hints can be found: foreign creatives “help build our scientific enterprises” (p. 95), account for “a disproportionate share
of most influential scientists” (p. 101), relieve the “looming talent shortage” (p. 103), “take American ideas and American relationships back home” (p. 110) and contribute to the entertainment industry (p. 125).

Florida has a very broad conception of the creative class which comprises 30% of the American workforce. Again it is unclear in which aspects the mobility of the creative class is different from other highly skilled persons. But not only Florida lacks a clear definition of what is meant by the mobility of the highly skilled. Scholars who want to investigate the international mobility of the highly skilled see themselves facing a jungle of definitions. The definition of their qualification and their migrant status can vary enormously. For instance, the term ‘highly skilled’ can indicate a formal educational credential, but ‘skill’ can also be defined as the ability to solve certain tasks whether those skills were acquired with a ‘learning by doing’-approach or a formal education. The status as migrant can be related to certain forms of work permits for foreign employees, the status as a seconded employee within an international companies or simply mean non-national. In addition to that, Florida gives an account about the creative class which does not necessarily mean that other occupations such as doctors or are not internationally mobile (cf. OECD, 2002), whereas other creative knowledge workers are certainly limited to perform their activity in different countries. One prominent example are lawyers whose main professional reference are national laws. International law firms have only developed recently and mostly they are limited to certain field like international mergers and acquisitions. Although differences between the creative knowledge occupations seem to exist, their scope is still unclear and also how do they contribute to the different national economies?

Florida’s ideas might be one of the most prominent accounts of social scientists which emphasise the importance of the international migration for regional economies. In the political arena, the issue has been more strongly articulated since the labour shortages in several sectors appeared in industrialised countries (OECD). Since the creation of a common market, the individual member of the countries of the European Union received the right to move freely within the common space even earlier. At the time, the creation of a common space was not so much motivated by the attraction of foreign talent, but by the reduction of economic disparities between the various regions of the member states. Although several limitations exist, for examples for citizens of the new European member states, the member states and the European commission try to reduce the barriers, introduce a common migration policy and even support the mobility of certain groups actively. The Lisbon agenda, the agreement of a common migration policy in Tampere and the establishment of the student exchange programmes such as Socrates and Erasmus are examples which aim to promote the international mobility within Europe. The goal is to increase the competitiveness of the member states of the European Union by stimulating their ability for innovation and knowledge transfer. In other political arenas, other motivations to support the international mobility of highly skilled professionals are articulated. For example, on a global level, governments find mechanism to deregulate short term international mobility which is related to the international trade of goods and services (OECD, WTO). Apart from the attraction of talent, the reduction of disparities, the decrease of labour shortage, the stimulation of innovativeness and the lubrication of economic globalisation, various national statistical offices in central and eastern Europe point at the continuous decrease of their work force in
the coming five decades. The political initiatives in Europe and the US are increasingly perceived as an international ‘war for talent’. Florida addresses in his recent book the increasing danger that the US American cities loose this ability to attract and to retain foreign talent. European countries are becoming increasingly successful competitors for creative talent, in his view.

All accounts use imaginations of international migrations which expect positive outcomes. This is a recent development. Since the oil crisis in the early 1970s, immigration was stopped in most European states, because the incoming labour was seen as a competitor for the home nationals. In many countries only transferees of trans-national companies were successfully able to apply for a labour permit. Although those negative threats are less articulated in the public now, the mechanism of the international migration of highly skilled are not fully analysed. Who is internationally mobile? Why are trans-national migrations engaged in certain industries? How long do they typically stay? What effects does their presence have on the region, in particular on the economy and the housing market? Which cities and regions are attractive and what are the drivers behind their success?

2.5 The upcoming paradigm

The firm related perspective has been central in the study of international migration of the highly skilled, because many researchers assumed that this migration flow was largely demand driven. Apart from labour migration, other motives exist. Personal motives like family unification and marriage are the most prominent. Another important factor is education. But asylum seekers and refugees start a new life in other countries, too. In addition to that, an increasing number of cases are reported, when highly skilled migrants decide to live in a country because of the interesting cultural environment and the offered amenities as it was described by Florida too. Then, immigrants settle in the country first, and look for work later. In other words, the variety of reasons to settle in a certain country might be larger than the reasons which are found in the immigration legacy of the country in question.

In the Netherlands, for example, about one third of the immigrants entered the country due to employment related reasons, another third because of family related reasons and one sixth started with their studies in the Netherlands. Of course, these numbers needed to be treated with caution, because they are strongly related to the immigration categories which exist in the Dutch law. Firstly, immigrants use and tend to be classified in categories which gives them the best access to the host country. Research (Kanjanapan 1995) shows that immigrants tend to switch between the categories to a large extent. Secondly, important motives such as large differences in the house prices in border regions which are not relevant in the legal framework are not mentioned in the legal framework.

The heterogeneity of expats increases. Apart from the seconded transferees who work in large companies, an increasing share comes on their own steam. Due to the removal of immigration barriers for labour migration within the EU and the stronger support of student mobility in the EU, but also internationally, the socio-economic background and the motives of trans-national migrants diversify (Conradson & Latham, 2005, 2006a; Scott, 2006b). According to Scott,
the group of expats is diversified. Young professionals who come in their early career or stay on as graduates, international Bohemians who enjoy the cultural amenities and assimilation-settlers who marry a partner in the host country are new groups that have not gained enough attention. An overview of the nationality of foreign highly skilled immigrants in the Netherlands shows that the immigration of highly skilled persons cannot always be related to economic linkages between the countries. Nearly 50% of the highly skilled foreign nationals who lived 2000 in the Netherlands come from countries which either had strong colonial ties to the Netherlands such as Indonesia or Suriname, or were the recruiting countries of the former guest workers such as Turkey and Morocco or where the home countries of a larger highly skilled refugee population such as Iraq, Iran or Afghanistan. Less than one third of the foreign highly skilled in the Netherlands, however, derive from Western OECD countries. Using the nationality as an indicator of the migration motivation is, of course, problematic too. Firstly, this approach assumes that persons with a similar nationality share the same motive. Secondly, these immigrants are formally highly educated, but it is unclear, if they can use their educational credentials in their job. In addition to that, many foreign nationals are born in the Netherlands, although they hold a foreign passport. They cannot be considered as migrants.

The new heterogeneity of the skilled migrants leads also to a larger diversity of residential choice between the foreign highly skilled. The former orientation on the higher segments of the housing market in the suburban areas fades in favour of the increasingly popular and therewith more expensive inner city on the one hand, and lower priced flats on the other. Due to the strong urban orientation of creative workers, the overall preference for inner city location might also be emphasised by foreign creative workers. Furthermore, the duration of the stay appears to change to. Expats which typically live between two to five years abroad are accompanied by trans-national migrants who settle for a longer time frame or even permanent in the foreign country. In addition to that, the possibilities to access the labour market of creative knowledge workers might also vary with their demographic background. Kibbelaar (2007) points out that foreign migrants who are not part of the classic expat population in the Netherlands often struggle to find positions in the creative knowledge industries on the one hand. On the other hand, they are less likely to choose a creative knowledge profession, because they consider those occupations as less prestigious and economically less rewarding.

Therefore, an analysis which identifies how many persons work in the creative knowledge economy and are of foreign descent might give a more accurate number about the real inflow foreign creative knowledge workers than an approach which only identifies the formal education of immigrants. A comparison between the results of both approaches identifies the scope of the brain waste of immigrant human capital, because it will identify the scope of access of foreign highly qualified workers to these industries.
2.6 Settling and staying: Highly skilled migrants in the host society

While the trans-national mobility of highly skilled migrants receives increasing interest and attention from academic researchers and policy-makers, much less attention has been given so far to their experiences after their move and their preferences in terms of residence, amenities and relations with the host society. Integration in the host society, for example, is generally hardly considered a problem since most highly skilled migrants are expected to stay a few years at most and since they are expected to have a well-paid job. Another generalising assumption often made is that highly skilled migrants most often come from societies that are very close to the host society in terms of norms, values and behavior, so they would hardly have adaptation problems. These assumptions might apply to most expatriates, but as we have seen in the sections above and will see again in our empirical analysis, this group is actually only a small part of the highly skilled migrants coming to and traveling within Europe. Highly skilled migrants quite often stay for more than a few years, they do not always come with the guarantee of a job, their job is not always well-paid, and they also come from non-Western developing countries. While this heterogeneity in the broad category of highly skilled migrants is gradually acknowledged, we hardly find evidence of this in the international academic debate so far. As far as matters of settling and staying of highly skilled migrants are discussed, mostly the focus is strongly on the sub-category of expatriates, and most attention is given to the housing and real estate market.

Expatriates are often merely seen as affluent corporate movers that can rely on relocation services. Because of this view, they are often discussed in terms of dualisation of world cities. Several studies (Freund, 1998; Glebe, 1986; White, 1998; White & Hurdley, 2003) show that immigrants from OECD countries differ in their housing preferences strongly from other, often lower skilled migrant population. The residential pattern is often very similar to home nationals with the same socio-economic status. “The settlement of migrants from North America, Australasia and other parts of Europe has tended to occur most strongly in those parts of London with the highest occupational status”, observes White. This pattern varies between different OECD nationals. Japanese corporate transferees and their families show the strongest segregation of all national groups in London, in Düsseldorf and Frankfurt/Main. They live more often in suburban locations, and share less often similar housing patterns with similar status groups. The high concentration is often ascribed to the activities of relocation services and Japanese real estate agencies, the important of public transport access to work, security of the residential environment, quality of the dwelling (cleanliness of kitchen) and proximity to school and other community institutions (Glebe, 1986; Glebe, 1997; White, 1998; White & Hurdley, 2003). In particular the proximity to schools is often stated as a pivotal point for all OECD nationals too, although this view is also contested. Generally, expatriates rent more often than home nationals due to their temporary status, although the rental sector is with some 10% of the dwellings relatively small in some of the investigated cities such as London. Rarely the flats of the transferees are owned by their companies. Instead White and Hurdley observe that other ethnic entrepreneurs who hold these flats as property investment let these high-priced dwellings to Japanese in London. This untypical demand in the rented sector leads to a rise of rent prices in those residential neighbourhoods. A similar connection between the rise of housing prices and immigration is described for Vancouver. This is properly the most prominent and extreme example which illustrates how
activities of affluent immigrants lead to a significant increase of housing prices (Brosseau et al., 1996; Hiebert, 2000, 31ff; Ley & Tutchener, 2001; Olds, 1998; Olds & Yeung, 1999). Because of the transfer of Hong Kong to the People's Republic China, wealthy Chinese immigrants and entrepreneurs fled to Canada. They acquired the Canadian citizenship by doing large investments. Often they spent large amounts of money in the regional housing market and transformed the suburban residential landscape, because they constructed houses which were conceived as monster-houses by the older population of English descent. Due to their acquisition of large suburban properties the prices in the higher housing market segment rose. In addition, entrepreneurs built malls and developed larger inner city housing projects (Ley & Tutchener, 2001; Olds, 1998; Olds, 2001).

The examples from London and Vancouver, however, show how the effects are firstly related to global flows which are linked to each city. Secondly, they show that the aims of the incoming educated population from the industrialized countries and the effects of their inflow can vary considerably. Recently, Scott underlined that an increasing heterogeneity of highly skilled immigrants stream into European cities. Apart from the typical expatriate population, overstaying students, family migrants and international bohemians live in the metropolitan regions. Also Conradson and Latham point at the ‘middling trans-nationalism’ in large European cities such as London which comprises an increasing number of mobile middle class individuals. Compared with the typical expat population, the residential preferences differ. They are more oriented towards inner city neighbourhoods. Due to their lower income, they are not able to afford a rented dwelling in the upper housing segments. Since they travel more often individually, they can also not rely on relocation services to find accommodation. On contrary, they are more likely to compete with the local middle class. In other words, the chances of trans-national migrants and expats to access the labour market and the effects of their presence are as much related to their socio-demographic background as to the local and national regulations.

2.7 What kind of theory for our empirical study?

The empirical results of this study will show that the migration of highly skilled migrants in the Munich region cannot be explained by simple pull-push models. Much more helpful are theories and studies which take into account the growing heterogeneity of migrants and which look at the micro level at the factors like social-networks, the role of families and partners or education. Job-related motives tell – as we will see - only part of the story. In the German context it seems especially important to take into account also the meso- and macro level: national regulations on migration heavily influence the migration of highly skilled transnational migrants to metropolitan regions.
3 ECONOMIC DEVELOPMENT AND POSSIBLE LABOUR SHORTAGES

3.1 Development of the creative knowledge economy in Germany and the Munich region

With unemployment now standing at 7.1 percent on average, Germany is still confronted with mass unemployment, at least in certain regions. Thus it might appear counterproductive to argue that Germany needs more labour migration. At the same time, employers as well as experts are increasingly concerned about current and future deficits, especially of qualified labour. To fill these gaps, transnational migrants – the employers as well as labour market experts argue – are becoming more and more important.

The following section looks at major economic and social trends in Germany which influence both the demand and supply of labour in Germany and in the study region.

3.1.1 The creative knowledge economy in Germany and possible labour shortages

Labour shortages can take a number of different forms. Aggregate shortages arise in situations of full employment when there are not enough workers available to meet the demand for labour. Far more frequent are shortages of labour due to a mismatch of labour demand and supply. This is the case when the number of workers is enough to fill jobs, but workers are not able or are unwilling to take up a job. This unwillingness can be for several reasons. It can be due to:

- Qualification mismatch: workers do not have the education, training or experience required
- Preference mismatch: workers have adequate qualifications but they refuse a particular job due to inadequate pay, status or working conditions
- Mismatch due to information deficits: either workers do not know of existing vacancies or employers use inadequate recruitment practices
- Regional mismatch: workers are able and in principle willing to take up the job, but they are located in another geographical area and they are not ready or are unable to move

This explains that shortages of labour due to mismatch can coexist with high levels of unemployment, as is the case in Germany as well as in many other European countries (Boswell & Straubhaar, 2005).

Basically two types of changes generate aggregate shortages and mismatch on the labour market. Firstly, they may happen when the changes in labour demand are greater than the corresponding shifts in the size or composition of the labour force. The reasons for these
changes can be growth of the economy as a whole or of particular sectors, changes in the international division of labour or technological change and changes in productivity. Secondly, decreases in labour supply can be another major reason for shortages. In this case, the labour force diminishes due to demographic changes, trends in the qualification structure of the workers entering the labour market or due to declining participation rates (Boswell & Straubhaar, 2005).

In common with many other European countries, economic development in Germany is characterised by two major trends which change quite substantially both labour demand and supply. On the demand side, two trends are of major importance. Firstly there is the development into an increasingly knowledge-based economy in which technological development, innovation and creativity are major assets, and secondly the ongoing structural economic change.

In 2004, the proportion of employees subject to social insurance contributions working in the creative knowledge sector as defined by the ACRE project team accounted for about 21.5 percent of all employees in Germany (Hafner, Miosga, Sickermann & von Streit, 2007). The creative knowledge economy as defined by the ACRE project team consists of the following sub-sectors:

1. The creative industries that are made up by advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer games, television and radio.
2. Information & communication technology (ICT)
3. Finance
4. Law and other business services
5. R&D and higher education
   (See annex 1 for a list of the selected NACE codes for each sector)

Whereas apart from software computer games, the creative industries have not developed more positively than the overall economy (Söndermann, 2007), the knowledge-intensive sub-sectors in particular, such as law and other business services as well as R&D and higher education, have shown growth rates which were higher than those of the overall economy over recent years (Hafner, Miosga, Sickermann & von Streit, 2007). These growth rates can be taken as an indicator that the German economy is becoming increasingly knowledge-based.

In a knowledge-based economy, skilled human capital is the most valuable factor in production, as productivity and competitiveness depend - more than ever before - on human knowledge and skills. Furthermore, innovation has become crucial for productivity and growth in a global economy which is characterised by short product cycles. The importance of knowledge, creativity and innovation implies the need for personnel with relevant qualifications as well as the ability to adjust to rapid technological change. The development towards greater demand for highly qualified workers can already be identified: between the year 1975 and 2000, employment levels of highly qualified workers have risen by 180 percent (Boswell & Straubhaar, 2005), whereas the demand for low-skilled
and unqualified workers has decreased. It is estimated that 2.2 million low-skilled and unqualified jobs will be lost in Germany between 1996 and 2025 (Munz & Ochel, 2001). Furthermore, Germany will continue to experience a loss of jobs in the manufacturing and agricultural sectors and an increase in jobs in the service sector. Whereas labour-intensive production has been and will continue to be shifted to regions with lower labour costs, it is likely that highly skilled jobs will continue to be located in OECD countries. Consequently the demand for qualified workers in occupations such as IT, engineering, consultancy, R&D and financial services will keep on growing.

To sum up, these changes suggest above all an increasing demand for highly qualified workers in the tertiary sector. However, a discussion of the demand for labour is insufficient without discussing how far this demand may be met by domestic labour supply. Only then can we say something about possible labour shortages. In this respect three trends are important: demographic change, education, and regional and occupational mobility.

Concerning demographic change, the German situation is characterised by low birth rates in combination with high life expectancy. The result is an increase in the old age dependency rate. It is estimated that by 2030 the proportion of the population in Germany who are retired will rise to almost 36 percent as compared with 23.5 percent in the year 2000. Labour supply will decrease by an average of 0.7 percent per year between 2010 and 2040 (Boswell & Straubhaar, 2005). The number of people potentially available for work is expected to fall from today's figure of almost 42 million to just around 30 million by the year 2050 (Institut der deutschen Wirtschaft, 2004).

Concerning the second trend – education – it must be stated that there was a steady trend towards better qualifications in Germany until the early 1990s. The proportion of people with professional qualifications rose whereas the number of unqualified persons decreased substantially. This steady rise in the skill level of the German population has come to an end: since the beginning of the 1990s, the number of graduates has continued to rise but the number of those with professional qualifications has stagnated (Boswell & Straubhaar, 2005; Reinberg & Hummel, 2004). Combined with the smaller numbers of those entering the labour market, it is expected that the number of professionally qualified people will decrease by almost two million between 1998 and 2015 (see figure 3.1).

**Figure 3.1: Workforce according to skill levels in Germany 1998 and 2015 (in million)**

![Workforce According to Skill Levels](source: Reinberg & Hummel, 2004)
Another study of the Institute of the German Economy estimates that the number of highly skilled people will fall by 2 million from today’s figure to 8.9 million in 2050 (Institut der deutschen Wirtschaft, 2004). Coming to the third trend - occupational and regional mobility -, it must be said that in comparison with some other European countries, German workers do not show high rates of mobility, either between different occupations or between regions. The limited occupational mobility can partly be attributed to the relatively rigid structure of occupational training in Germany. Consequently, well trained people or people with experience in one field have difficulties in switching to another occupation where there would be jobs available (Boswell & Straubhaar, 2005). Furthermore, compared with other European countries, inter-regional mobility in Germany is among the lowest. In Germany, only 1.1 percent of the employed population moved to another region essentially within Germany in 1999, compared with an EU average of 1.4 percent. The Austrians with 4.4 percent, the British with 2.3 percent and the Dutch with 1.7 percent are well above the EU average, whereas the employed population of Spain and Greece display the lowest inter-regional mobility with 0.1 percent and 0.2 percent (European Commission, 2002).

To sum up: the growing importance of the knowledge-based sectors in the German economy as well as the ongoing deindustrialisation increases the demand for qualified and highly-qualified workers. It is estimated that the domestic supply will not be able to keep up with the shift in demand if the current demographic and educational trends persist. It is likely that the shrinking German labour force in combination with stagnation in the trend towards better qualifications will create acute shortages of skilled labour (Boswell & Straubhaar, 2005). Although most studies on possible labour shortages in the next few years come to the conclusion that there will be a growing demand for highly qualified workers which cannot be covered by the domestic supply, it is not possible to forecast exactly which occupations, skill levels or regions will exactly be affected by future shortages (Hess & Sauer, 2007). According to different studies, labour shortages are expected in the field of engineering, mathematics, ICT, and the natural sciences (Institut der deutschen Wirtschaft, 2007; Biersack et al., 2007). However, the question remains as to whether migration is a suitable instrument for meeting shortages, especially in the creative and knowledge-intensive parts of the economy. Undoubtedly, migration can be a fairly rapid and efficient instrument if existing legal frameworks allow managing and organising migration according to labour market needs (see chapter 4.1 in this report).

3.1.2 The creative knowledge economy in the Munich region and possible labour shortages

In general, regional labour markets are much more influenced by migration than national ones. The economy of the region of Munich has profited since World War II from inward migration of qualified labour (see chapter 5 of this report). The trends described above for the whole of Germany apply also for the region of Munich. However, due to the sectoral composition of the regional economy as well as the high skill level of the employed population, it can be assumed that the region of Munich might even be more severely affected by labour shortages than other regions in Germany if the Munich
region is not able to attract highly qualified workers consistently, either from other regions of Germany or from abroad.

The Munich region can be considered to be one of the leading German locations for the creative and knowledge-intensive industries. Whereas in Germany around 21 percent of all employees work in the creative knowledge industries, 28.5 percent of all employees subject to social insurance contributions in the Munich region work in this sector, and in the city of Munich this even rises to 32 percent of all employees. Almost 8 percent of the total workforce is employed in the creative industries, and 9 percent in finance, the biggest sub-sector of the knowledge-intensive industries in Munich (Hafner, Heinritz, Miosga & Siekermann, 2007). In 2004, the creative knowledge sector comprised more than 41,000 enterprises in the region of Munich. Around 28 percent of firms in the Munich region were active in the creative and knowledge-intensive sectors in 2004. They achieved a turnover of over 80.6 billion Euros, which corresponds to just under a quarter of the total turnover of all the firms based in the Munich region, and in 2004 they employed 304,573 people. In the city of Munich, the proportion of companies from the creative and knowledge-intensive sectors is higher than in the Munich region: approximately one third of all firms are active in these sectors of industry here. In 2004, the companies in the capital of Bavaria achieved a turnover of just under 51.2 billion Euro, i.e. 22.1 percent of the total turnover of the city of Munich (Hafner, Heinritz, Miosga & Siekermann, 2007).

These numbers underline the strong knowledge base of Munich’s regional economy and point to the fact that the region of Munich is more dependent than other regions on highly qualified workers.

Concerning the mobility of the creative knowledge workforce, data from previous ACRE-reports demonstrate that creative knowledge workers in the Munich region are not very mobile (Hafner, Heinritz, Miosga & von Streit 2008; see also Hafner & von Streit, 2007). More than half of the creative knowledge workers surveyed can be described as very tied to Munich as a location: almost 53 percent of the creative knowledge workers have lived longer than 10 years in the Munich region. Furthermore, 30 percent of them were born in the region and 28 percent have never left it for a longer time. Thus, with regard to their mobility behaviour and their sense of connection to place, Munich’s creative knowledge workers can be assigned to neither the transnational class nor the creative class of Richard Florida.

3.2 The internationalisation of the German and Munich economy

International labour migration must be seen in the context of the internationalisation of the global economy which has kept on increasing in recent years. It can be assumed that international economic relations induce a flow of highly skilled migrants, such as transnational operating companies that send expatriates to international offices. The geographer Bodo Freund has examined highly skilled foreign workers in Frankfurt and has found a positive correlation between international cross-ownerships and the quota of foreigners from developed countries (Freund, 2001).
Indicators for the internationalisation of national economies are international trade and investment flows, foreign direct investment as well as the activities of multinationals (OECD, 2005).

The growing internationalisation is also mirrored in key data on the German economy. Looking at the outflow of foreign direct investments, Germany is among the three European states with the largest amount: “Three Member States accounted for the bulk of EU outward FDI stocks at the end of 2004: the United Kingdom, France and Germany. These three Member States made up 45 percent of extra-EU outward stocks” (Eurostat, 2008, p. 31). Germany holds a share of 11 percent of extra-EU stocks, while the UK was the biggest investor with 21 percent, followed by France with 12 percent. The main partner for German investments was the USA (Eurostat, 2008).

With a share of 36 percent in 2006, the UK was not only the main investor, but also the largest recipient of direct investments into the EU-27. Second was Luxembourg with 16 percent and third – again – Germany with 10 percent (Eurostat, 2008).

Of all the OECD countries, Germany is the biggest exporter of goods, also ahead of the USA (OECD, 2009).

In terms of the internationalisation of the economy, the Bavarian economy takes a leading position in Germany. With exports accounting for 141.3 billion Euro in 2006 and an export surplus of € 25.4 billion, foreign trade is the driving force of the Bavarian economy. With an export quota of 47 percent, the Bavarian trade relations are even more export-based than the German ones, with a quota of 42 percent (Zademach & Haas, 2008). The export of Bavarian products has nearly tripled since 1992. The export as a share of the GDP has increased from around 18 percent in 1992 to 35 percent in 2006. In 1992, imports accounted for 17 percent of the GDP and they rose to 28 percent by 2006. Moreover, Bavaria receives 14 percent of all German foreign direct investments (Zademach & Haas, 2008).

Bavarian companies are well represented in all markets around the world. In 2006, the most important buyers of Bavarian-made products were once again the USA with a share of 11.9 percent of total exports, followed by Italy (8.7 percent), Austria (8.5 percent), France (7.6 percent) and Great Britain (7.3 percent). The most important trade partners of Bavaria are the member states of the European Union with an increase of 10.6 percent in 2006 and a share of total exports of 60.2 percent. The development of exports to the new EU countries in Central and Eastern Europe has been exceptionally dynamic in the last few years. Furthermore, Russia and the CIS, the Arab countries in the Middle East as well as India and China are the fastest expanding markets for Bavarian goods (Bayerisches Wirtschaftsministerium, 2008).

There are no data available on the internationalisation of the regional economy of Munich. With Munich being the economic centre of Bavaria, it can be assumed that the Bavarian companies which are globally active are mostly located in or around Munich.

For an analysis of the mobility of highly qualified migrants it is important to look at institutions and employers which could function as possible migration channels in the study region. According to Freund (2001), European or German headquarters of multinational firms of different sectors are of major importance in this respect.

Due to the presence of Munich airport, there are numerous international transportation companies to be found in the region of Munich. Being a German centre of the ICT industry, Munich hosts numerous firms with global activities, such as Microsoft, Siemens or O2.
Alongside the ICT industry, the automotive industry in particular shows a high degree of internationalisation. Munich hosts many multinationals and, with BMW and MAN, two global players in this sector.

Furthermore, Munich is Germany’s second most important centre in the banking sector and the number one location for insurance companies. Almost 80 insurance companies have their national or international headquarters in Munich, including global players such as Allianz, Munich Re or Swiss Re. Munich also has a high concentration of firms in the field of business-related services. Within the GaWC inventory of world cities, which ranks cities according to their advanced producer services, Munich ranks as a “gamma world city” (Taylor et al., 2002). Only Frankfurt ranks higher in Germany and has the status of an “alpha world city”.

Besides the private sector, numerous public institutions and international organisations can be found in Munich. One important institution is the European Patent Office. It employs 3,500 people in Munich; three quarters of them are foreigner, mostly highly skilled.

Whether this structure of Munich’s economy and institutions results in a high proportion of highly skilled migrants in the labour force will be analysed in chapter 5.2 Migrants in the Munich region.
In order to understand the composition of the foreign population in Germany today, a short historical account of migration to Germany since the Second World War will be provided. This will be followed by a description of the law regulating migration in Germany, as the legal framework is an important factor influencing the mobility of highly qualified workers (Guth, 2007), at both national and regional levels. Particular focus will be on the national legislation for migration of third-country (non-EU/EEA-national) highly skilled workers in Germany. The chapter will further provide a short statistical overview of different types of migrants and migrant workers in Germany.

4.1 Migration to Germany since the Second World War

The aim of the next section is to portray the development of immigration to Germany since 1945 by the largest groups of immigrants, as well as presenting current data about foreigners in Germany.

In the 19th century and in the first half of the 20th century, Germany was a country of emigration, but since the middle of the 20th century it has become one of the most important European destinations for migrants. Concerning migration to Germany since the Second World War, one can distinguish between different forms and phases of migration in combination with different groups of migrants: 1945 – 1950 German expellees; 1950s -1970s recruitment of foreign labour; 1980s – 1990s ethnic German repatriates; 1980s - 1990s asylum seekers and refugees; 1990s until today labour migration of seasonal and guest workers as well as of highly skilled immigrants and subsequent immigration by spouses and family members of third-country nationals. These different phases of migration also reflect the different political approaches to migration in Germany.

4.1.1 German expellees

As a result of World War II, ethnic Germans in the former Soviet Union and Eastern bloc countries faced persecution and serious discrimination for decades after the war's end. Germany took in more than 12 million expellees and other persons between 1945 and 1950. From 1950 to 1984, an average of 36,000 repatriates of German origin resettled in the Federal Republic each year from Eastern Europe and the Soviet Union. After the foundation of the GDR in 1949 until the building of the Berlin wall in 1961, almost 4 million people migrated from East to West Germany (Özcan, 2007).

However, in 1950, there were only about 500,000 foreigners living in the Federal Republic of Germany, which accounts for 1 percent of the total population.

In the following years, immigrants came in several waves:
4.1.2 Labour recruitment

In the 1950s, the Federal Republic of Germany's "economic miracle" led to a growing demand for unskilled and semi-skilled labour. Following the recruitment of foreign workers, known as "guest workers" (Gastarbeiter) (see figure 4.1), the number of foreigners living in Germany rose to about 4 million from 1955 to 1973. During these years foreign labour was recruited primarily from Italy, Spain, Greece, Turkey, Morocco, Portugal, Tunisia and Yugoslavia. As the domestic supply of labour could not meet the demand, and the German government signed recruitment agreements with Italy (1955), Spain and Greece (1960), Turkey (1961), Morocco (1963), Portugal (1964), Tunisia (1965) and Yugoslavia (1968) (Reißlandt, 2005).

The first generation of foreign workers was made up mostly of single men aged between 20 and 40, although increasing numbers of women also came to Germany by themselves. Until the late 1960s, most foreign workers came from Italy, Spain or Greece. Later, workers from what was then Yugoslavia and above all Turkey predominated. In the late 1960s, Turkish citizens made up 10.7 percent of the foreign population in Germany and citizens from the former Yugoslavia 8.8 percent. By 1973, Turkish citizens accounted for 23 percent of foreigners living in Germany, while Yugoslavs made up 17.7 percent. Most foreign workers settled in the states of North-Rhine Westphalia, Baden-Württemberg, Bavaria and Hessen. They were employed above all in the food service industry, construction, mining, automobile and steel and metalworking industries.

The original intention was to limit the length of time foreign workers could stay in Germany: the so called “rotation principle” meant that when the allotted time had run out, the foreign workers were supposed to return to their home countries, to be replaced by new ones. But starting in the late 1960s, a growing number of foreign workers stayed in Germany permanently. This was in the interests of employers, who wanted to keep their workers, and of the workers themselves, who increasingly regarded Germany as their home and who wished to benefit of the better income opportunities and existing infrastructure for the long term. As a consequence, the foreign workers brought more and more family members with them to Germany (Federal Ministry of the Interior, 2008).

As a result of the oil shortage and subsequent economic slowdown in the early 1970s, the Federal Cabinet ordered a stop to further recruitment of foreign labour in 1973. The immigrants coming at this time, and their families and descendants, form the largest immigrant groups in Germany today. The contemporary problems of people with an immigrant background who are the second or third-generation descendants of immigrants have their roots in this time. For example, the first and second-generation immigrant children are less successful in the German education system than German children and consequently they have more problems on the labour market.

Due to the belief that foreign workers return to their home countries anyway, as well as the constant denial that Germany is a country of immigration until very recently, the integration of these immigrant groups into the German society has for a long time not been an issue in German policy. The marginalisation of certain groups of foreigners can be regarded as a direct consequence of this political failure. As will be shown, the integration of the immigrant population and their descendants, as well as political measures accompanying this process, have only recently become an issue in German politics.
The GDR too recruited workers from abroad. To overcome the labour shortage, the GDR signed agreements to train and employ workers, for example with Hungary, Poland, Algeria, Cuba, Mozambique and Vietnam. In 1981, 24,000 "contract workers" were staying in the GDR. In 1989 this figure had risen to 94,000, including 60,000 workers from Vietnam. The conditions and duration of their stay, their rights and total number were settled individually in contracts concluded with the governments of their home countries. Depending on the country of origin, the duration of the residence permit varied between two and six years. Permanent residence, however, was not envisaged by the agreements or by law. It was not possible for these workers to be joined by their family members. At the end of their contractual stay they usually had to leave the GDR and return to their home countries (Federal Ministry of the Interior, 2008).

In the 1950s and 1960s the percentage of foreigners in Western Germany remained rather small (see figure 4.1) and then began to rise until the recruitment stop in 1973. Until the end of the 1980s the numbers of foreigners rose quite slowly to 4.8 million. After 1973 and up to about the middle of the 1980s, most immigration was by family members joining foreigners already living in Germany. From the end of the 1980s to the middle of the 1990s the number of foreigners moving to Germany rose significantly: within only 11 years (1986-1996) it jumped by 2.8 to over 7 million. This growth was only partly due to family members rejoining those living in Germany and to the birth of roughly 1 million foreign children during the period. Most of the rise was due to increasing numbers of refugees and ethnic German repatriates.

Figure 4.1: Development of the foreign population in Germany

Source: German Federal Statistical Office
4.1.3 Asylum seekers

The right of asylum has a special importance in Germany. According to Article 16a of the 1949 Basic Law of the Federal Republic of Germany, "persons persecuted on political grounds shall have the right of asylum". During the Nazi regime, when many Germans faced persecution by the Nazis, their lives depended on protection offered by other countries. This led to the recognition of the special responsibility for those seeking protection and refuge from political persecution (Federal Ministry of the Interior, 2008).

Since the introduction in 1953 of a legally defined procedure for claiming asylum, the significance of asylum law has changed considerably. In the early years of the Federal Republic, relatively few foreigners asked for asylum in Germany. For the first few decades, these were primarily refugees from the communist Eastern bloc countries. In most cases, their claims to asylum were recognised. Not until the mid-1970s were there larger numbers of asylum seekers from other countries, as well as growing numbers of persons who were – according to officials - not actually suffering persecution. From 1984 to 1992, there was a massive increase in the number of people seeking asylum in Germany: the highest number was reached in 1992, with a record 440,000 applications. At the same time, fewer and fewer asylum seekers actually qualified for asylum (4.25 percent in 1992). The large number of applications resulted in long processing times, and the costs of housing and looking after asylum seekers rose. This situation increased social tensions and reduced public acceptance of the fundamental right to asylum.

But in the second half of the decade, a new group of "jet-age refugees" came to Europe and especially to West Germany, which took more refugees than any other western European country. In the mid-1980s, many refugees came from Iran and Lebanon. By 1991 most refugees originated from regions of war-torn former Yugoslavia, Romania, or Turkey. From 1986 to 1989, about 380,000 refugees asked for asylum in West Germany. By comparison, in the 1990-92 period, nearly 900,000 people sought refuge in a united Germany.

Although only about 5 percent of applications for asylum are approved, slow processing and appeals mean that many refugees remain in Germany for years. Because financial aid is also provided for the refugees' living expenses, their presence has – according to German officials and politicians - become a burden on federal and local government. The resulting social and political tensions led to an amendment to the constitutional provision regarding asylum.

After heated political and public debate, in 1993 the Bundestag passed legislation that amended the Basic Law and tightened restrictions on granting asylum. One important change is that asylum-seekers are no longer to be admitted into Germany if they have applied from a third country. In addition, more funds are provided to process applications, so that asylum-seekers remain in Germany for shorter periods. After the asylum law was amended, the numbers dropped to well below 100,000 asylum applications a year starting in 1998 (Federal Ministry of the Interior, 2008).

Concerning the numbers today, of the 6.7 million foreigners living in Germany in 2006, 60,000 are refugees granted asylum according to the Geneva Refugee Convention, 40,000 are people currently applying for asylum, and 76,000 people are granted asylum (Özcan, 2007).
4.1.4 Ethnic German repatriates

As a result of World War II, Germany took in more than 12 million expellees and other persons between 1945 and 1950. From 1950 to 1984, an average of 36,000 repatriates of German ancestry resettled in the Federal Republic each year from Eastern Europe and the Soviet Union. In 1987-88 this immigration started swelling; in 1988, the number of ethnic Germans moving to Germany rose to 203,000, and in 1990, the number was nearly 400,000. From 1987 to 1999, Germany took in a total of 2.7 million ethnic German repatriates from the territory of the Soviet Union. Starting in 2000, the annual figures sank to well under 100,000 and have now returned to their 1984 level. Between 1988 and 2005, 3 million ethnic Germans came to Germany. Like other groups of migrants, the ethnic Germans have problems on the labour market and in education (Özcan, 2007).

4.1.5 Subsequent immigration by spouses and family members of third-country nationals

Spouses, children and in certain cases other family members of third-country nationals may under certain conditions accompany these nationals when immigrating to Germany or may rejoin them in Germany at a later date. There are no precise statistics on such immigration available. The number of visas issued by German diplomatic missions abroad for the purpose of family reunification gives a general indication. Statistics kept since 1996 show annual numbers of approx. 50,000 to 85,000 persons. Also because of this ongoing process of family reunification, the number of foreigners had risen to 7.3 million in the year 2000 (see figure 4.1) (Federal Ministry of the Interior, 2008).

4.1.6 Labour migration today

In contrast to the 1950s, 1960s and early 1970s, the residence of foreign workers in Germany today is subject to strict time limits in all but a few cases. In particular, contract and seasonal workers are not permitted to remain in Germany permanently. In 2003, approximately 44,000 persons were working in Germany under temporary contracts in accordance with bilateral government agreements with Central and Eastern European countries. Seasonal workers from Central and Eastern Europe may be employed in agricultural and forestry occupations and in the hotel and restaurant industry for up to four months to fill temporary labour needs. In recent years there were 19,636 contract workers (2007) and 294,000 seasonal workers (2006) in Germany. In addition, from 1 August 2000 until the entry into force of the 2005 Immigration Act, foreign IT specialists with a relevant university degree or the equivalent qualified for receiving a residence and work permit to work in the IT industry in Germany. By the end of 2004, when this ordinance expired, more than 17,000 permits for such work, known as Green Cards, had been issued (Federal Ministry of the Interior, 2008). The immigration of highly skilled workers will be analysed in detail in chapter 4.4 Brain gain and brain drain in Germany.
4.2 Migration policy in Germany

The legal framework affecting the movement of highly skilled workers is composed of legislation at both the EU and national levels. Current developments in German immigration policy resulted from the reform process which began with the reform of the Nationality Act after the Social Democratic and Green federal government assumed office in 1998. This legislative reform triggered a general debate about immigration and integration, and the topic began to emerge in the form of highly controversial social and domestic policy issues. After a heated discussion, the red-green federal government, the official opposition and the federal states agreed on an Immigration Act, which came into force on the 1st January 2005. The law contains provisions on the immigration of foreign workers, the reception of refugees and asylum-seekers and the integration of immigrants. It is considered to be groundbreaking in its focus on promoting the integration of the immigrant population and on increasing the number of highly-skilled and self-employed immigrants (Özcan, 2007).

Labour migration is governed in Germany by the Residence Act, the ordinance governing residence and the ordinance on the admission of foreigners for the purpose of taking up employment. The Residence Act (AufenthG) of 30 July 2004 is the core element of the Immigration Act. It governs the entry, residence, employment and termination of residence of foreigners. In general it can be said that the ban on recruiting foreign labour remains in effect for unskilled and less-skilled workers; even skilled workers will be granted work permits only in exceptional cases.

There are two types of permissions or residence permits in the area of labour migration: the settlement permit is one of the two types of residence permit introduced by the Immigration Act. Unlike the residence permit, the settlement permit is an unlimited residence entitlement. It authorises the holder to take up employment or self-employment, it does not carry any geographical restrictions and, apart from cases provided for under the Residence Act, it may not be made contingent on any ancillary provisions.

4.2.1 Groups of migrants admitted to the German labour market

In Germany, different categories of migrants are admitted to the labour market, either temporarily or on a longer term basis (Hailbronner, 2007): the categories of migrants admitted for taking up employment are privileged European Union citizens, privileged third country nationals such as the nationals of Cyprus, Malta, Switzerland and EEA citizens (Norway, Iceland, and Lichtenstein), and citizens of associated states such as Turkey, who form a large part of the foreign resident population in Germany and who enjoy privileged access to the labour market under the EEC-Turkey association treaty.

European Union citizens, old member states

European Union citizens from the old Member States and their family members enjoy freedom of movement within the European Union (Art. 39 of the EC Treaty) and do not need to apply for any permit to reside in Germany and to take up employment. Furthermore, nationals of Cyprus and of Malta are treated equally to European Union citizens from the old
Member States. The same applies to EEA citizens as well as citizens of Switzerland who are granted rights similar to those of European Union citizens with regard to residence and employment.

**European Union citizens of the Middle and Eastern European Member states (new member states)**

In contrast to European Union citizens of the old member states, different rules apply for citizens of the Middle and Eastern European Member States. Interim regulations in the accession treaties provide for a limitation of free movement of workers of the new member states in Germany. Workers from these states have to apply for a temporary work permit (EU) (Arbeitserlaubnis-EU) before they take up employment in Germany. The conditions for this work permit are the same as for the issuing of a residence permit for employment purposes for third-country nationals. Skilled workers from the new Member States are not affected by the recruitment ban. Furthermore, workers from the new Member States may be admitted to the German Labour market as seasonal, guest, or contract workers. This concerns in general low-skilled jobs.

**Turkish nationals**

Turkish nationals have privileged access to the German labour market once they have obtained a residence permit which allows them to take up employment. Turkish workers have the following rights: “after one year of lawful employment the right to continue employment with the same employer, after three years of lawful employment the right to change the employer and to seek employment in the same profession, after four years of lawful employment the right of unlimited access to the labour market.” (Hailbronner, 2007)

**Third-country nationals**

As a general rule, third-country nationals must not be admitted to the German labour market. However, there are several exceptions which give third-country nationals the opportunity to take up a job in Germany. These exceptions concern several occupational groups, which can be divided into three categories. Normally two independent authorities are involved in the issuing of a residence permit for employment purposes: first the aliens authority, second the Federal Agency for Labour. The aliens authority examines the foreigner’s application with respect to policy aspects of immigration, integration, and social matters. The Federal Agency for Labour has exclusive competence for examining the aspects related to the labour market (no negative impact on the labour market can be expected; priority test: no German or EU citizen is available to do the job). The actual implementation procedure of this ordinance by the two authorities concerned in the Munich region will be discussed later. The first category refers to permit-free employment. For a series of occupations the Federal Agency’s approval is not needed. Into this category fall employment types as diverse as professional training, employment of highly skilled workers, leading management positions, personnel for science, research and development, some selected office personnel, selected occupations in the artist and sports sector, journalists, charitable and religious occupations, holiday jobs, licensed voluntary services, selected short term occupations, personnel for international sports events, personnel in the transport sector, and service personnel employed
The view of transnational migrants

with an employer in a Member State of the EU. The residence is restricted to this actual employment.

The second category are employment types that require no special skills (§18, para. 3). In these cases the issuing of the residence permit requires the Federal Agency for Labour’s approval. Into this category fall seasonal workers who are employed in the farming and forestry sectors, hotel and catering trade, and fruit and vegetable processing sectors, but also au pairs and domestic workers. This group also includes artists and acrobats and their personnel, and practical employment if it is necessary to achieve acceptance for foreign diplomas and certificates.

The third category concerns professionals and employment that requires a qualified vocational training of at least three years (§18, para. 4, Residence Act) and will be described below.

For academics the same rules apply as for the third category above (§18, para. 4, Residence Act), as well as the rules for highly qualified workers (§19 Residence Act) described below. Furthermore, since the new Immigration Act which came into effect in 2005, there are also special rules for self-employed migrants which are also described in the following section.

4.2.2 Legislative context for the entry of highly qualified third-country nationals

In contrast to other EU member states such as Ireland or the Netherlands, Germany has no special programmes to recruit and facilitate the entrance of foreign highly-skilled workers. Furthermore, the definition of highly-skilled worker in Germany does not take into account the ISCO-88 classification; rather, the term “Hochqualifizierte” in German law refers to mainly “managers, academics and scientists with outstanding qualifications, teaching personnel in high-ranking positions, as well as recognised specialists and executive personnel” (EMN, 2007, p. 15).

Foreigners receiving a settlement permit (§ 19, Residence Act)

In special cases, third-country highly-skilled workers are granted a (permanent) settlement permit and are admitted to the labour market without restrictions. The immediate issuing of a settlement permit upon entry is restricted to a very limited number of cases and it can only be issued to highly skilled foreigners if it can be expected that their integration into German society will not be problematic, and if there is no doubt that applicants can earn their own living and support their family without relying on public assistance. Highly qualified applicants do not require prior approval by the Federal Labour Agency (§19, Residence Act).

Highly skilled foreigners are scientists with special professional knowledge, teaching personnel or scientific researchers in higher positions, and specialists and leading employees with special work experience who receive a salary of at least twice the earnings ceiling of the statutory health insurance system. or who hold a similar post with regard to qualification, income level and social status. In the year 2006, the required salary was a minimum of 85,000 Euro.
**Foreigners receiving a residence permit (§ 18, Residence Act)**

Furthermore, highly-skilled third-country nationals can obtain a (temporary) residence permit. The issuing of the residence permit requires the Federal Agency for Labour’s approval and is given only if the employment is in public interest, particularly with respect to regional economic or labour market aspects. The occupational groups in this category are language teachers, cooks for local specialities, academic professions, particularly in the IT sector, leading management posts and posts that require special knowledge, social workers with special knowledge, nursing staff, and highly skilled personnel who are exchanged internationally within one company.

**Self-employed foreigners**

Foreigners who want to set up their own business in Germany can – under certain conditions - receive a residence permit for employment purposes. There must be a superior economic interest in the occupation or a specific regional need for it. Additionally, it should have a positive impact on the economy. As a rule, these conditions are met if the foreigner makes an investment of at least 1 million Euro and creates at least ten jobs. This does not, however, imply that foreigners who plan a smaller investment or create fewer jobs cannot be admitted. Such smaller projects are to be checked on an individual basis. However, the required investment has been criticised for being too high and there is a discussion going on to lower it substantially (Hess & Sauer, 2007).

Considering the low numbers of highly-skilled persons who have immediately received an unlimited settlement permit since the new law came into effect (see chapter 5.2 Migrants in the Munich region), the provisions relating to the immigration of highly-skilled persons have proved relatively ineffective. Accordingly, the current debate revolves around lowering the hurdles for the permanent immigration of highly-skilled persons – at least this was the case before the current economic crisis (Özcan, 2007).

**4.3 Migrants in Germany today: Facts and figures in Germany**

There are currently about 7.3 million foreigners living in Germany (8.85 percent of the total population) of whom one third are EU citizens (EU-27) and two thirds are third-country nationals. Regarding foreigners by nationality, the number reflects not only migration movements but also the number of births to foreigners in Germany (second- and third-generation immigrants), deaths and naturalisations.

The largest proportion of foreigners in Germany is made up of Turkish citizens, Italians, Polish citizens and citizens of Serbia and Montenegro (see table 4.1).
Table 4.1: Foreign population 2006, 10 most common citizenships

<table>
<thead>
<tr>
<th>10 most common citizenships</th>
<th>Foreign population (absolute numbers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkish</td>
<td>1,738,831</td>
</tr>
<tr>
<td>Italian</td>
<td>534,657</td>
</tr>
<tr>
<td>Polish</td>
<td>361,696</td>
</tr>
<tr>
<td>Serbian-Montenegrin</td>
<td>316,823</td>
</tr>
<tr>
<td>Greek</td>
<td>303,761</td>
</tr>
<tr>
<td>Croatian</td>
<td>227,510</td>
</tr>
<tr>
<td>Russian</td>
<td>187,514</td>
</tr>
<tr>
<td>Austrian</td>
<td>175,653</td>
</tr>
<tr>
<td>Bosnian-Herzegovinian</td>
<td>157,094</td>
</tr>
<tr>
<td>Ukrainian</td>
<td>128,950</td>
</tr>
</tbody>
</table>

Source: German Federal Statistical Office

About one in every five foreigners living in Germany was born here and thus is a second- or third-generation immigrant.

The foreign population is not distributed evenly. More than two-thirds live in the Länder states of North Rhine-Westphalia, Baden-Württemberg, and Bavaria, where in 2006 they made up 10.6, 11.8, and 9.4 percent of the population respectively. Foreigners live mainly in urban areas. There are few foreigners in the new Länder states. Of the roughly 190,000 foreigners living in the former GDR in 1989 because of work contracts, many have since been repatriated to Vietnam, Mozambique, Cuba, and other developing countries that were friendly to the GDR regime (Federal Ministry of the Interior, 2008).

4.4 Brain gain and brain drain in Germany

4.4.1 Balance of migration

The statistics on immigration and emigration offer a general picture of migration movements in Germany. From 1991 to 2006, 15.1 million Germans and foreigners moved to Germany, while 11.6 million moved away. From 2004 to 2006, the number of Germans leaving exceeded the number of those returning for the first time, above all due to the dramatic drop in the number of ethnic German repatriates. Outward migration by Germans was also extremely high during this period: from 1991 to 2003, an average of 116,000 Germans moved abroad each year, while from 2003 to 2006 this figure was 150,000 (Federal Ministry of the Interior, 2008).

There are no exact data available on how many highly qualified Germans leave the country every year. There are only estimates which rely on studies looking at the immigration data of receiving countries. According to a study analysing German migration to the US, the number of temporary as well as permanent residence permits of highly qualified Germans has risen but remains small in absolute numbers (Diel & Dixon, 2005 cited after Hess & Sauer, 2007).
4.4.2 Skill level of the foreign population

In comparison to “classical” countries of immigration like the US or Canada, the average educational level of the foreign-born population in Germany is rather low. The low education level results from the labour recruitment for unskilled and semi-skilled labour in the 1970s and the subsequent immigration by spouses and family members and thus still mirrors the German immigration policy of this time (Brücker & Ringer, 2008). This fact is also confirmed by OECD data. According to OECD data, the share of foreign workers among all workers in Germany is 12 percent, while the average in OECD countries is about 11 percent.

In figure 4.2, the national proportion of all highly skilled migrants in OECD countries is correlated with the general inflow of migrants. It can be seen that there is a concentration of international migration to North America (USA and Canada). Fifty percent of all migrants, and as much as 57 percent of all highly skilled migrants choosing an OECD country as destination, go to either the US or Canada. Germany has 11 percent of all migrants, but only 6.5 percent of all highly skilled migrants going to an OECD country go to Germany.

Figure 4.2: Proportion of migrants in OECD countries, educational levels

These data suggest that the educational level of immigrants coming to Germany is lower than in other OECD countries. Looking at the proportion of foreign-born employees in managerial positions, with only 3 percent - just like Denmark – Germany lags behind the OECD average of 10 percent. Only in Mexico, Poland, Finland and Sweden the proportion is even smaller, while countries like New Zealand or Canada all have foreigners in more than 20 percent of managerial positions (OECD 2008, p. 140).
4.4.3 Highly skilled foreigners in Germany

The following data are based on data of the Federal Labour Agency, and refer to employees subject to social security contributions only. The ISCO classification is not used in Germany. Therefore the occupations used for the analysis relate only approximately to the ISCO 1-3 Groups. Following the practice of EUROSTAT, those three groups can be considered to be “highly skilled” (EMN, 2007). In Germany, 5.6 million employees or 21 percent of all employees belonged to the occupational groups 1-3 in the year 2005. The proportion of highly-skilled foreign employees of all highly skilled employees in Germany rose from 3.6 percent in the year 2000 to 3.9 percent in 2002 and has remained constant until today. As the proportion of foreign employees of all employees is 7 percent, the foreign employees are underrepresented among the highly skilled, which can be attributed to the lower educational and skill levels of this group.

Almost 40 percent of the 215,000 highly skilled foreigners came from EU-14 countries, 8.7 percent from EU-10 countries and almost 53 percent were third-country nationals in 2005. If we look at the third-country nationals only, Turkish citizens form the largest group with 21 percent (about 24,000 persons) (Hess & Sauer, 2007), followed by citizens of the former Yugoslavia. Between 6 percent and 8 percent of the third-country highly skilled workers come from the US, Russia and Croatia (see figure 4.3).

Figure 4.3: Proportion of highly skilled (ISCO 1-3) third-country nationals, 2005

![Proportion of highly skilled (ISCO 1-3) third-country nationals, 2005](image)

Source: Hess & Sauer, 2007, p. 30

Whereas 30 percent of all US citizens on the German labour market are highly skilled, only 5 percent of the Turkish citizens are. The same applies for the proportion of highly skilled workers from the former Yugoslavia (7.5 percent) and Croatia (10 percent). By contrast, 30 percent of all Chinese workers on the German labour market also belong to the ISCO 1-3 groups.

When we look at the small numbers of highly qualified foreigners who have received a permanent settlement permit and have been admitted to the German labour market without restrictions, one can understand that critics argue that the new regulations for the admittance of highly skilled foreigners have not been successful. In the year 2007, 3,411 ICT professionals (two thirds are professionals from India) as well as 2,205 professionals of other
occupations received a work and residence permit according to § 18 of the Residence Act (see chapter 4.2 Migration policy in Germany). Most of these professionals come from India, China, Russia and the Ukraine (Hess & Sauer, 2007). Moreover, 5,419 professionals were admitted to Germany within the framework of personnel exchange in multinational corporations. Most of these professionals are from India (2,225 people), China (740 people), and the US (705 people) (Hess & Sauer, 2007).

Up until July 2006, 279 people from 52 different countries received a permanent settlement permit according to § 19 of the Residence Act (see chapter 4.2 Migration policy in Germany). Most permits were given to US citizens (42), to citizens from Russia (40), Turkey (24), China (15), India (13) and Croatia (12).

Figure 4.4: Permanent residence permits until July 2006 (§ 19 Residence Act) – countries of origin and federal states

Source: Hess & Sauer, 2007, p. 32

The majority of highly qualified workers settled in North Rhine Westphalia (24 percent), Bavaria (23 percent) and Baden Württemberg (13 percent) in 2006 (Hess & Sauer, 2007). Strikingly few highly skilled migrants settled in the Eastern federal states. How many of these permits were given to highly skilled foreigners in the Munich region is one topic of the next chapter.

4.5 Germany: A country of immigration

The present-day immigrant population of Germany has mainly been shaped by the recruitment of guest workers and the subsequent immigration of their family members, the influx of ethnic Germans from Eastern Europe and the former Soviet states, as well as the reception of asylum seekers. The proportion of foreigners is 8.85 percent of the total population in Germany at the moment. Two thirds of them are living in the states of North Rhine-Westphalia, Baden-Württemberg, and Bavaria. These are also the federal states with the highest proportion of highly qualified foreigners.
Compared to other immigration countries, the education level of the foreign born population is rather low. This low level of education is also a result of the fact that German politicians have shied away from measures promoting the integration of the immigrant population as well as increasing the number of highly skilled people over many years. Although Germany has been one of the most important European destinations for immigrants since the mid-1950s, immigration and integration have only recently become important and fiercely contested topics in German policy discussions.

Current developments in German immigration policy have their roots in the reform process which started when the red-green federal government assumed office in 1998. Since that time there have been considerable achievements concerning immigration policy in Germany: the reform of the Nationality Act, the adoption of the Immigration Act and political measures concerning the integration of the immigration population and their descendants.

Özcan (2007) identifies several challenges that Germany will have to face in the near future, which can be summarised as follows:

- One important challenge is to overcome the educational problems of the immigrants and their children. Several studies have recently deconstructed the weaknesses of the German education system and in particular the difficulties experienced by pupils with immigrant backgrounds.
- Germany will have to promote and use the potential inherent in the immigrant population to overcome the economic consequences of an ageing population.
- Germany has to make itself more attractive in order to be able to compete with countries like the United States, Canada and Australia, which have an advantage purely on account of the global spread of the English language. This means that the government has to further lower the hurdles for potential highly skilled migrants.
5 MIGRATION TO THE MUNICH REGION

5.1 History of Migration in the Munich region

Immigration has always been an important factor in the demographic development of the Munich region. It can be said that generally the same various forms and phases of migration and the same groups of migrants can be identified in the region of Munich as on the national level.

After World War II, about 2 million refugees and displaced persons came to Bavaria (Kramer 2008). The Munich region profited greatly from the immigration of approximately 150,000 to some extent highly qualified ethnic German repatriates and refugees, since firms in Munich could rely on an ample and qualified labour pool (Fritsche & Kreipl, 2003). After the integration of German expellees had almost come to an end, the recruitment of foreign workers from Yugoslavia and Turkey started in the 1960s. Four phases of migration can be distinguished:

In the late 1960ies, there was high demand for guest workers in Munich, as the infrastructure had to be developed in the run up to the Olympic Games in 1972 (Fassmann & Reeger, 1999), and the number of migrants rose. From 1965 to 1975 the proportion of foreigners doubled, rising from 6.9 to 13.8 percent (see figure 5.1).

Figure 5.1: Development of the foreign population in Munich (city)

Source: LH München, 2008, p. 17
In the middle of the 1970s, when the German economy slowed down and fewer workers were needed, further official recruitment of labour was stopped. Due to the good economic situation in the middle of the 1980s, large numbers of workers, mainly from Turkey and the former Yugoslavia, came to Munich. As a consequence of the stricter management of immigration, especially concerning labour migration as well as asylum for refugees, the high annual numbers declined in the mid-1990s and settled down at a lower level (Fassmann & Reeger, 1999).

5.2 Migrants in the Munich region

At the moment (2007) there are 311,321 foreigners living in the city of Munich, who account for 23 percent of the total population. Foreigners are more concentrated in the city of Munich than in the region, where the proportion of foreigners is 17 percent (Planungsverband Äußerer Wirtschaftsraum München, 2008). Forty percent of the foreigners in the city of Munich are EU citizens (EU-27) and 60 percent are third-country nationals. The largest proportion of foreigners in Munich (city) is made up of citizens from Turkey (13.7 percent), Croatia (7.9 percent) and Greece (7.0 percent of all foreigners), Austria (6.9 percent) and citizens of Italy (6.8 percent) (see Table 5.1).

<table>
<thead>
<tr>
<th>Ten major nationalities</th>
<th>Foreigners (Absolute numbers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>42,662</td>
</tr>
<tr>
<td>Croatia</td>
<td>24,646</td>
</tr>
<tr>
<td>Greece</td>
<td>21,870</td>
</tr>
<tr>
<td>Austria</td>
<td>21,627</td>
</tr>
<tr>
<td>Italy</td>
<td>21,064</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>16,502</td>
</tr>
<tr>
<td>Poland</td>
<td>15,118</td>
</tr>
<tr>
<td>Serbia-Montenegro</td>
<td>13,387</td>
</tr>
<tr>
<td>Serbia</td>
<td>10,886</td>
</tr>
<tr>
<td>France</td>
<td>7,403</td>
</tr>
</tbody>
</table>

Source: Statistical office, Munich

Compared with other German cities, Munich has the highest proportion of foreigners of all large German cities. As mentioned before, the skill level of foreigners is relatively low in Germany. But it must be stated that foreigners in Munich are better skilled and better integrated into the labour market than in other large German cities, as the low unemployment rates and the higher proportion of foreigners with secondary and tertiary education demonstrate (see table 5.2).
### Table 5.2: Education level and unemployment rates of German and foreign employees (in percent)

<table>
<thead>
<tr>
<th>City</th>
<th>Unemployment rate, 2007 (in percent)</th>
<th>Proportion of employees with professional training or university degree, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berlin</td>
<td>Foreign 37.0 German 15.5</td>
<td>Foreign 29.3 German 64.9</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>Foreign 17.1 German 9.5</td>
<td>Foreign 38.3 German 71.7</td>
</tr>
<tr>
<td>Hamburg</td>
<td>Foreign 21.6 German 9.2</td>
<td>Foreign 35.3 German 67.9</td>
</tr>
<tr>
<td>Cologne</td>
<td>Foreign 25.7 German 11.8</td>
<td>Foreign 36.4 German 67.6</td>
</tr>
<tr>
<td>Munich</td>
<td>Foreign 12.7 German 6.2</td>
<td>Foreign 41.4 German 73.1</td>
</tr>
<tr>
<td>Stuttgart</td>
<td>Foreign 12.4 German 6.5</td>
<td>Foreign 46.2 German 78.4</td>
</tr>
</tbody>
</table>

Source: Steinhardt, Stiller & Damelang, 2008

#### 5.2.1 Highly skilled migrants in Munich and the Munich region

As data on highly qualified migrants is difficult to obtain, other studies use the number of migrants coming from OECD countries as an indicator of the number of “expatriates”. These studies assume that migrants from developed countries are not likely to be found in unskilled jobs and that their number corresponds roughly to the number of highly skilled foreigners in a certain region. The studies do not include those countries which were sending “guest workers” to Germany as well as - in the case of Munich – Austrians (the high number of Austrians is attributed to the geographical proximity and not to other factors). Compared with other large German cities, Munich had the highest proportion of OECD foreigners in 1995 (Freud, 2001). Today the proportion is 54.4 percent (see table 5.3).

### Table 5.3: Foreigners from OECD countries in Munich (absolute numbers and percentage of all foreigners)

<table>
<thead>
<tr>
<th>Foreigners from OECD countries</th>
<th>Absolute numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreigners from OECD countries</td>
<td>169,347</td>
<td>54.4</td>
</tr>
<tr>
<td>Foreigners from OECD countries, not including “guest workers” (Italy, Spain, Greek, Turkey)</td>
<td>80,052</td>
<td>25.7</td>
</tr>
<tr>
<td>Foreigners from OECD countries, not including “guest workers” and Austrians</td>
<td>58,425</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Source: OECD, 2008

In order to make statements about the number of highly skilled foreigners on the Munich labour market, data from the Federal ministry of labour have been analysed for this report. The data cover workers subject to social security only; freelancers as well as civil servants are not included. As the ISCO-88 classification is not in use in Germany, major occupational groups had to be converted in line with the ISCO terminology. This was possible, and therefore the data represent more or less the ISCO 1-3 groups which are usually used in studies to describe highly qualified workers. Furthermore, the category of foreigners with
university degrees was used in the following data to determine the number of highly skilled migrants.

In the Munich region the proportion of foreigners of all employees subject to social security contribution is 13.6 percent, and in the city of Munich it amounted to 15 percent in 2007. Munich has one of the highest proportions in comparison with other German cities. These numbers have remained stable since 1999.

According to the available data, 33 percent of all employees in the region and 35.8 percent in the city belong to skill-intensive occupations. The proportion of foreigners employed in skill-intensive occupations was 7.8 percent in the region and 5.8 percent in the city of Munich in 2007. Thus as on the national scale, foreigners are underrepresented in skill-intensive occupations on the Munich labour market.

The proportion of employees working in skill-intensive occupations out of all employees rose only slightly, from 33.4 to 35.8 percent, in the city of Munich between 1999 and 2007 (Munich region: 31.3 to 33 percent). The proportion of foreigners out of all employees working in skill-intensive occupations rose in the Munich region from 6.3 to 7.8 percent, while it declined in the city of Munich from 6.5 to 5.8 percent from 1999 to 2007. In the years from 1999 to 2002 and then again from 2004 to 2007 a rise in numbers is discernable, especially in the region of Munich (see figure 5.2).

**Figure 5.2: Foreigners in skill-intensive occupations in the city and region of Munich, 2007**

![Graph showing the number of foreigners in skill-intensive occupations in Munich and region from 1999 to 2007.](image)

*Source: Federal Ministry of Labour; own calculation*
The same applies for the numbers of foreign employees with university degrees in the region of Munich (see figure 5.3).

**Figure 5.3: Foreign employees with university degrees in the city and region of Munich, 2007**

The proportion of foreign employees with university degrees out of all employees rose from 6.9 percent in the year 1999 to 10.9 percent in 2007 in the region of Munich, and from 7.0 percent to 10.5 percent in the city of Munich.

Looking at the nationalities of foreign employees with university degrees, it becomes apparent that most highly skilled foreigners in the region of Munich come from the EU countries Austria, France, Italy and the UK (see figure 5.4 and 5.5). The high proportion of Austrians can be attributed to the closeness of Munich to Austria, and the fact that there is no language barrier. Furthermore, the Munich labour market seems to be attractive to Austrian workers.

**Figure 5.4: Ten major nationalities of foreign employees with university degrees in the region of Munich 1999 and 2007**
However, looking at the development of the numbers of different nationalities in the years 1999 to 2007, it is noticeable that the proportion of citizens of the UK, the US, Turkey and Austria rose by only 10 to 30 percent, whereas the proportion of citizens of the Russian Federation almost tripled, and that of Polish and Chinese citizens more than doubled. The proportion of highly skilled Italians, French and Spanish people also doubled.

The number of highly skilled employees coming from the EU member states rose from 6,646 in 1999 to 10,424 in 2007. Among EU citizens, the rise in numbers of highly skilled French, Italian, Spanish and Polish employees is remarkable (see figure 5.5). The rise in highly qualified Italian employees is particularly noticeable, as the Italians like the Greeks belong to the groups of migrants who came as guest workers to the region of Munich. This means that nowadays the Munich labour market seems to be attractive to qualified Italians.

Concerning third country nationals with university degrees in the Munich region, most highly skilled migrants come from the US, Russia and China (see figure 5.4). Remarkably, there are more highly skilled employees from China in the Munich region than from Turkey, albeit the Chinese population accounts for only a very small share of the whole population of the region of Munich.

Looking at the different nationalities in detail, the proportion of highly skilled Chinese doubled, that of Russians tripled, and that of Indians even quintupled between 1999 and 2007. The number of Indians began to rise in 2001 when the Green Card for ICT employees came into effect.

According to data from the “Kreisverwaltungsreferat”, which is the institution that hands out residence permits for the city of Munich, the number of foreigners receiving a (permanent) settlement permit (§ 19, Residence Act) and who are admitted to the labour market without restrictions is very small (see figure 5.7). One can see a rise in numbers, albeit on a very low
In 2008, most permanent residence permits were held by citizens of the US (59), citizens of Russia (12) and Turkey (11) as well as Canada (9) and India (8).

Table 5.4: Different forms of residence permits issued by the city of Munich 2006 to 2008

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>§19 of the Federal Residence Permit Law (permanent)</td>
<td>50</td>
<td>134</td>
<td>170</td>
</tr>
<tr>
<td>Other residence permits (permanent)</td>
<td>158,309</td>
<td>158,250</td>
<td>158,509</td>
</tr>
<tr>
<td>Training (other than academic studies)</td>
<td>682</td>
<td>n.a.</td>
<td>822</td>
</tr>
<tr>
<td>Academic studies</td>
<td>6,031</td>
<td>5,992</td>
<td>6,350</td>
</tr>
<tr>
<td>For the purpose of employment</td>
<td>6,237</td>
<td>5,931</td>
<td>6,350</td>
</tr>
<tr>
<td>Self-employment</td>
<td>120</td>
<td>142</td>
<td>175</td>
</tr>
<tr>
<td>Humanitarian, political, international law reasons</td>
<td>7,646</td>
<td>7,889</td>
<td>7,659</td>
</tr>
<tr>
<td>Family unification</td>
<td>25,034</td>
<td>30,423</td>
<td>30,723</td>
</tr>
<tr>
<td>Special regulations</td>
<td>1,241</td>
<td>1,669</td>
<td>1,847</td>
</tr>
<tr>
<td>Other residence permits</td>
<td>34,781</td>
<td>n.a.</td>
<td>16,198</td>
</tr>
<tr>
<td>All</td>
<td>240,131</td>
<td>210,430</td>
<td>228,078</td>
</tr>
</tbody>
</table>

Source: Kreisverwaltungsreferat / Ausländerwesen (Aliens’ authority of Munich); own calculations
5.2.2 Migration policy and institutions in Munich

In Munich - as in every other city or county in Germany - two independent authorities are involved in the issuing of a residence permit for employment purposes: the Aliens’ authority and the office of the Federal Ministry of Labour in Munich. The Aliens’ authority looks at the foreigner’s application with respect to policy aspects of immigration, integration and social matters. If it concludes that a residence permit must not be issued for compelling reasons, it may reject the application without consulting the Federal Ministry of Labour. The Federal Ministry of Labour examines the aspects related to the labour market. As already explained in chapter 4.2.2 Legislative context for the entry of highly qualified third-country nationals of this report, the approval procedure depends on the form of employment (permit-free employment etc.). The examination procedures for both institutions are defined by national law. Thus the regional bodies have little scope to take into account the regional context.

According to the representative of the Federal Ministry of Labour in Munich who is involved in applying the so-called “priority test”, the changes in the legal regulations of Germany’s immigration law have made the immigration of highly skilled immigrants easier. The “priority test” means that if a third-country national applies for a temporary residence permit, the Federal Ministry of Labour has to make sure that there is no other German or EU citizen available for the job which the third-country national has been offered. This test takes usually between one day and six weeks. The priority test does not apply for third-country nationals who have a German university degree, and it is usually omitted when the candidates are sent to Germany by international firms for a certain period of time (expatriates). Unfortunately, there are no data available on how many priority tests have been carried out in the region of Munich in recent years. In the year 2008, the rejection rate was ten percent. According to the representative of the Federal Ministry of Labour, the majority of applications in the Munich region are in the field of ICT, engineering and biotechnology, as well as accountancy.

In contrast, a representative of the Aliens’ authority in Munich regards the law as still too restrictive to fuel an influx of highly qualified third-country nationals. In her opinion, a second major obstacle for highly skilled migrants is that their university degree or professional training is very often not recognised by German institutions and employers. This applies especially for the field of medicine as well as architecture.

Concerning the city’s policy on migration, it must be stated that there are no special programmes or contact persons, especially at the city council, for highly skilled migrants. In the same way as migration research has traditionally focused on the analysis of labour migrants from lower social classes with regard to the economic and social consequences of migration, regional migration policy of German cities focuses on migrants from lower social classes and their problems on the labour market and housing market as well as in education (Freund, 2001). Munich is no exception in this respect. The local authority that deals with migration is the Authority for Housing and Migration (Amt für Wohnen und Migration) within the Department for Social Issues. In the second policy paper on migration and integration, the aims of the city of Munich concerning foreigners in Munich and the measures and programmes supporting migrants are described. The report can be read as a commitment by the city of Munich to a pluralistic and open society. However, the report focuses solely on problematic aspects which could hinder the integration of foreigners: their limited access to
work, education and housing, and crime, poverty and language skills. Highly skilled migrants or “success stories” are not mentioned in the report.

Other important institutions for highly skilled foreigners in Munich are the numerous international schools. There are two English-speaking schools in the region of Munich, two bilingual (English / German) schools, one French, eight Greek, one Japanese and one Jewish school in the city of Munich. Furthermore, there is one European school predominantly for the children of employees of the European Patent Office.

### 5.2.3 Foreign scientific university employees and foreign students in Munich

Scientific mobility plays an important role in the field of migration of the highly skilled. Studies have found that a high proportion of mobile scientists have some experience of mobility during their time as students, and that students who had spent some time abroad show a higher propensity to move in the future (Guth, 2007). Moreover, due to the importance of social networks in migration (Arango, 2000), foreign students who have spent a year in Munich are more likely to come back after their degree, or the ones who do their degree at one of Munich’s universities might decide to stay in Munich. Therefore, a closer look at the numbers of foreign students and scientists at the universities of Munich is important.

Munich is the second largest university centre in Germany, after Berlin. In the academic year 2007/2008, 13,112 foreign students were enrolled at Munich’s universities (see table 5.5).

<table>
<thead>
<tr>
<th>University</th>
<th>Number of Students (total)</th>
<th>Foreigners</th>
<th>Proportion of foreigners (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ludwig-Maximilian university</td>
<td>41,757</td>
<td>6,129</td>
<td>14.7</td>
</tr>
<tr>
<td>Technical University Munich</td>
<td>22,760</td>
<td>4,176</td>
<td>18.3</td>
</tr>
<tr>
<td>Bundeswehr University</td>
<td>3,668</td>
<td>68</td>
<td>1.9</td>
</tr>
<tr>
<td>Munich Institute of Higher Education for Politics</td>
<td>654</td>
<td>124</td>
<td>19.0</td>
</tr>
<tr>
<td>Munich School of Philosophy</td>
<td>338</td>
<td>66</td>
<td>19.5</td>
</tr>
<tr>
<td>Academy of Fine Arts</td>
<td>591</td>
<td>146</td>
<td>24.7</td>
</tr>
<tr>
<td>University of Music and Performing Arts</td>
<td>346</td>
<td>49</td>
<td>14.2</td>
</tr>
<tr>
<td>Munich Academy for Television and Film</td>
<td>747</td>
<td>263</td>
<td>35.2</td>
</tr>
<tr>
<td>Munich University of Applied Sciences</td>
<td>13,115</td>
<td>1,968</td>
<td>15.0</td>
</tr>
<tr>
<td>Stiftungsfachhochschule München</td>
<td>1,654</td>
<td>96</td>
<td>5.8</td>
</tr>
<tr>
<td>Munich Business School</td>
<td>276</td>
<td>27</td>
<td>9.8</td>
</tr>
<tr>
<td>Total</td>
<td>85,906</td>
<td>13,112</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Bavarian State Office for Statistics and Data Processing, Statistical Office of Munich*

The highest proportions of foreign students are seen in those institutions that specialise in the creative fields. 1,337 foreign scientists were working at one of the universities in Munich in 2006 (see table 5.6).
Table 5.6: Foreign scientists at universities in the Munich region 2006

<table>
<thead>
<tr>
<th>Inland</th>
<th>Foreigners</th>
<th>Total</th>
<th>Proportion of foreigners (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ludwig-Maximilian university</td>
<td>4,981</td>
<td>630</td>
<td>5,611</td>
</tr>
<tr>
<td>Technical University Munich</td>
<td>3,828</td>
<td>626</td>
<td>4,454</td>
</tr>
<tr>
<td>Bundeswehr University</td>
<td>409</td>
<td>22</td>
<td>431</td>
</tr>
<tr>
<td>Munich Institute of Higher Education</td>
<td>404</td>
<td>21</td>
<td>425</td>
</tr>
<tr>
<td>Munich School of Philosophy</td>
<td>21</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Academy of Fine Arts</td>
<td>67</td>
<td>11</td>
<td>78</td>
</tr>
<tr>
<td>University of Music and Performing Arts</td>
<td>77</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>Munich Academy for Television and Film</td>
<td>30</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Stiftungsfachhochschule München</td>
<td>31</td>
<td>2</td>
<td>33</td>
</tr>
<tr>
<td>Munich Business School</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>9,854</td>
<td>1,337</td>
<td>11,191</td>
</tr>
</tbody>
</table>

Source: Bavarian State Office for Statistics and Data Processing, Statistical Office of Munich

Most of the scientists who are employed at one of the universities of Munich come from an EU country (see figure 5.8). Twelve percent come from Switzerland and Austria. 31 percent come from a non-European country.

Figure 5.8: Countries of origin of foreign scientists at the universities of Munich 2006

Source: Bavarian State Office for Statistics and Data Processing, Statistical Office of Munich

Both the big universities – the Technical University (TUM) and the University of Munich (LMU) - have international offices which are concerned with the exchange and mobility of students and scientists and welcome activities. Both universities have representatives who are especially concerned with the support of international scientists and professors. They support foreign scientific personnel in areas like housing, schooling, visas and other matters of integration (e.g. activities in the Munich region).

According to the representative of the Technical University, the factors which lead scientists to choose Munich are almost purely job-related. The attractiveness of the city only plays a role if they can choose between several locations. Normally the quality of research institutions and the kind of research they can accomplish here determines their choice for Munich. In her
experience, many of the researchers have no information about the city at all before they come to the Munich region.

The motives for students are different. The representatives of both universities stressed that the low German tuition fees play a significant important role. Concerning the foreign students of the TUM, it is remarkable that the number of students from Europe dropped slightly since 2001/02 whereas the numbers from Asia, Africa and Latin America have risen. This trend is reflected in the figures for the highest originating countries on each continent (China and India, Mexico and the USA, Tunisia, Italy and Bulgaria). Looking at the number of students by their county of origin, the 800 students from China form the largest group of foreign students at the TUM. Their number has doubled since 2001/02.

Both universities have offices abroad to recruit students and researchers as well as to enhance mobility and research contacts. The TUM has the German Institute of Science and Technology in Singapore, which is the first spin-off of a German university abroad and holds offices in Delhi, Beijing and Moscow. The LMU holds offices in Bangkok, Shanghai and New York.

The representatives name three main problem areas concerning their daily work with foreign scientists: the low pay of scientists in Germany, language problems, and the tight and expensive housing market in Munich.

In comparison with other countries like the US or Canada, the salary of professors and researchers is rather low in Germany, which is a major obstacle for German universities in attracting the best people in their fields.

Despite all the internationalisation efforts by the universities, the language spoken at the universities as well as in many research teams is still German. Only very few courses are taught in English. Furthermore, a great deal of information on the internet on the city of Munich, for example on public authorities or cultural events in the city, as well as on insurance companies or public transport, is only available in German. Consequently, the low salaries and the language barrier make English-speaking countries more attractive for many foreign students and researchers.

Another major problem area is the tight and expensive housing market in Munich. This applies to students but also to doctoral students and post-doctoral researchers. In particular, the segment of furnished residences which can be rented for limited periods of time is underdeveloped.
6 RESEARCH DESIGN AND METHODOLOGY

6.1 The qualitative research approach

For the empirical research, a qualitative research design was selected. The aim of the empirical investigation was to answer the following questions: which factors were decisive behind the decisions of the trans-national migrants to settle at a certain location? What was their main motivation to come to work and live in Munich? Migration research has traditionally focused on less privileged groups of migrants and there are no studies about highly skilled migrants in Munich, and hardly any in Germany. For this reason, a qualitative and exploratory approach is most suitable here, since with this methodological approach, new and context-specific perspectives and explanatory approaches can be gained (Glückler, 2004).

In qualitative social research, the focus is not on checking predetermined hypotheses and concepts, as is the case with quantitative approaches; rather, the hypotheses or theorising come at the end of the research process. “The aim of research here is not so much to check what is known (such as pre-formulated theories), but to discover new things and to develop empirically grounded theories” (Flick, 1999).

Fundamentally, a piece of circular research is structured as follows: from the researchers’ knowledge, first of all assumptions about the subject under investigation are made, and building on that, initial qualitative open surveys, such as for example guided interviews or expert discussions, are carried out. The new information that is thus obtained is used to modify, supplement or tighten up assumptions, and these in turn are taken into account in the further research process. In this way, newly obtained information and aspects can be included in the investigation, and the research tools (such as e.g. a guideline) can be adapted if necessary. Through constant reflection on the results, one obtains a comprehensive understanding of the subject under investigation, thus enabling empirically grounded formation of hypotheses or theories (Flick, 1999).

Advantages of the qualitative approach include, for one thing, that through the open approach, new aspects can be included in the research that had not been considered by the researcher. The data forming the basis of qualitative research projects usually comprise text material that has been obtained from interviews with varying degrees of structuring, or from participative observations (Hopf, 1995).

The empirical survey for this project began with a comprehensive search of data and literature on different groups of migrants in Germany and the Munich region. This was followed by partially standardised interviews in the form of topic-centred guided and expert interviews.
6.2 Expert interviews and guided interviews

6.2.1 Expert interviews

For this study, we have pursued two routes: expert interviews and guided interviews. The interviews with experts at the start of the research process were above all important for obtaining initial general information about the following subjects:

- the legal and regulatory framework for the admission of highly skilled migrant workers for labour purposes
- the procedure which is followed by the respective institutions at the regional level before a residence permit or a visa for employment purposes is issued
- data on the different groups of migrants in Munich
- problems that different groups of highly skilled migrants are confronted with (labour market / housing)
- regional policy on highly skilled migrants

The interviewed experts are representatives from the area of public administration (Aliens’ Authority, Federal Agency of Labour), university employees who are in charge of foreign scientists and students at the Technical University, as well as relocation services (see table 6.1).

<table>
<thead>
<tr>
<th>Table 6.1 List of interviewed experts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>City of Munich</strong></td>
</tr>
<tr>
<td>- Representative from the Kreisverwaltungsreferat (Aliens’ authority)</td>
</tr>
<tr>
<td><strong>Relocation Service</strong></td>
</tr>
<tr>
<td>- Real estate agent</td>
</tr>
<tr>
<td><strong>Federal Agency of Labour</strong></td>
</tr>
<tr>
<td>- Representative concerned with labour permits and priority tests</td>
</tr>
<tr>
<td><strong>University</strong></td>
</tr>
<tr>
<td>- Representative concerned with foreign students and researchers at the Technical University</td>
</tr>
<tr>
<td>- Two representatives concerned with foreign students and researchers at the University of Munich</td>
</tr>
</tbody>
</table>

*Source: own illustration*

The information from the expert interviews was used above all for the description and analysis of different groups of migrants in Munich (see chapter 5). Furthermore, the information obtained from the experts, in other words, their “insider perspective”, was of great importance for evaluating the guided interviews with the highly qualified migrants. It is envisaged that the results of the investigations will be discussed within the framework of a workshop with the interview partners, as well as with the experts from the different institutions.
6.2.2 Guided interviews

The core of this investigation is formed by 25 topic-centred guided interviews with highly skilled migrants working in knowledge-intensive and creative sectors in the Munich city region.

On the basis of qualitative guided interviews, the subjective perspectives, evaluations, or decision circumstances of the discussion partners can be established. As one aim of this research is to trace the decision-making process for migration of the highly skilled, this approach seems especially useful. Furthermore, the advantage of partially standardised interviews is that through openly formulated questions, those people who are interviewed have a wider area in which to frame their answers, and can thus freely express their experiences and views (Bortz & Döring, 2006), which can lead to new and unexpected insights into the topic.

For the topic-centred interviews that were conducted within the scope of this investigation, first of all a guideline was developed, which contains a catalogue of questions on the most important topics. This ensures a certain comparability of the interviews, and during the discussion the interviewers can check whether all the important aspects have been addressed or dealt with adequately. The questions from the guideline did not follow any set order, but were put according to the situation, and depending on the situation, new questions were asked accordingly.

6.2.3 Content of the guideline

The interviews were conducted on the basis of a semi-standardised guideline which contains open questions on the most important topic complexes of the investigation. A short questionnaire which the interviewees filled out before the interview took place enabled the interviewer to adapt the guideline to the respective particularities.

The guideline is divided into 10 thematic focus areas (see guideline in Appendix):

**Education and work experience:** The aim of this topic area was to obtain information about the education of the discussion partner. We tried not only to focus on formal professional titles (institutionalised cultural capital according to Bourdieu, 1984), but also on work experiences and especially work experiences abroad.

In-depth knowledge about the education and cultural capital of the migrants is important in order to understand why he or she is or is not successful in integrating into the regional labour market. Moreover, the focus on the life history of the migrant enables one to trace the decision-making process which precedes the actual decision to migrate.

The actual work situation, in contrast to the work situation in the home country, was also a point of discussion in this part of the interview.
Main motivation to come to live and work in Munich: In order to find out whether the main motivation of the migrants to choose Munich was family-related or job-related, the migrants were asked why they had come to Munich. It was also discussed which role soft factors (tolerance, diversity, quality of life) and hard factors (job, labour market, financial aspects, housing market) had played in their decision-making process.

Actual living situation / daily life: The questions on how migrants found their accommodation and what their actual living situation and neighbourhood is like are intended to reveal how accessible and attractive housing in Munich is for them. Descriptions of their daily life (and of their family) gave insights into the most important problems of the migrants. A special focus was placed on the beginning of their time in Munich: how did they manage their daily life in the new city? Which strategies and coping patterns did they employ?

Role of networks in the migration process / support structure: Social networks relate to the family background of the migrants as well as to friends, colleagues and closer contacts in the region of Munich. Special attention was paid to the question of whether the migrant had known people in Munich before he or she came to Munich, and what role these contacts have played in their decision to come to Munich.

Overall satisfaction and future plans: The last point of discussion was on future plans: whether the migrant plans to stay for a longer period in Germany and Munich, or whether he or she intends to go back to his or her home country.

Within the framework of a pilot test with two migrants, we examined whether the wording of the questions was comprehensible, and whether the choice of questions is consistent. The guideline was revised slightly following the pilot test. Over the course of the investigation, the guideline was repeatedly adapted, in the manner of a circular research process, to the current status of evaluation and knowledge.

6.2.4 Sampling and selection of interview partners

The design of the study focuses on the drivers behind the decisions of transnational migrants to settle and work in the Munich region, and on the situation of the migrants. We assumed that the drivers behind their decision as well as their actual situations differ according to the migration context of the respective migrants.

First of all, we have only interviewed migrants who have no legal problems with respect to their right of residence and work permit which could put them into a disadvantaged position on the Munich labour market. However, we have not differentiated between people who have acquired their academic qualifications in their home country or in Germany.

The cases were selected in a targeted manner, according to several variables. The following criteria were decisive for the structure of the sample:
The research team agreed that some criteria have to be fulfilled:

- people must not have German nationality, even if they are migrants; interviewed people must not speak German as their native tongue (Austrians and Swiss are therefore excluded)
- people must work in a creative or knowledge-intensive occupation (ISCO1&2)
- people must be actually working, looking for work, or be self-employed (high-skilled jobs only).

Furthermore, the sample contains a balance of creative and knowledge intensive workers as well as a balance of women and men. The length of stay is over six months in all cases. We were also looking for a great variety of age groups and different family situations as well as different places of residence (inner city, metropolitan area). Other important criteria were also to have a mixture of migrants who migrated individually and those who were sent to Munich by their company (the classic expatriate, who is in one city only for a limited period of time) and to have a wide range of nationalities from developed, developing as well as transformation countries represented (see table 6.2).

To sum up: the main focus of the empirical study is on highly skilled migrants in the city and region of Munich working in the creative knowledge industries with a residence status, who in terms of access to the labour market are formally in the same positions as the native-born population. The social and cultural background of the sample is relatively diverse: they come from EU countries such as France, Great Britain, the Netherlands, Finland, Italy and new EU countries such as Romania, as well as transformation countries such as Ukraine. Migrants from developed countries such as Canada and developing countries such as India are also represented in the sample. Many of the highly skilled migrants have lived in many countries in the course of their careers.
<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Sex</th>
<th>Age</th>
<th>Nationality</th>
<th>Employer</th>
<th>Occupation</th>
<th>Sector</th>
<th>in Munich since</th>
<th>Family status</th>
<th>Place of residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ann</td>
<td>female</td>
<td>30</td>
<td>Canadian</td>
<td>University</td>
<td>Research scientist</td>
<td>Knowledge intensive</td>
<td>2008</td>
<td>unmarried</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Nanda</td>
<td>male</td>
<td>50</td>
<td>Indian</td>
<td>ICT</td>
<td>IT-expert</td>
<td>Knowledge intensive</td>
<td>1999</td>
<td>married, 1 child</td>
<td>Urban fringe</td>
</tr>
<tr>
<td>Vimal</td>
<td>male</td>
<td>28</td>
<td>Indian</td>
<td>Editor</td>
<td>IT – expert</td>
<td>Knowledge intensive</td>
<td>2006</td>
<td>unmarried</td>
<td>Region</td>
</tr>
<tr>
<td>Viola</td>
<td>female</td>
<td>49</td>
<td>British/Canadian</td>
<td>ICT</td>
<td>Research scientist</td>
<td>Knowledge intensive</td>
<td>1992</td>
<td>married, 3 children</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Thomas</td>
<td>male</td>
<td>33</td>
<td>British/South African</td>
<td>Self-employed</td>
<td>System administrator</td>
<td>Knowledge intensive</td>
<td>2005</td>
<td>unmarried</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Jane Lan</td>
<td>female</td>
<td>46</td>
<td>British/Indian</td>
<td>European Institution</td>
<td>Examiner</td>
<td>Knowledge intensive</td>
<td>1993</td>
<td>unmarried</td>
<td>City centre</td>
</tr>
<tr>
<td>Aseem</td>
<td>male</td>
<td>39</td>
<td>Indian</td>
<td>ICT / Security</td>
<td>Software Engineering</td>
<td>Knowledge intensive</td>
<td>2002</td>
<td>married, 2 children</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Samir</td>
<td>male</td>
<td>48</td>
<td>Iranian</td>
<td>Self-employed</td>
<td>Consultant</td>
<td>Knowledge intensive</td>
<td>2000</td>
<td>married, 2 children</td>
<td>Urban fringe</td>
</tr>
<tr>
<td>Louis</td>
<td>male</td>
<td>46</td>
<td>Belgian</td>
<td>Self-employed</td>
<td>Software</td>
<td>Knowledge intensive</td>
<td>1982</td>
<td>married, 3 children</td>
<td>Urban fringe</td>
</tr>
<tr>
<td>Laslo</td>
<td>male</td>
<td>31</td>
<td>Rumanian</td>
<td>European Institution</td>
<td>Chemistry</td>
<td>Knowledge intensive</td>
<td>2004</td>
<td>unmarried</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Lidia</td>
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<td>31</td>
<td>Spanish</td>
<td>Software</td>
<td>Quality Management</td>
<td>Knowledge intensive</td>
<td>2001</td>
<td>married</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Joaquin</td>
<td>male</td>
<td>35</td>
<td>Spanish</td>
<td>European Institution</td>
<td>Administrator</td>
<td>Knowledge intensive</td>
<td>2001</td>
<td>married</td>
<td>n.a.</td>
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<tr>
<td>Mari</td>
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<td>42</td>
<td>Finnish</td>
<td>ICT</td>
<td>Human resource manager</td>
<td>Knowledge intensive</td>
<td>2008</td>
<td>married</td>
<td>City centre</td>
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<tr>
<td>Henk</td>
<td>male</td>
<td>48</td>
<td>Dutch</td>
<td>European Institution</td>
<td>Lawyer</td>
<td>Knowledge intensive</td>
<td>1989</td>
<td>unmarried</td>
<td>City centre</td>
</tr>
<tr>
<td>Gerard</td>
<td>male</td>
<td>41</td>
<td>French</td>
<td>European Institution</td>
<td>Examiner</td>
<td>Knowledge intensive</td>
<td>2006</td>
<td>married, 2 children</td>
<td>Region</td>
</tr>
<tr>
<td>Marcel</td>
<td>male</td>
<td>33</td>
<td>French</td>
<td>European Institution</td>
<td>Engineering</td>
<td>Knowledge intensive</td>
<td>2001</td>
<td>married, 1 child</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Marie</td>
<td>female</td>
<td>42</td>
<td>French</td>
<td>European Institution</td>
<td>Controlling</td>
<td>Knowledge intensive</td>
<td>2008</td>
<td>married</td>
<td>City centre</td>
</tr>
<tr>
<td>Isabella</td>
<td>female</td>
<td>37</td>
<td>Italian</td>
<td>Editor</td>
<td>Marketing</td>
<td>Knowledge intensive</td>
<td>2005</td>
<td>married</td>
<td>Edge of city centre</td>
</tr>
<tr>
<td>Name</td>
<td>Gender</td>
<td>Age</td>
<td>Nationality</td>
<td>Occupation</td>
<td>Field</td>
<td>Year</td>
<td>Relationship</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
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<td>-----</td>
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<td>-------------</td>
<td>------</td>
<td>----------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Carla</td>
<td>female</td>
<td>32</td>
<td>Italian</td>
<td>European Institution Examiner</td>
<td>Knowledge intensive</td>
<td>2008</td>
<td>engaged</td>
<td>Edge of city centre</td>
<td></td>
</tr>
<tr>
<td>Giovanni</td>
<td>male</td>
<td>33</td>
<td>Italian</td>
<td>European Institution Biochemist</td>
<td>Knowledge intensive</td>
<td>2005</td>
<td>unmarried</td>
<td>City centre</td>
<td></td>
</tr>
<tr>
<td>Aiko</td>
<td>female</td>
<td>48</td>
<td>Japanese</td>
<td>Self-employed Artist / Musician</td>
<td>Creative</td>
<td>1995</td>
<td>divorced, 1 child</td>
<td>Edge of city centre</td>
<td></td>
</tr>
<tr>
<td>Etienne</td>
<td>female</td>
<td>45</td>
<td>French</td>
<td>Self-employed Photographer</td>
<td>Creative</td>
<td>2001</td>
<td>divorced, 2 children married, 3 children</td>
<td>Edge of city centre</td>
<td></td>
</tr>
<tr>
<td>Antoine</td>
<td>male</td>
<td>46</td>
<td>French</td>
<td>Academy of Arts Artist in glas / Lecturer Design</td>
<td>Creative</td>
<td>1992</td>
<td></td>
<td>Urban fringe</td>
<td></td>
</tr>
<tr>
<td>Charles</td>
<td>male</td>
<td>44</td>
<td>French</td>
<td>Self-employed Design</td>
<td>Creative</td>
<td>1990</td>
<td>divorced, 1 child</td>
<td>Edge of city centre</td>
<td></td>
</tr>
<tr>
<td>Demetrius</td>
<td>male</td>
<td>3x</td>
<td>Bulgarian</td>
<td>Architecture Computer Aided Design</td>
<td>Creative</td>
<td>1999</td>
<td>married</td>
<td>Urban fringe</td>
<td></td>
</tr>
</tbody>
</table>
6.2.5 Selection of cases: Theoretical sampling

To identify and contact highly qualified migrants who fulfilled the selection criteria, different strategies were pursued. Firms in the creative knowledge sector were contacted by means of an official letter and asked for support. Furthermore, the universities and languages schools were contacted and asked to issue a notice. All members of the Architectural Association of Munich were contacted by mail, as were two hundred new media firms. In the creative sectors in particular, this strategy was not successful. Finally, personal contacts to firms and foreigners proved to be most successful, as did the announcement of the research project in the extranet of a European institution.

The theoretical sampling of the study ensured that several factors such as a high level of skills, and non-Germans, were kept constant, whilst some potential structuring forces were varied in order to ensure a strong contrast, e.g. gender, family status, self-employed / employed, nationality (see table 6.1). All information about individuals, firms, names was treated anonymously for this report.

6.2.6 Interview situation and analysis of the interviews

At the beginning, the interviews mostly took place at the companies where the migrants worked. As the interview touched also on work and job-related subjects, soon more “neutral” places (university office, café) were chosen, in order to ensure that the discussion partners were not inhibited in their answers. The interviews lasted on average 1 to 1.5 hours. Usually the discussions were conducted by two interviewers, in order to ensure that all aspects of the guideline were adequately dealt with, and new aspects were investigated further. For each interview, a memo of the most important statements and details about the interview situation was produced.

The discussions were recorded, and subsequently transcribed in full and anonymised. After transcription, an initial evaluation of the interviews was made, the results of which flowed into the further progress of the research.

The evaluation of the interviews is represented by a textual analysis of the content. The analysis is based on the principles of qualitative content analysis according to Mayring (2003). The aim of this evaluation procedure is to reduce the textual material to a category scheme that applies across cases, and which on the one hand results deductively from the guideline as well as from existing theoretical approaches or hypotheses, and on the other hand is obtained from the material (Bortz & Döring, 2006). The reduction of the data material is simultaneously associated with a generalisation of the results at an abstract level. This method enables a comparative analysis of the individual statements about thematic aspects, and helps with the identification of causal effects. Through the category scheme, which is applied equally to all cases to be investigated, the interpretation of the text material remains comprehensible inter-subjectively.

In the present investigation, the category scheme was developed in a two-stage analysis process. First of all, two example interviews were selected from migrants with different
migration motives, and these were initially coded openly and thematically (Flick, 2002). In a further step, the codes that were produced in this way were further generalised and abstracted in a group discussion amongst the project team, and eventually a final coding scheme and initial hypotheses or guideline questions for the analysis of the text material were drafted. Coding of the interviews was carried out finally with the aid of the program for computer-assisted qualitative data analysis, MAXQDA.

6.2.7 Creating a typology

Subsequently, the cases were studied according to the principle of minimum / maximum contrast in respect of the answers to the questions posed. The analysis of the empirical material can be understood as aiming at the creation of empirically-based hypotheses. The corresponding method of analysing the data is based on grounded theory as well as on the concept of the construction of types (Glaser & Strauss 1967; Kluge, 2000). The method of constructing types combines inductive elements (based on research questions) as well as deductive elements (based on empirical material) and has the generalising character of a certain number of cases studied.

6.3 Problems and limitations

Unfortunately we were not able to contact and interview as many creative as knowledge workers. Thus, creative workers and artists are underrepresented in the sample.

Although a wide variety of nationalities - including Asians - are represented in this study, we did not succeed in interviewing highly skilled Chinese migrants who are a growing group on the Munich labour market.
The empirical results of this study derived from a comparative case analysis of the interviews form the subject matter of this chapter, which is intended to provide answers to the following questions: What are the motives of highly skilled foreigners for migrating to the city and region of Munich? How satisfied are they with their living and working environments there? How satisfied are they with what is on offer (education, culture, leisure) in the city or in the Munich region? Thus, this chapter will be concerned with an examination of the experience of highly skilled migrants who have sought job opportunities in the Munich city region.

The chapter is divided into several parts. First of all, the interviewed migrants are introduced. In a second step their decision process and the most important motives for migrating to the Munich city region will be revealed. Then, the four different types of highly skilled migrants emerging from a comparative analysis of the interviews will be described: researchers, self-employed people as well as advantaged and less advantaged foreigners. This will be followed by a discussion of the most important points which came up in every interview. The last point will be a discussion of the opportunity structure of Munich for the different groups of highly skilled migrants.

Whenever it is possible, the results of this analysis will be compared with the results of other studies as well as with previous ACRE studies. Firstly, we examine the results of a survey among creative knowledge workers in the city and in the Munich region about their living and working environments (Hafner, Heinritz, Miosga & von Streit 2008) as well as the results of interviews with managers of creative and knowledge-intensive firms on their main drivers of settlement in the Munich region (von Streit, forthcoming).

7.1 The highly skilled migrants in this study: Who are they?

Within the framework of this study, a total of 26 highly skilled migrants, 15 men and eleven women, were interviewed. Six of them work in the field of the creative industries and 20 in the field of the knowledge-intensive industries. Most of the creative workers are self-employed (4 persons), whereas only three of the interviewed knowledge workers are. Concerning their country of origin, eight of the discussion partners are third-country nationals coming from Canada (2 persons), India (3 persons), Japan, Ukraine, South Africa and Iran. 17 migrants come from an EU country. Most of them are from France (6 people), Italy (3 people) and Great Britain (3 people).

Concerning their family status, most of the interviewed migrants are married or engaged (14 people) and ten of them have children. Concerning the age of the discussion partner, most of them are in their forties (12 people), ten are between 30 and 40 years old, two are below 30
years old, and one interview partner is over 50 years old. Most of them came to Munich in the year 2000 or after (16 people), seven came in the 1990s and two migrants came before 1990. Six of the interviewed highly-skilled migrants came as expatriates; the others came on their own. A special feature for Munich is that nine of the interviewed migrants work for a big European institution in Munich. They enjoy privileges like an international and English-speaking work environment, an international school for their children and very high salaries.

7.2 The decision process and the most important “triggers” or motives for migration

In the discussions with the highly skilled migrants it became apparent that most of them had already lived abroad and that Munich was not the first foreign city they had lived and worked in. It was striking how many of them had some experience of mobility before, either at the undergraduate level or during their professional career. This led us to the question of why the highly skilled migrants are mobile in the first place. How did the decision to migrate develop? In a second step, the actual motives for migrating to the Munich city region will be discussed. However, it can be stated that the motives for migrating can be divided into general motives for being mobile and working in another country, and motives for working in Germany and in the Munich city region.

7.2.1 The decision-making process

Most of the migrants formed the dream or the plan to migrate step by step in their childhood or as young persons. Thus, biographical experiences play an important role for later life, as the experience of Viola shows. She explains:

“I have not been to Germany during my university studies. Actually much earlier. My parents were both university professors, so they always had sabbatical years. When I was growing up we had a year in Germany; I must have been around ten years old. I was in a boarding school in the Black Forest. So as a child I had been to Germany for a year and my mother is originally from Germany. So that explains that story. And then we had a sabbatical year in England and in Jülich near Cologne. (...)Yes, I think the fact that I was raised very internationally had a big effect on being willing to live my adult life more internationally too, and to teach that to my children”.

(Viola, Canadian, 49 years old, knowledge worker, married, three children).

In the case of Marie, a French knowledge worker, the wish to work and live in Germany has to do with the “European Spirit” she experienced in her youth and childhood. She explains:

“I grew up when the European spirit was very strong. At that time, it had been Schmidt and Giscard, [...] and later Mitterrand. So Germany and France had a strong partnership. This was one reason for me to open my eyes because in my opinion France was too introverted, only concentrating on itself, and I wanted to go somewhere else, to see something else”.

(Marie, French, 42 years old, knowledge worker, married)
The family background also plays an important role: especially the interviewed migrants from India grew up in families where some members had migrated to the US. They describe migrating to another country and living abroad as a normal thing to do, as they have experienced it as children in a positive way.

Furthermore, many highly skilled migrants had studied abroad. This raised their cultural competence and their language skills and gave them self confidence and the idea that living in another country is possible and might even be more interesting and fulfilling than in their home country. For example Samir, an Iranian knowledge worker, went to a German school in Teheran and studied in Geneva and in Boston (USA). He emphasises that he enjoyed the international atmosphere of Geneva very much. He has also worked in Canada, Sweden and other German cities. Concerning his cosmopolitan attitude he explains:

"I have difficulty finding roots anywhere because I would like to live and learn a lot from cultures all over the world. So this is why I am a moving person”.

(Samir, Iranian, 48 years old, knowledge worker, married, two children)

Previous contact with Germany, such as going to a German school in the case of Samir, or spending a year in Germany as a student, or knowledge of the German language, plays an important role in finally choosing Germany as a destination. Thus knowledge of the culture and the language seems to be of pivotal importance for migration decisions. This is affirmed by Marcel, a French knowledge worker who explains his reasons for coming to Germany in the following way:

"It’s a matter of personal history because a part of my family came from Alsace, so the German language was basically one of the languages I had learnt, and then I already knew it better than English, and then a logical step was to go to Germany. So I already had this personal connection to Germany.”

(Marcel, French, knowledge worker, 33 years old, married, one child)

These findings are in line with other research results. In recent studies, Bürgelt (2003) and Bürgelt (2008) have analysed the main motives of German migrants who migrated to New Zealand. The most important results of these studies were that the final decision to migrate is the result of a decision process which sometimes lasts for years. This decision process is influenced by individual factors of the migrant (e.g. biographical experiences, feelings, skills, attitudes) as well as environmental, societal and economic factors.

Furthermore, research among mobile scientists has found that those scientists who have some experience of mobility at the undergraduate level, and students who had spent some time abroad, show a higher propensity to move to another country in the future. Mobility at the undergraduate level provides students with the experience of what working and living in another country might be like, and it offers them insight into the working conditions and everyday life in the host country and host city (Ackers et al., 2007).
7.2.2 Factors influencing the choice of the Munich region: mobility triggers

In general, traditional migration literature tends to view the motivation for moving and the choice of the destination country or city in terms of push and pull factors. Basic economic migration models emphasise wage differentials as reasons why migrants are moving and choosing a particular region. Other factors which turn up in migration research are financial security and working conditions (see also chapter 2 of this report). Although other factors might be taken into account, migration literature supposes that potential migrants do a kind of cost-benefit analysis before they decide to move (Guth, 2007). The literature indicates that “migration starts with imaging the new destination, continues with balancing benefits and costs, and ends with an actual move” (Hadler, 2006). Particularly in the literature on highly skilled migrants, the main drivers which are discussed are improved working conditions, pay, and opportunities for career enhancement. More personal factors are less accentuated in the literature.

The discussions with highly skilled migrants in the Munich city region have shown that the drivers for settlement there are much more diverse and complex and do not necessarily relate to their expertise only.

Guth (2007) has shown in her research on the mobility of scientists that migration and the choice of location is - apart from the influence of push and pull factors - also linked to certain mobility triggers. Those mobility triggers can be impetuses, events, persons or contexts. Mobility triggers cannot necessarily be planned or controlled by the migrants. They are the factors which induce mobility and lead to the choice of a certain location. Some possible mobility triggers are networks, knowledge of the city from former stays, family contexts, or the possibility to enhance career prospects.

In principle one can distinguish between work and family-related motives. Some of the migrants have chosen Munich solely for work-related reasons; the city itself did not play a role at all. This is for example the case for scientists and people employed at the universities.

In other cases the decision has nothing to do with the job or business but the highly skilled migrants came to Munich for purely family-related reasons. For example, they married a German man or woman and the couple decided to settle in Munich.

In most cases, it was a combination of motives: a job offer together with personal reasons, as Marcel, a French knowledge worker, explains:

“I had the opportunity to study in Germany first, so it was clear for me that working in Germany was a possibility. Then, exactly at the same time when I finished my studies, I married and then my wife already had a job in France. Although I knew it is a good place to work here, I didn't choose to come to Munich straight away because I wanted to have some work experience in France first, and the other point was that my wife wasn't ready to take this step and move to Germany. The final trigger was the birth of my daughter and then my wife was forced to stop working for a while. Then it was a good opportunity to come here because there was this offer from the xy (European Institution). Yeah, so the deciding step was to combine the good job opportunity with personal and family organisation.”

(Marcel, French, 33 years old, knowledge worker, married, one child)
The quote illustrates also the important role of the partner in the decision-making process for people who are married or who are living in a close relationship.

Social networks also play an important role in the choice of Munich because they provide information about the city region, which subsequently lowers the costs of a move. This explains why people tend to migrate to countries with which a network has been established. Therefore, it has been claimed that “it can be safely said that networks rank among the most important explanatory factors for migration” (Arango, 2000, p. 291).

This fact could also be retrieved in the interviews with the migrants in the Munich region. Many of them had contacts with people living in Munich: relatives, friends or colleagues who helped them during their first time in Munich, as the following quote illustrates:

“I was not helped by my employer, but by the friends I had who were already working here and who could arrange the meetings with the estate agents. Well, I couldn’t come from Paris every time and I needed to have the flat really the day I was coming because of my small daughter who was three months old at that time, so the friends helped me, they sent me photos and they talked with the people, the estate agents and so on.

(Marcel, knowledge worker, 33 years old, French, married, one child).

The role of hard and soft factors will be discussed in chapter 7.4.5 of this report.

## 7.3 Groups of migrants

After the analysis of the interviews, it was decided not to group the migrants according to their motives for coming to Munich. In order to understand why the interviewees stressed such different points about Munich in the discussions, factors like their employment status (employed / entrepreneur or self-employed) and their cultural, social and economic capital (Bourdieu, 1984; see also Verwiebe, 2008) turned out to be significant. These are the factors which explain the differences between the migrants.

Cultural capital can be measured in terms of the possession of educational capital and education titles. The social capital is based on the social networks the migrants are integrated into. The economic capital as well as the types of occupational positions the migrants possess place them in different social classes. Another factor for the formation of groups is whether the social status changes with migration, namely if the migrants experience upward / downward mobility. It is only the group of researchers that is not moulded by the above dimensions. They form a group of their own because they enact a certain form of mobility.

In order to illustrate the most important characteristics and to draw a richer picture of every group, one typical case will be presented in each of the following chapters.
7.3.1 Researchers as a special type of highly skilled migrant

The case study: Ann is 29 years old; she is Canadian and has studied biomechanics and physiology. She completed her Master’s in Toronto. She came to Munich with a fellowship and works as a researcher at the University of Munich. She plans to stay temporarily in Munich for one year. Her migration reason is purely job-related. She did not know a lot about Munich before she came here. Her main motivation for the choice of destination is her research subject and the research facilities at Munich University. In the case of researchers and scientists, the quality of research facilities determines where they go – family and partnering issues can play a role but the city itself is not important. This dimension defines the group of researchers and differentiates it from the other groups of highly skilled migrants presented below.

Ann explains her motives for coming to Munich as follows:

“I came for research. I didn’t really think of the city. As a researcher, you go where the research takes you. You don’t think much about where it is going to be. You follow a subject and then the subject takes you somewhere. And the methodology I use for my PhD thesis is based on a classification system that the World Health Organization uses and there is a World Health Organization research branch in Munich at the university. And I met someone at a conference who is sort of a leader in that area and wanted to learn more about the methodology from them, and first they said why don’t you come to Munich for a few weeks and I said oh great. And then it just turned into a year-long thing and I got an EU fellowship to do it.”

(Ann, Canadian, 29 years old, knowledge worker, not married)

Ann has always anticipated that as a researcher she has to be mobile and flexible about where her place of work will be, as the following quote shows:

“I definitely knew that in my future I will be doing some travelling and experiencing places that were different, very different from what I was doing, and now that I am here I think the benefits start to show once you are here because as a researcher you are telling yourself ‘I am going to be flexible’.”

(Ann, Canadian, 29 years old, knowledge worker, not married)

Her argumentation is typical for scientists, especially for those in their early career and doctoral students. As other studies have shown, e.g. a study by Ackers et al. (2007) on the mobility of Polish and Bulgarian scientists coming to the UK and Germany, researchers in general view mobility in a positive light and accept the likelihood that it will be a part of their career trajectory. So their most frequently cited reason in the above mentioned study for working abroad was the exchange of scientific ideas, sharing knowledge and benefiting from other approaches in doing science.

Ann’s choice of destination was influenced by a contact she had made at a conference, so networks played an important role for her choice of Munich. The importance of networks in facilitating migration is recognised in migration research. However, Ackers et al. (2007) draw attention to the fact that for scientists especially ad hoc networks are important as they move with little corporate support. In contrast to typical expats who are sent by their company on a
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Temporary basis, they have to organise their move on their own. Scientific mobility therefore "takes place through networks, individual motivation and risk" (Ackers et al., 2007). The example of Ann also shows the importance of individual fellowship schemes in bringing foreign researchers to Germany as they provide a relatively risk-free way to make mobility happen.

In comparison with the group of advantaged migrants, the economic capital of researchers is lower. Consequently, the biggest problem for young researchers and scientists is finding a flat in Munich’s tight housing market, firstly due to their limited economic resources and secondly because there is only limited availability of furnished accommodation that can be afforded by young researchers – either the apartments are extremely expensive or they are poorly furnished. Thirdly, short-term contracts are less accepted by landlords. These points were also confirmed by the representatives of the universities who deal with foreign students and university employees.

7.3.2 Entrepreneurs and self-employed migrants

Included in this group are migrants who are active in the knowledge-intensive and creative sectors. The motives for why entrepreneurs or self-employed migrants settle in the Munich city region are diverse: they come either for job-related or family-related reasons. What they have in common is that in order to make a living, they have to gain access to the markets in the Munich region or in Germany, and to find customers for their products. Thus they have very different priorities and see Munich from a very different viewpoint than the other groups.

A typical case of an entrepreneur in the knowledge-intensive sector is Thomas, who was born in South Africa and lived there until he was 17. Then he went with his family to the U.K., where he took some classes in computer science in Warwick. He took one year off from university and established a little business and then decided to quit university. After that he worked as a computer specialist in London and in San Francisco. He became frustrated by the thought of staying in London forever and took a German course in Berlin in 2005. On his way back to London he got an interview at the European Patent Office in Munich (EPO) (arranged by a recruitment consultant), flew to Munich and got the job where he started two weeks later. In 2008 he quit the job at the EPO, which he found not challenging enough, and then started to set up his own business as a computer specialist.

He regards Munich from the perspective of an entrepreneur and stresses the positive factors of Munich for his business. He explains:

"But I think, the rest of my team would really agree with me, it is a very nice place to be orientated. Particularly for the work that we do, because we speak to a lot of venture capitalists and it's very technology-orientated. But Munich is a good sort of hub for that in Germany. I mean, I can't think of a better place to do what we're doing than Munich. There are a couple of people doing venture capital work in Frankfurt, there is one that we know in Berlin but that's it. And then it's ten or fifteen here in Munich."

(Thomas, British / South African, 33 years old, knowledge worker, not married)
Another entrepreneur who works as a consultant stresses the good infrastructure, the supportive entrepreneurial thinking and the proximity to other European countries as positive factors for Munich as a business location. On the whole, the positive location factors of Munich cited by the highly skilled self-employed migrants in the knowledge-intensive sectors are similar to those named by the managers in the last ACRE report (von Streit et al., 2008). However, their view of foreign entrepreneurs from “outside” reveals important insights into the weaknesses of Munich as a business location. One point of critique is the heavy taxation and the inflexibility of government officials. Starting a business in Germany is more complicated than in many other European countries. Furthermore, Germany is in their opinion overregulated and too bureaucratic. One discussion partner explains:

“Seen from other countries, there are very restrictive regulations that are not encouraging highly skilled people to work here. So non-Germans who come here and try to work or try to set up their own business are always facing a lot of problems and that fact is not worked against enough. When you have investors who want to invest in Western Germany there is lots of bureaucracy that’s blocking them.”

(Samir, Iranian, 48 years old, knowledge worker, married, 2 children)

Whereas the self-employed knowledge workers who were interviewed were able to maintain or improve their social and economic status through migration, this was not the case for all of the self-employed in the creative industries. One photographer who came to Munich because she had married a German and had interrupted her job for bringing up children has severe problems getting access to the market in Munich, even through she had a successful studio for food photography in Paris. Due to the small number of self-employed migrants in the creative sectors, generalised statements about for the reasons of this cannot be drawn. One reason might be that she is more reliant on local customers, where language problems play a bigger role than in an international environment, and that for selling cultural products on a regional market access to networks seems to be of pivotal importance. This point will be taken up again in chapter 7.4.3 of this report.

One musician has the problem that her Japanese degree is not recognised for teaching music and piano at state schools or at universities in Germany.

“In Japan it would have been easier to find employment, like a job as a teacher at a school or university. Here this is not possible for me. For this reason many Japanese fellow students went back to Japan to start a family and work – I could possibly have done better in Japan.”

(Aiko, 48 years old, creative worker, divorced, one child)

To supplement her income as a concert musician, she teaches piano on a freelance basis, which lacks the security of a permanent position.
7.3.3 Advantaged highly skilled migrants

Most of the migrants in this group have experienced continuing upward mobility through job changes; they have highly paid jobs and positions in higher management. The following quote from a Canadian knowledge worker is quite typical:

"Probably my international background and the sort of international network contacts that I have in the area of software engineering have really helped my career. Because of my international network, I have been able to move up the career ladder fairly quickly and have a very large of responsibility now, partly because of these connections."

(Viola, Canadian, 49 years old, knowledge worker, married, three children)

Job-related motives for migration predominate among this group. Quite often Munich is the final stage in an international business career.

A typical example of this group is Mari, from Finland. She completed her Master’s in business administration in 1991 and started working for a small company in Espoo, Finland. In 1999 she changed to a large international company in Helsinki. In 2006 she got an international assignment and went to Atlanta for two years. When her contract in the US expired she had the choice either to go back to Helsinki or to go to Munich. As she and her husband wanted to stay abroad and because the position she was offered in Munich was excellent, she decided for Munich. In her words, the decision was “a combination of the position and the location”. Their move was paid by the company and they were supported by a relocation agent who was also paid by the company. Her husband does not work at the moment.

However, none of the people interviewed displayed a form of highly skilled migration like that analysed by Beaverstock (2002, 2005). He describes an international managerial elite migration “whose ultimate international mobility meets the challenges of international business in globalisation” (Beaverstock, 2005, p. 246). These people have educational qualifications from elite schools and make use of global multi-cultural networks. Their reasons for migration are solely based on the advancement of the individual career. However, some of the discussion partners in this study come very close to the form of highly skilled migration described by Beaverstock (2002, 2005). However, their migration reasons are more diverse:

This group also includes for example dual-career couples who moved for partnership and marriage in combination with job-related reasons, as the following quote shows:

"Well, (...) once I was in Germany, I was doing my doctorate in Karlsruhe and met my husband there, and we decided that we wanted to – you know we got married – and we just wanted to stay in Germany. And we are both in a high-tech industry, computer science network industries, and it is not always so easy to find a place where it is attractive to live and where both the husband and the wife can find good jobs, and Munich was a place able to offer that. And also Munich has got an excellent reputation and also has very good schools, which was important to us as well."

(Viola, Canadian, 49 years old, knowledge worker, married, three children)
Especially for dual-career couples it is important that both can find a highly qualified job on the local labour market.

This group also includes expatriates who work for international firms in Munich, as well as migrants in management positions who came on their own but also work for big international companies. The nine migrants interviewed who work for a big European institution in Munich also belong to this group. They all come from European countries as well as Canada.

In comparison with the other groups, they share the highest economic capital. They can rely on an international network of business contacts and they enjoy privileges like an English-speaking work environment, as the following quote shows:

"From my point of view I can't really tell about Germany business culture because I really work in an environment which is completely European. (...) It's multicultural, I have the opportunity to really work in German, French, English every day; it's really a strong point. And that the colleagues are from everywhere. I really appreciate these contacts."

(Marcel, knowledge worker, 33 years old, French, married, one child)

Their often very limited knowledge of German does not hinder their career prospects, as all the communication in the European institution as well as in the international firms takes place in English. In case of the expats, the company normally has sponsored relocation agents to find them a flat, and the companies provide them with help opening bank accounts etc. Due to their high economic capital, this group has no problems on the Munich housing markets.

Most of them stress the high quality of life in the Munich region in respect of leisure and cultural activities.

7.3.4 Less advantaged highly skilled migrants

The most important attribute of this group is that despite their middle class background and international degrees and careers, they do not experience an upward mobility through migration. Either they are less successful than the group of advantaged migrants in mobilising their high educational capital on the Munich labour market, or they have problems on the housing market. The reasons for migration of these interviewees are social and/or occupational in nature. They come from European countries as well as from India. Very often their knowledge of German is limited.

Two case studies shall illustrate the characteristics of this group:

Nanda is 50 years old and works for a big ICT firm in Munich. He grew up, went to school and studied in Hyderabad, India. He learnt German at school. He studied chemistry and completed his MBA in the US. After university he worked for five years in the automotive sector in Singapore. After that he went to Mumbai and worked for about five years for a German international ICT company. He got the chance to come to Munich through the department he was working for in 1999. He is married and has a son who went to an international school in Munich and now studies in Karlsruhe.

Whereas he had a management position in India, he stresses that he is only a “normal member of staff” in Germany. He does not see any chance to advance to a management position as an
Indian in Germany. Furthermore, his salary is lower in comparison with India, where the family had domestic staff. Thus Nanda experienced downward mobility in respect of his job and the whole family had to adapt to a less luxurious lifestyle. Despite this, he is satisfied with his life and work in Munich and would like to stay. However, due to the low pension he will receive in Germany he will go back to India in a few years. He says:

“If my pension was better I would have the choice to stay or to leave – but I don’t and being poor in India is better than in Germany”

(Nanda, Indian, 50 years old, married, one son, knowledge worker)

The second example is Isabella, a 37-year-old Italian who is married to a Greek who has a very good position in the financial sector of Munich. The main motivation was to end the long-distance relationship which had already lasted for six years, and to move to be with her husband. Isabella also has an international education and career path. She went to university in Italy and did her Master’s there. Her first job was at a business school in Rome. Then she went to Brussels and was a trainee at the European Commission for one year. There she met her husband. After that she worked for 8 years as a communication co-ordinator and promotion and events manager in different sectors in Paris. In 2005 she came to Munich and works at a publisher’s.

She has difficulties finding a job that corresponds to her international work experience and education. She has found that her career path is not straightforward enough for the German labour market and in some cases she found that her knowledge of German is insufficient, especially when she applies to small and medium-sized firms which are more regionally oriented. She relates experience as follows:

"What I found extremely difficult is to some extent the lack of flexibility in the job market. This is what I found difficult. You have more specialised people. You go in one direction; you stick to it for your entire life. In other places like Great Britain or Italy, Spain, Greece, you can easily move from one sector to the other or one position to another if you can manage it. (...) And the level I was looking for was - I would not say manager with responsibility - but a good management position. And I have seen that this is difficult to find, I have to say. There are international companies but either you get into something which is very, very structured, for example BMW, and they have tons of CVs coming in. So it is very difficult to get into these big companies. Or you have a much more local type of company and then you have to have very good German. That’s my experience.”

(Isabella, Italian, 37 years old, knowledge worker, married)

Third-country migrants experience particular problems due to their limited visas. It was therefore decided to include them in the group of less advantaged migrants, despite their high economic and social capital and good position in the labour market. They only have limited access to the housing market, due to the national migration regulations. Aseem, an Indian IT manager, reports:

"When we entered in 2000, the German government had introduced a Green Card plan, and they issued the visa quite fast. But after I came here, I had a great deal of trouble. In 2002, I planned to buy an apartment, because it is really expensive to rent apartments here. Then I went to the bank and I said I want to buy an apartment and they were happy
when they saw my salary. They said it is fine, you can buy an apartment but you have a restriction because your visa is only valid for 5 years. Then I had to wait till 2006. This upset my plans and was very annoying."

(Aseem, Indian, 39 years old, knowledge worker, married, two children)

7.4 Discussion of the most important aspects

While the last chapter was concerned with the characteristic of the four groups of migrants and the differences between them, the aim of this chapter is to present and discuss the topics which are important for all groups of highly skilled migrants in the Munich region.

7.4.1 Housing market

According to the two experts who are working in relocation services and who support mainly expatriates of large companies in the region of Munich, the Munich housing market has several particularities. The Munich housing market is, compared with other German cities, in their words “very fast, very expensive and there is always more demand than supply in certain sectors”. As a general rule their clients without children - either singles or couples - prefer inner city locations, while families look for locations which are close to international schools. To get acquainted with the German and Munich housing market, the available sizes as well as the layout of flats and houses is a “learning process” for many expatriates. Many of them are used to flats or houses with walk-in closets, built-in furniture and en suite bathrooms for all bedrooms; things which are normally not available on the German market.

Twenty-three of the highly skilled migrants interviewed in this study live within the city borders; only two have their place of residence in the region (the place of residence is not known for two migrants). The majority live at the edge of the city centre (see table 7.1). These are the districts that directly border on the city centre. Most of these districts date to the years of industrial expansion in the late 19th century, with a high proportion of older buildings, which are characterised by a strong functional mix of residential, office space, various services and retail outlets, as well as a high level of cultural provision.

Table 7.1: Places of residence of interview migrants

<table>
<thead>
<tr>
<th>Location</th>
<th>with children</th>
<th>without children</th>
<th>together</th>
</tr>
</thead>
<tbody>
<tr>
<td>City centre</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Edge of city centre</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Urban fringe</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Region</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Own illustration

Although the sample is not representative, the strong orientation towards the inner city, even among families, is remarkable. The interview partners who live in the city centre or close to the city centre stress several factors that drew them to this place of residence: they want to live close to work, they enjoy
the atmosphere and infrastructure of these quarters, they enjoy the availability of public transport, and the possibility of going on foot or by bike. As a Finnish knowledge worker puts it:

"It is quite a beautiful neighbourhood, old houses; the environment is quite nice from that perspective. There are quite a few restaurants in the area. As we like biking we have good access to the biking trails. And I mean you can bike on the streets as well. It is a good location with not such long distances to work. There is good public transportation so we have U-Bahn connections."

(Mari, Finnish, 42 years old, knowledge worker, married)

There is no general answer to the question of how accessible the housing market of Munich is for transnational migrants. Its accessibility depends on their economic and social capital. Highly advantaged migrants have seldom reported problems. They are often supported by relocation services and they assess the supply and the price level of the Munich housing market depending on where they have lived before. As one internationally experienced professional explains: “After living in London, I was astonished how cheap Munich is, really like, I was just blown away.”

Migrants with less economic capital have the same problems as the German creative knowledge workers in the ACRE report 5.7 (Hafner, Heinritz, Miosga & von Streit, 2008): the unavailability of affordable housing in the Munich city region. They often describe the search for an affordable flat or house in Munich as a “nightmare” which is in most cases extremely time consuming.

However, for foreign creative knowledge workers the Munich housing market might be even less accessible than for Germans: although no direct discrimination against foreigners by landlords was reported in the interviews, people with foreign passports or only a limited knowledge of German have difficulties as landlords still very often prefer Germans und normally can choose between several possible tenants. As one interview partner reports:

“When I was looking at flats the landlords were really picky. I wouldn't say they were discriminating, not in my case. But I heard some stories of colleagues that were, at least some of them, some Indian colleagues, for example, they were discriminated against. I mean, not openly but they were just told strange reasons why they cannot have the flat.”

(Giovanni, 33 years old, Italian, knowledge worker, single)

While the expats and researchers who are in Munich only for a limited period of time are renting, the majority of the interviewed migrants have acquired property in Munich.

Finally, the segment of furnished residences as well as serviced accommodation which is especially requested by expatriates is, according to the interviewed relocation experts, not well developed on the Munich housing market.
7.4.2 The situation of families: Childcare and international schooling

The availability of childcare and international schooling seems of pivotal importance in attracting highly skilled migrants. Almost all the interviewees with children stressed the importance of good schools and most of them are sending their children to international schools. This point was also confirmed by the relocation agents who were interviewed. For their clients, an excellent education for their children is of high importance and the availability of good international schools plays a significant role in whether or not to take a job in Munich. The reasons why transnational migrants send their children to international schools are diverse:

First of all, language plays an important role. When the children are taught in their mother tongue, the parents can help them at school, even if they do not speak German. Secondly, many parents regard an international education in English as very important for the future career of their children. An Indian knowledge worker explains:

"The point is I come from India and I have always worked in multicultural places. We want our children to be capable of handling plenty of skills all over the world. So for that, it is best that we start their education in English. (...) In that sense we are finding it hard, because in Munich you find very few schools with an English base. And even if you find it you have to pay a lot. So this will be a burden".

(Aseem, Indian, 39 years old, knowledge worker, married, two children)

Another point which came up in many interviews was the lack of full-time childcare in Munich, which is especially important for working couples.

7.4.3 Social networks

As mentioned before, social networks are one of the most important factors explaining migration (Arango, 2000). Many of the discussion partners of this study had contacts to people or a partner living in Munich who helped them with finding a flat or a job. Especially for those migrants who followed their partners to Munich, contacts via social networks proved to be the most important resource to find a job in the new city. Concerning the different groups of migrants it can be said that most of the expats and highly advantaged migrants have an international network of friends. They get in contact with other internationals through their work and the international schools. They are rarely active in German clubs or associations and stay very much in their international environment. This is of course not they case if they are married to a German.

For the creative workers, a big social network seems to be important, especially for business reasons. It is a characteristic of many activities in the cultural industries that access to the market is regulated to only a limited extent via certification. Contacts to new clients come about mainly through recommendations and previous collaborations. Reputation consequently represents an important resource for self-employed creative workers and artists (von Streit, forthcoming). Thus, to have access to local networks seems to be vital in order to come into contact with clients and to secure projects. Problems arise when their knowledge of the German language is not sufficient or the foreign creative workers do not get to know the right
people in the field they are working in. At the same time it is noticeable that in case of the transnational creative workers, business contacts and private contacts very often mix. Business partners and clients are at the same time friends and often spend their free time with them. Their contacts are frequently not separable into a business and a private sphere, and there is a fluid crossover between the two.

### 7.4.4 Open Munich

Concerning the question of whether Munich is an open and tolerant city, the statements of the discussion partners were contradictory. Some describe Munich as an open and tolerant place which is more international than other German cities and where they easily made friends, as the following quote illustrates:

"My experience on this that there is a gap between the way the Germans are seen abroad, especially in France, and the way they are. They are seen as cold people and maybe they are, in the sense that you sometimes need to get talking, but afterwards, once you have established contact, usually it doesn't go cold, and if you see the same people a year later, they still know you. Whereas in other countries where the people are easy to make contact with, if you see them two weeks later, they've forgotten you. And this is not really contact, this is superficial. So with German people, generally of course there may be exceptions, but I think you have to work a bit more to get the contact working but afterwards it's really great and stable, usually."

(Marcel, 33 years old, French, knowledge worker, married, one child)

None of the highly skilled migrants has experienced open racism. However, ethnic-minority migrants have found that in Munich or Germany in general, the notion of where people come from is still very much tied to the colour of their skin. A Canadian knowledge worker explains:

"Another thing that I find is really different from Canada is that in Canada when people meet me they don’t say, “OK, but where are you really from?” because my skin is brown. So a lot of times when I meet German people they are like “OK you are Canadian but where are you really from?” and I am like “I really am Canadian! My parents are from Egypt but I am Canadian.” And so I don’t really get that question in Canada because I guess it could be that because there are so many people from all over the world that if you looked at every person who is not completely Anglo-Saxon white and you are confused then you will be stopping to ask every other person’s ancestry. And in Canada asking people about their ancestry is sort of the process of getting to know them."

(Anne, Canadian, 29 years old, knowledge worker, not married)

In this respect Germany seems to be very different from typical immigration countries like Canada, and this reflects how much citizenship is still based primarily on the principle of *jus sanguinis* in people’s minds.

Furthermore, ethnic minority migrants find that they are treated differently from the white population. Aseem, an Indian knowledge worker, is constantly checked by the police, as the following quote shows:
“The police used to check us everywhere. They want to see the passport and the visa all the time. So I used to go everywhere with my passport. Because I was obliged to carry the passport everywhere, one time I lost it. And I thought why they don’t give us a sort of identity card to show that we have a visa here, why do we always have to carry the visa and the passport around? Up to now, I have had to show my passport the same way, and this is a little bit annoying. Because anyhow, I have been here for so many years now.”

(Aseem, Indian, 39 years old, knowledge worker, married, two children)

7.4.5 The role of soft and hard factors

As has been discussed earlier, highly skilled migrants come to Munich either for job-related reasons or because of personal trajectories, like a German partner. Soft location factors were rarely mentioned in this context.

But once they are in Munich, they are very satisfied with the high quality of life. It can be concluded that the overall satisfaction with the city is very high among all groups of migrants. This was also confirmed by the relocation agents who were interviewed: most of their clients enjoy their stay in Munich.

Important soft location factors are the area surrounding Munich and cultural opportunities, as the following quote reveals:

"For me it's a perfect balance, because you have a quite big city in the sense that there is enough to do in it, let's say museums and so on. But still it's not far to be out, completely out of the city and to get some green areas and the mountains. I don't think there are a lot of cities in Europe which can offer this balance between having a big city and plenty of nature around. So this is a strong point for Munich, definitely."

(Marcel, 33 years old, French, knowledge worker, married, one child)

The soft location factors named by the highly skilled migrants are no different from those named by the German creative knowledge workers in the ACRE report 5.7. However, the two factors of security and cleanliness are more pronounced among the transnational migrants. The following quote nicely summarises the soft location factors of Munich:

"I like the safety factor, it is very safe, very secure. I like the cleanliness of the city, it’s a very clean and organised city. I like the general approach to life in Munich. (...) I like the weather, you have almost four seasons: you have warm summers and cold winters. I like the architecture in Munich which is very attractive. I like the cultural aspects of Munich, there are a lot of museums and theatres. So that’s what I like about Munich. If we go to the region it's the lakes, the Starnberger See, the Chiemsee, the Tegernsee, or the others around you can reach in half an hour, the mountains, the beautiful landscapes, nice air, nice weather, you have excellent food, it's fantastic.

(Samir, Iranian, 48 years old, knowledge worker, married, 2 children)

Particularly the migrants with children stressed that for them, security plays an important role and very often they feel safer in Munich than in their home town, as one French knowledge worker explains:
“Munich is a very safe city. That is an important factor, especially when you have a family. You do not have to be afraid when they (his children) go to the city by S-Bahn on their own. In Paris I would never let them do this.”

(Gerard, 41 years old, knowledge worker, married, two children)

Another advantage of Munich that was mentioned by several interview partners is the size of Munich. It is a human-scale city, the public transport system is very well developed and it is possible to get around on foot or by bike.

To conclude: Hard factors such as jobs, and personal trajectories such as a partner in Munich, draw transnational migrants to Munich, while soft factors such as the high quality of life make them stay.

7.5 The opportunity structure of Munich for different groups of highly skilled migrants

Until now, Munich has been described from the viewpoint of highly skilled migrants. This perspective will now be changed, and we shall ask what opportunities Munich offers to the different groups of migrants that were identified before.

There are some general points which apply to all groups of migrants. On their arrival, the German language is a major problem for most transnational migrants. It would make their daily life much easier if more information in the city were provided in English. This applies for example to information on the webpage of the city of Munich, to information on the public transport system, or to official forms from the city council. Signs in the street concerning parking areas or explanations on ticket vending machines are almost solely in German.

International schools and kindergartens are also pivotal importance for all groups of migrants. Dual-career couples with children in particular criticise the lack of child care facilities with flexible opening hours and high educational standards.

Finally, the high costs of living as well as the lack of affordable housing in the city and region of Munich are major problems for all groups of migrants apart from the very affluent ones.

Coming to the different groups, it has been shown that researchers do not choose a city for its attractiveness; rather, they choose a certain university. Munich is attractive to them due to the numerous universities which have excellent research facilities.

Housing problems are the biggest obstacle for young researchers as well as foreign students in Munich. Housing for researchers and students would make Munich more attractive to these groups. However, the quality of research institutions and cutting-edge research are the most important pull factors for scientists.

The foreign entrepreneurs who are active in the knowledge-intensive industries are in general very satisfied with Munich as a business location. The biggest obstacles for them are the heavy taxation, the many regulations and the inflexibility of officials and institutions.
The biggest problems of self-employed people in the creative fields are the high prices for premises and – similar to the German creative workers (see ACRE report 5.7) - the lack of affordable space in Munich for those founding new businesses and for those engaged in artistic activities: space where they could realise their projects. And once again, information on programmes which support business founders or information on legal questions is very often only available in German.

Due to their high social status, the highly advantaged migrants have the fewest problems in Munich. They are normally assisted by their companies as well as relocation services when they arrive in Munich, and they do have the economic resources to cope with the high costs of living costs in Munich rather easily.
In the following chapter, the most important results of the study will be summarised and compared with results from other studies, as well as examined and discussed in the light of existing concepts and assumptions about highly skilled transnational migrants in the literature.

8.1 Summary of results

8.1.1 The macro-level: Migration policy and migrants in Germany and the Munich region

Economic and social trends point to labour shortages in certain sectors
Several major economic and social trends in Germany influence both the demand and supply of labour in Germany and in the Munich region. On the demand side, there is the development of an increasingly knowledge-based economy in which technological development, innovation and creativity are major assets, as well as the ongoing structural economic change. Both trends suggest an increasing demand for highly qualified workers in the tertiary sector. On the supply side, demographic changes as well as trends in education are of major importance: concerning demographic change, the German situation is characterised by low birth rates in combination with high life expectancy, which will lead to a shrinking labour force. Thus it is very likely that the shrinking labour force in combination with stagnation in the trend towards better qualifications will create acute shortages of skilled labour (Boswell & Straubhaar, 2005). According to different studies, labour shortages are expected in the field of engineering, mathematics, ICT, and the natural sciences (Institut der deutschen Wirtschaft, 2007; Biersack et al., 2007). Although most studies on possible labour shortages in the next few years come to the conclusion that there will be a growing demand for highly qualified workers which cannot be covered by the domestic supply, it is not possible to forecast exactly which occupations, skill levels or regions will be affected by future shortages (Hess & Sauer, 2007). Labour shortages are expected particularly in the information technology sector, electrical engineering and the chemical industry.

It can be assumed that the region of Munich might even be more severely affected by labour shortages than other regions in Germany. The high skill level of the population and the sectoral composition of the regional economy, which is very knowledge-based, point to the fact that the region of Munich is more dependent on highly qualified workers than other regions are. Data from previous ACRE reports demonstrate that the local creative knowledge workers are not very mobile (Hafner, Heinritz, Miosga & von Streit 2008; see also Hafner & von Streit, 2007). Thus the Munich region is dependent on the constant inflow of highly qualified workers, either from other regions of Germany or from abroad.
Migration policy concerning the labour migration of the highly skilled is still restrictive

However, due to the fact that the legal framework affecting the movement of highly skilled workers is composed of legislation at both the EU and national levels, the scope of municipal governments to influence the numbers of transnational migrants – and especially of third-country nationals – is rather limited. Compared to other immigration countries, the German migration law concerning the labour migration of highly skilled third-country nationals is restrictive. Although the new Immigration Act which came into force in 2005 is considered by experts to be groundbreaking in its focus on promoting the integration of the immigrant population and on increasing the numbers of highly-skilled and self-employed immigrants (Özcan, 2008), the low numbers of highly-skilled people who have immediately received an unlimited settlement permit since the new law came into effect prove that the provisions relating to the immigration of highly skilled persons are rather ineffective. In contrast to other pro-immigration countries like Canada or Great Britain, Germany has no measures such as attractive tax benefits for qualified foreigners or a quota system for a contingent of foreign specialists.

The migrant population in Munich: better skilled than in other large German cities

One result of the German immigration policy which has shied away from measures for increasing the number of highly skilled people as well as promoting the integration of the immigrant population for many years is the low level of education of the immigrant population when compared with other countries of immigration. This also holds true for the immigrant population in the city and region of Munich. But it must be stated that foreigners in Munich are better skilled and better integrated into the labour market than in other large German cities.

With a share of 23 percent of the total population (2007), Munich has the highest proportion of foreigners of all German cities. Forty percent of the foreigners in the city of Munich are EU citizens (EU-27) and 60 percent are third-country nationals. The largest proportion of foreigners in Munich (city) is made up of citizens from former “guest-worker countries” like Turkey, Croatia, Greece and Italy, as well as from neighbouring Austria.

Concerning the skill level of the foreign population, it becomes apparent that as on the national scale, foreigners are underrepresented in skill-intensive occupations. In the Munich region the proportion of foreigners of all employees subject to social security contributions is 13.6 percent, and in the city of Munich it amounted to 15 percent in 2007. Munich has one of the highest proportions in comparison with other German cities. Thirty-three percent of all employees in the region and 35.8 percent in the city are in skill-intensive occupations. The proportion of foreigners employed in skill-intensive occupations was 7.8 percent in the region and 5.8 percent in the city of Munich in 2007.

Concerning foreign employees with university degrees, the numbers rose: the proportion of foreign employees with university degrees out of all employees went up from 6.9 percent in 1999 to 10.9 percent in 2007 in the region of Munich, and from 7.0 percent to 10.5 percent in the city of Munich. Looking at the nationalities of foreign employees with university degrees, it becomes apparent that most highly skilled foreigners in the region of Munich come from the EU countries Austria, France, Italy and the UK. However, looking at the development of the numbers of different nationalities in the years 1999 to 2007, it is noticeable that the
proportion of citizens of the UK, the US, Turkey and Austria rose by only 10 to 30 percent, whereas the proportion of citizens of the Russian Federation almost tripled, and that one of Polish and Chinese citizens more than doubled. The proportion of highly skilled Italians, French and Spanish people also doubled.

This relatively high number of highly skilled foreign people (in comparison with other German cities) reflects the advanced internationalisation of the Munich economy. However, the absolute numbers of highly skilled migrants, especially of third-country nationals, can still be considered to be rather low. The national legal framework strongly regulates the inflow of highly skilled migrants at the regional level, and the influence of the regional scale on these regulations is marginal. This points to the fact that for an international comparison, the national frameworks must be taken into account.

8.1.2 The meso- and micro level: the Munich city and region in the view of transnational migrants

The new heterogeneity of transnational migrants

The empirical results of this study point to the fact that neither simple push and pull models are able to explain migration to Munich, nor is it sufficient to focus primarily on the meso level of firms and institutions, because in this case the growing heterogeneity of migrants in respect to their socio-economic background and their motives for migration remain hidden (Scott, 2006b).

The main findings of this study are that the migration flow is not only demand-driven. Apart from labour migration, various other motives for migration exist. Furthermore, the broad category of highly skilled migrants is diversified; thus it is not sufficient to focus solely on classic expatriates. Moreover, none of the people interviewed displayed a form of highly skilled migration which for example Beaverstock (2002, 2005) has analysed in his studies on an international managerial elite.

Motives for migration: job-related motives and personal trajectories are predominant

According to the analysis of the interviews with the highly skilled migrants, the main motives for coming to Munich are either job- or family-related. Although the highly skilled workers are in general very satisfied with the high quality of life in the Munich city region, soft location factors do not play a major role in their decision to migrate to Munich. Hard factors like the Munich labour market e.g. in the form of concrete job offers and personal trajectories such as marriage to a German partner proved to be more important.

Most of the interviewed migrants can be described as very internationally experienced: many of them had already studied and worked abroad. Munich was in many cases not the first foreign city where they had lived and worked. We were able to reconstruct from the interviews that the motives for migrating can be divided into more general motives for being mobile, and motives for actually moving to the Munich city region. The actual decision for Munich was very often an interplay of a job offer and personal reasons (partnership, marriage).
Groups of migrants
Four different types of highly skilled migrants emerged from analysis of the empirical material: researchers, entrepreneurs/self-employed, as well as advantaged and less advantaged highly skilled migrants.
The groups differ in respect of their available social and economic capital, and whether they are able to maintain or improve their social and economic status through migration.
It became clear during this study that transnational migrants do not all belong to a form of elite migration, and that their opportunities and conditions on the Munich labour and housing market show considerable differences. This finding should be taken into account by further studies as well as by the local government.

The group of researchers is not moulded by the above dimensions. They form a group of their own because they enact a certain form of mobility. In the case of researchers and scientists, the quality of research facilities determines where they go – family and partnering issues can play a role but the city itself is not important. In contrast to typical expats, researchers have to organise their move on their own. Individual fellowship schemes play an important role in bringing foreign researchers to Germany, as they provide a relative risk-free way of making mobility happen. In comparison with the group of advantaged migrants, the economic capital of researchers is lower. Consequently, the biggest problem for young researchers and scientists is finding a flat in Munich’s tight housing market.

Entrepreneurs and self-employed in the field of the creative knowledge economy have in common that they have to gain access to the markets in the Munich region or in Germany. Therefore, they see Munich from a different viewpoint than the other groups: for them, business-related aspects like positive and negative location factors in the region of Munich play an important role. One important finding in this group is that whereas the self-employed knowledge workers who were interviewed were able to maintain or improve their social and economic status through migration, this was not the case for all of the self-employed in the creative industries. One reason might be that they are more reliant on local customers, where language problems play a bigger role than in an international environment, and that for selling cultural products on a regional market access to networks seems to be of pivotal importance.

The advantaged highly skilled migrants have experienced continuing upward mobility through job changes; in general they have highly paid jobs and positions in higher management. In comparison with the other groups, they share the highest economic capital. They can rely on an international network of business contacts and in general they enjoy privileges like an English-speaking work environment. Due to their high social status, the highly advantaged migrants have the least problems in Munich. They are normally assisted by their companies as well as relocation services when they arrive in Munich.

The less advantaged highly skilled migrants do not experience upward mobility through migration. Either they are less successful than the group of advantaged migrants in mobilising their high educational capital on the Munich labour market, or they have problems on the housing market. The reasons for migration of these interviewees are social and/or occupational in nature. They come from European countries as well as from India. Very often their knowledge of German is limited.
The satisfaction with the city and region of Munich is high; problem areas are the housing market, the availability of international schools and childcare.
In general, the overall satisfaction with the city is very high among all groups of migrants. Important soft location factors are the area surrounding Munich and cultural opportunities. The soft location factors named by the highly skilled migrants are no different from those named by the German creative knowledge workers in the ACRE report 5.7. However, the two factors of security and cleanliness are more pronounced among the transnational migrants, especially among the migrants with children. Another positive aspect of Munich for many transnational migrants is that it is a human-scale city, the public transport system is very well developed and it is possible to get around on foot or by bike.

One important finding concerning soft and hard location factors is that hard factors such as jobs, and personal trajectories such as a partner in Munich, draw transnational migrants to Munich, while soft factors such as the high quality of life make them stay. Due to their high economic capital, highly advantaged migrants seldom have problems on the tight and expensive Munich housing market. Migrants with less economic capital have the same problems as the German creative knowledge workers in the ACRE report 5.7 (Hafner, Heinritz, Miosga & von Streit, 2008): the unavailability of affordable housing in the Munich city region. Furthermore, the segment of furnished residences as well as serviced accommodation which is especially requested by expatriates is not well developed on the Munich housing market.

Another problem area is the lack of affordable international schools and the lack of full-time childcare in Munich.

8.2 The results of this study in relation to existing policies

In the following, we shall deal with the question of whether there are measures that are specifically tailored to suit highly skilled transnational migrants. Concerning the city’s policy on migration, it must be stated that the regional migration policy of Munich focuses on migrants from lower social classes and their problems on the labour market and housing market as well as in education. However, it can be argued that a broad-based urban development policy with certain focus points is also a policy for highly skilled transnational migrants, as their needs are not so different from German creative knowledge workers and the rest of the population. Nevertheless, there are some measures which the city of Munich could take to make Munich more attractive and welcoming to highly skilled migrants:

- More information in the city should be provided in English. This applies for example to information on the webpage of the city of Munich, to information on the public transport system, or to official forms from the city council.
- International schools and kindergartens are also pivotal importance for all groups of migrants. More affordable international schools as well as childcare facilities would make Munich more attractive for this group.
- To promote Munich more actively as a region of education and science to make it more attractive to foreign students and researchers.
The high costs of living as well as the lack of affordable housing in the city and region of Munich are major problems for all groups of migrants apart from the very affluent ones. More residences for students and researchers are needed.

The biggest obstacles for the self-employed in the knowledge-intensive sectors are the heavy taxation, the many regulations and the inflexibility of officials and institutions in the city.

The biggest problems of self-employed people in the creative fields are the high prices for premises and the lack of affordable space in Munich. There is a need for action here on the part of the municipal authorities. There are some municipal projects, for example the new “Platform3” that could be extended.

On the whole, a change in the attitude of the city of Munich toward highly skilled migrants is important. Until now, there have been no special programmes or contact persons at the city council for this group. Small campaigns could also help to present Munich as a more open city for foreigners. Some nice ideas for such campaigns can be found in the following words of an Iranian knowledge worker:

“Yes, publicise more of the success stories you have of all the non-Germans, write profiles on the internet, carry out interviews, show them outside, make showcases of the German open society so that they also encourage non-Germans to achieve success and build up businesses here. Show them and take them along with you on trips abroad by the Ministry. So that other people say “Wow, this is a non-German and he is really successful”. This impresses people. Most people when you go abroad and you think of moving to other countries they always think of the States as the land of open opportunity, so they are all keen on the USA, not seeing that there are lots of negative things as well. So the USA has been very successful in conveying the image of the land of the free and you can do whatever you want. It is not true, but people don’t see that. Germany, seen from other countries, is still shown through very restrictive portraits that are very discouraging for people to work here.”

(Samir, Iranian, 48 years old, knowledge worker, married, 2 children)

To conclude, it is to be hoped that the current economic crises will not lead to a backlash in German migration policies and stop cities thinking about how they can become more attractive to highly skilled foreign migrants.
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Annex 1: Structure of the topic-centred guided interview (Migrants)

Start of the interview:

- Short introduction of ACRE
- Permission to record the interview

First question:

- How did you come to live in the Munich region now?
- Did you study here?
- Are you here with your family? Do you plan to bring any family members?
- Where do you live? (city / region)
- For how long?
- Where did you live before? (If the interviewee has lived elsewhere in the country before: why did he / she choose to move to region xy?)
- How much did you know about Munich before you came here for your present stay?

Education:

- Could you please tell me something about your education?
- Where did you go to school / university?
- What did you study?
- From where did you obtain your degree?

Professional experience / Career:

- Could you please tell me something about the main steps in your career after finishing study?
- How did you find your first job in Munich?
  - Own search/I was offered the job
  - Own internet search
  - Sent by the company: Were you able to choose the city?
  - Advertisement (newspaper / internet)
  - Open application
  - Family/Friends
  - Other, what?
- How did you find your current job? (if different to above)
• Where do you work? Could you please describe your actual working situations?
  o Position, job, employment status, full time, part time
  o What do you like about your job situation / what do you not like?
  o How satisfied are you with your situation?
  o Would you like to change something?
• Is the job you do now different from the one you had or were looking for before you came to XY region? If yes, what is different about it? Why do you do a different job?
• What do you like/dislike about your job? (hours of work, rates of pay, working conditions, career progression potential, friendliness of colleagues, training opportunities etc)
• How satisfied are you with your current job overall?
• Has moving to Germany / Munich improved your career prospects? Why?

Motivation to come to Munich:

• What was your main motivation to come to Munich? (pull and push-factors)
  • Role of hard factors:
    o study
    o job offer, career opportunities now and later in your home country, interesting work task, higher income, better working conditions (working hours, permanent and temporary contract, executive level, routine –project activities),
    o good international accessibility of the xy region, transport infrastructure and public transport facilities,
    o public social infrastructure (availability of kindergartens, (international) schools, higher education),
    o technical infrastructure,
    o price of housing
    o price of living
    o availability of subsidies (e.g. for artists),
    o tax incentives, other?
  • Role of soft factors
    o followed partner
    o came here with my parents
    o tolerance, acceptance of diversity, equality, openness or too strong social cohesion, civil society
    o quality of life (spare time activities, subcultural scene
    o quality of the environment (landscape, culture and tourism sights etc.)
    o attractive residential environment, attractive architecture, housing conditions
• Did you consider moving to anywhere else in Germany or to another country? (Why/why not?)
Social networks

- What is your family background?
- What role have other family members played in the decision process? (wife / husband)
- How many people did you know in Munich before?

Actual living situation:

- Could you please describe your actual living situation? Where and how do you live?
- How satisfied are you with your living situation?
- What type of accommodation do you live in?
- What do you like/dislike about your neighborhood? (housing quality; tolerance; diversity of cultures/religion/ethnicities; strong community feel; access to countryside/spare activities, landscape etc; open space, litter/graffiti/anti-social behaviour/crime. Link with WP5 questions)
- How satisfied are you overall with your living situation?
- What do you like about Munich / what do you not like about Munich? (quality of life, housing situation, tolerance, diversity, spare time activities, landscape etc. )

Past:

- When you think back to your first months in Munich, how did you experience the first time after you came from abroad?
- Can you remember your first impression of the city?
- Did you get support? (E.g. by your company, the city, friends in xy…)?
- How did you find your accommodation (relocation service, own search,..)?
- How was the paper work?
- How much did you pay yourself for the international move?
- Did you miss a certain type of support?

Future:

- What are your future plans?
- What is your main reason for staying in XY region (same as reason for coming or different reason?)

End of the interview:

- How satisfied are your altogether with your situation in Munich?
- What do you think can be done to improve the situation of highly skilled migrants in the creative knowledge industry in Munich?
- Would you like to add something?
### Annex 2: Questionnaire

**WP 7 Highly skilled Migrants: Short Questionnaire to be filled in before the interview**

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<td>Place of birth</td>
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<td>Country of residence before coming to xy</td>
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</tbody>
</table>
Annex 3: Classification of economic activities (NACE and SIC)

Table: Creative knowledge sectors – NACE classification

<table>
<thead>
<tr>
<th>Sector</th>
<th>NACE codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Creative industries</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td>744 Advertising</td>
</tr>
<tr>
<td>Architecture</td>
<td>742 Architectural and engineering activities and related technical consultancy</td>
</tr>
<tr>
<td>Arts/antiques trade</td>
<td>Portions of the following sectors:</td>
</tr>
<tr>
<td></td>
<td>524 Other retail sale of new goods in specialised stores</td>
</tr>
<tr>
<td></td>
<td>525 Retail sales of second-hand goods in store</td>
</tr>
<tr>
<td>Crafts</td>
<td>No codes</td>
</tr>
<tr>
<td>Design</td>
<td>No codes</td>
</tr>
<tr>
<td>Designer fashion</td>
<td>Portion of the following sectors:</td>
</tr>
<tr>
<td></td>
<td>17 Manufacture of textiles</td>
</tr>
<tr>
<td></td>
<td>171 Preparation and spinning of textile fibres</td>
</tr>
<tr>
<td></td>
<td>172 Textile weaving</td>
</tr>
<tr>
<td></td>
<td>173 Finishing of textiles</td>
</tr>
<tr>
<td></td>
<td>174 Manufacture of made-up textile articles, except apparel</td>
</tr>
<tr>
<td></td>
<td>175 Manufacture of other textiles</td>
</tr>
<tr>
<td></td>
<td>176 Manufacture of knitted and crocheted fabrics</td>
</tr>
<tr>
<td></td>
<td>177 Manufacture of knitted and crocheted articles</td>
</tr>
<tr>
<td></td>
<td>18 Manufacture of wearing apparel; dressing and dyeing of fur</td>
</tr>
<tr>
<td></td>
<td>181 Manufacture of leather clothes</td>
</tr>
<tr>
<td></td>
<td>182 Manufacture of other wearing apparel and accessories</td>
</tr>
<tr>
<td></td>
<td>183 Dressing and dyeing of fur; manufacture of articles of fur</td>
</tr>
<tr>
<td></td>
<td>19 Tanning and dressing of leather; manufacture of luggage, handbags,</td>
</tr>
<tr>
<td></td>
<td>saddlery, harness and footwear</td>
</tr>
<tr>
<td></td>
<td>191 Tanning and dressing of leather</td>
</tr>
<tr>
<td></td>
<td>192 Manufacture of luggage, handbags and the like, saddlery and harness</td>
</tr>
<tr>
<td></td>
<td>193 Manufacture of footwear</td>
</tr>
<tr>
<td>Video, film, music and photography</td>
<td>223 Reproduction of recorded media</td>
</tr>
<tr>
<td></td>
<td>921 Motion pictures and video activities</td>
</tr>
<tr>
<td></td>
<td>748 Miscellaneous business activities (*part of it)</td>
</tr>
<tr>
<td>Music and the visual and performing arts</td>
<td>Portions of the following sectors:</td>
</tr>
<tr>
<td></td>
<td>923 Other entertainment activities</td>
</tr>
<tr>
<td></td>
<td>927 Other recreational activities</td>
</tr>
<tr>
<td>Publishing</td>
<td>221 Publishing</td>
</tr>
<tr>
<td></td>
<td>924 News agency activities</td>
</tr>
<tr>
<td>Computer games, software, electronic publishing</td>
<td>722 Software consultancy and supply</td>
</tr>
<tr>
<td>Radio and TV</td>
<td>922 Radio and television activities</td>
</tr>
</tbody>
</table>
| 2. Information Communication Technology (adapted from OECD definition) | ICT manufacturing:  
300 Manufacture of office machinery and computers  
313 Manufacture of insulated wire and cable  
321 Manufacture of electronic valves and tubes and other electronic components  
322 Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy  
323 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods  
332 Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes except industrial process control equipment  
333 Manufacture of industrial process equipment  

ICT services  
642 Telecommunications  
72 Computer related activities (minus 722 Software)  
72.1: hardware consultancy;  
72.3: data processing;  
72.4: database activities;  
72.5: maintenance and repair of office, accounting and computing machinery;  
72.6: other computer related activities;  

3. Finances  
1. Financial intermediation  
65 Financial intermediation, except insurance and pension funding  
66 Insurance and pension funding except compulsory social security  
67 Activities auxiliary to financial intermediation  

4. Law and other business services  
741 Legal, accounting, book-keeping and auditing activities; tax consultancy, market research and public opinion polling, business and management consultancy.  
743 Technical testing and analysis  
745 Labour recruitment and provision of personnel  
746 Investigation and security activities  

5. R&D and higher education  
73 Research and development  
731 Research and experimental development on natural sciences and engineering  
732 Research and experimental development on social sciences and humanities  
803 Higher education