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Brain Drain and Brain Gain

***Migration in the European
Union after enlargement***

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1 *Introduction: Migration - hopes and fears*

Migration is as old as mankind. So are the fears and hopes attached to it by the different parties directly or indirectly concerned. Wars and humanitarian crises have been one steady producer of – mostly involuntary – migration. The pursuit of economic advantage has been another major driver of migration, by those who left their home in the hope of a better life elsewhere. Sometimes, immigrants met with a hearty welcome in the destination country, especially if they brought with them skills needed but in short supply in the destination country. Mostly, however, the reaction of those at the receiving end was at best mixed, and often outright hostile.

At a first glance, the fact that migration creates such strong feelings is surprising. Estimates of the number of people living outside their own country vary between 50 and 100 million¹, against a world population of 6.314 billion². In other words, only between 0.8 and 1.6 per cent of the world population are migrants. Experts agree that the surprising thing about migration is not how often it occurs, but how rare it is. Up to now, human beings have shown a strong resistance to move away from their home ground. As long as conditions at home do not become absolutely unbearable, or the expected benefits of moving elsewhere are not extremely high, the human race seems to prefer to “stay put”. However, it must also be stressed that the 50 to 100 million migrants are not evenly spread across the globe. European countries are among those with the highest share of foreign nationals. It is therefore perhaps better understandable that there is a major public debate about the pros and cons of migration in Europe.

In this debate, a number of issues regarded as important recur constantly. One of these issues is the phenomenon of *globalisation*. It is generally – and probably rightly – assumed by all parties that in a world characterised by higher-than-ever movements of goods, services, capital and ideas, by an unprecedented degree of “interconnectedness” of the different countries and regions of the world, and by an expectable further lowering of international trade barriers, the number of people moving from one country to another will also increase. Those who expect this to lead to further substantial economic growth and thus embrace the concept tend

to view migration as a good thing. Those who are sceptical or even hostile to the idea, such as the many anti-WTO protesters, view the prospect of increased migration with suspicion. Their main concern is that globalisation will “drain” the less competitive countries of badly needed “human resources” (although they would not label them as such).

Globalisation is, as already its name suggests, a development affecting the whole world. It is also viewed as being driven in the main by economic forces. Next to globalisation, regional integration is perceived as a major factor in migration. The prime example is the *European Union*, but there are similar, although less highly integrated forms in other world regions, such as NAFTA in North America, MERCOSUR in Latin America or ASEAN in Asia. These supra-national entities were founded on a strong economic rationale, but they have also been politically motivated. On 1 May 2004, the European Union went through its most sizeable enlargement of membership to date: ten new member states, predominantly from Central and Eastern Europe, were admitted to the previous federation of 15 countries. On the one hand, there were – and remain – high hopes that enlargement will strengthen Europe’s economic position in the world, and therefore, in the end, benefit everyone. This view is, at any rate, the official position of the Union’s 15 “old” and ten new member states’ governments. In line with the long-held position of the Union, this development will and should entail a higher-than-hitherto degree of mobility of workers. An integrated labour market, and a concomitant flow of supply (people) to the hot spots of demand, is politically intended and thus regarded as beneficial. The corporate sector is largely of the same opinion, and so seem to (still) be the populations of the European Union’s new member states, most of whom recently endorsed their governments’ step in a referendum. Public opinion in the “old” member states, on the other hand, is characterised by strong doubts. There are fears of mass immigration of labour from the new into the “old” member states, spurred by the very considerable wage differential between the two, which would push up unemployment and result in a lowering of salary levels. In other words, migration as a consequence of enlargement is expected by many in the population of the “old” EU to come at their expense. It is noteworthy that popular sentiment in the West seems to exclude the possibility of a reverse movement: post-enlargement migration is expected to come as a one-way flow, from east to west. This is surprising, to say the least, given the fact that there has been considerable migration

of production away from the “old” and into the new member states already since 1990, and more and more large corporations in the West have recently publicly considered to move more capacity to these countries – not only in the low or medium-skilled segment of the labour market.

Another aspect that plays a role in the debate about the blessings and woes of migration is linked to changes in the composition of the population, or, in other words, to the demographics of societies. The majority of the populations in the different EU countries are rapidly ageing. The adverse effects of this trend are already becoming visible today, but they will be felt much more strongly in the future. Combined with the impact of short working weeks, long holidays, and a relatively early retirement age, the demographic trend has the potential of seriously eroding Europe’s economic well-being. Pension systems could collapse, current health provision appears to become untenable, and salary levels could move downhill. One answer to this challenge might be what is labelled as “replacement immigration”. It would require immigration policies focused on the inflow of young people, who would help to balance the unhealthy age pyramids. In order to be effective, inflows would need to be substantial. Governments in the Union member states, as well as the European Union institutions, are very well aware of the big challenge ahead. The problem lies in the – expected – lack of acceptance of determined immigration policies on the part of the general public. The reluctance of Europe’s population to welcome more immigration has increased over the last decade, as documented by worrying gains of xenophobic parties in national, regional and local elections. Populations in many countries do not attribute the danger of lower pensions to the objective demographic trends, but to alleged “unsocial policies” of their governments, and the misunderstood effects of globalisation. They fear that unemployment, already high in many Union countries, would be even more fuelled by immigration.

Another publicly-debated aspect of migration concerns the so-called highly skilled, commonly understood as those with tertiary education. The importance of the highly qualified is linked to the concept of the “knowledge society”. According to this theorem, in earlier times the wealth of nations depended to a much lesser degree than today on the innovative capacity of their workforces, and more on other factors (such as natural

resources, for example). In order to outperform others today, however, it is more important to avail of human resources capable of cutting-edge developments in science and technology than to have large coalfields or fertile soil. Therefore, according to this concept, the economic future of Europe, as that of any other region or country in the world, will critically hinge on its ability to produce sufficient numbers of highly skilled people, but also to retain them, and to attract further ones from other countries. To date, the record of most European Union states (with the exception of its Nordic members) is not too encouraging in this respect. Europe's research capacity in the critical science, engineering and ICT fields is not on par with that of its major competitor countries, such as the United States of America. Already today, there are serious "skills shortages" in the said sectors, and the European Union expects these to grow to a very serious shortfall in the order of magnitude of some 700,000 scientists in the not-too-distant future. One obvious remedy could be the "import" of this missing know-how via the stimulation of immigration of the highly skilled from other countries. By means of incentive schemes, a fair number of Union countries have tried already in the recent past to do just that. Likewise, efforts and schemes aim at re-attracting some of those highly skilled that the Union has already lost to other countries, in particular the USA. Further, much discussion is devoted to how to make Europe's research and teaching facilities more attractive to top-quality third-country nationals. Unlike the themes of enlargement-induced immigration, and the consequences of globalisation, the issue of the highly skilled has been debated mainly at the level of governments and expert groups, but it has not had a large impact on the popular debate.

When trying to estimate the impact of the post-enlargement migration, the findings support the conclusion that rather than worrying about the internal migration of highly skilled in Europe (fears of both brain drain from the new member-states and excessive migration flows into the EU-15), the focus of efforts should be on attracting enough highly skilled migrants from the new member states to the EU-15, and indeed, to find ways to make more highly skilled (including academics and researchers) stay in Europe as a whole, instead of leaving the continent for the USA and other parts of the world. The slightly increased migration resulting from the gradual opening of borders after the enlargement of the European Union could therefore be seen more as an opportunity than as a threat. The main challenge would

then be to take full advantage of this opportunity in order to assure that both the EU-15 and the new member states, and indeed the EU of 25, reap the full benefits.

Notes

- 1 Cf. Salt, J., *Current Trends in International Migration in Europe*, Council of Europe (CDMG (2003) 39), Strasbourg 2003
- 2 Cf. Population Reference Bureau, *2003 World Population Data Sheet*.

2 *Aims and methods*

This study was commissioned by the Nuffic, the Netherlands Organization for International Cooperation in Higher Education. It is one of a number of inputs into a Nuffic-organised high-level international conference, on the theme “Braingain - the instruments”, which will be held on 29 and 30 September 2004 in The Hague. The conference forms part of the educational programme of the Dutch presidency of the European Union’s Council in the second half of 2004. The ministry of education of the Netherlands has already for a number of years shown a particular interest in mobility-related matters. The past focus of this interest has mainly been on mobility as a means of the internationalisation of Dutch higher education. The above-mentioned conference, and the present study, widens this earlier perspective by including a neighbouring but partly different form of mobility, migration.

This study was produced by Maria Kelo and Bernd Wächter, of the Academic Cooperation Association (ACA), in the first eight months of 2004. Like the Nuffic, one of ACA’s member organisations, ACA has, in all phases of its existence, devoted its particular attention to academic mobility, as part of its wider focus on the internationalisation of the tertiary sector of education. At the same time, it has entered, as did the Nuffic, new ground with this study, in that it addresses a wider phenomenon of mobility, that of migration.

There are many forms of migration. The object of this study is *international* migration, i.e. migration across country borders. But it does not address migration on a global scale. It looks at migration within a European Union context or, more specifically, migration between the countries of the “old” EU, as it existed until the end of April 2004, and the ten new countries which joined the Union in May of the same year. It thus has a regional focus. Next to this, its particular interest is with the migration of a special set of individuals, those with high qualifications. The overarching question the study tackles can thus be formulated as follows: *how will the 2004 EU enlargement impact on migration between the EU-15 countries and the new member states in general, and how will it impact on the movement of the highly skilled in particular?* In this context, the term “impact” denotes a wide set of effects and

consequences, mainly on the economies, the labour markets and the academic and scientific communities. The study was designed to assess the migration impacts for the EU-15 countries and the new member states, as well as the Union as a whole. For reasons explained further below, it shows a certain focus on the EU-15 countries.

This study has been structured into six chapters. *Chapter 1*, the introduction, provides the general background to the questions pursued. The *present chapter (2)* tries to briefly describe the object, aims and methods.

Chapter 3 is devoted to conceptual issues. It attempts to present the reader with a theoretical background of the issue under scrutiny and to clarify the terminology used. Migration is not an unambiguous term, and therefore an understanding of its various forms (and their differences) is key to the understanding of the specificity of past and future intra-European migration. The chapter also gives an overview of the main migration theories and concepts, and the major factors which influence the migration decisions of individuals. Finally, it addresses the problem of the availability, accuracy, differentiation, and comparability of statistical data on migration.

Chapter 4, entitled “Migration in Post-War Europe”, takes a historical perspective. It is meant to provide the reader with the historical framework in which current and future migration flows in Europe take place. It delineates the most important migration periods of the last century and gives an account on the current stocks of migrants in European countries and in the European Union. The recent migration history of researchers and, more broadly, the highly skilled, has been given special focus where possible.

Chapter 5 briefly describes the current legal framework which regulates the movement of persons between European Union countries, focusing especially on the “transitional arrangements” in operation in the first years after the May 2004 Union enlargement. A second part of this chapter is devoted to policies, instruments and schemes of individual European countries to attract highly skilled individuals from other countries, by facilitating their access to the domestic labour market. Return-enhancing policies aimed at emigrated scientists are given special consideration in this chapter.

Drawing on the facts and figures provided in the previous chapters, *chapter 6* finally tries to answer the central questions of the study. It is divided into two main parts, both of which deal with the future, i.e. with predictions. Part one presents estimates of future east-west and west-east migration volumes and information on the type(s) of migrants to be expected, giving again special attention to the highly skilled. The second part, building on the first, tries to assess the impacts, i.e. the effects and consequences, which future intra-EU migration is likely to have for population growth, economic development, labour markets and employment, and social security systems.

This study is based on the findings of the fast growing bulk of research literature on migration in general, migration in Europe, and the migration of the highly skilled. The authors have not conducted any new empirical (or other) research of their own. The study is thus essentially a literature review: it draws on the work of other researchers, and it organises their findings around the central questions posed in this study. The strengths and weaknesses of this piece of work therefore reflect those of migration research in general. The authors wish to stress this point because the reliance on the work of others confronted them with some unwelcome restrictions. They are, mainly, of two sorts.

First, the existing set of research work is characterised by a heavy concentration on the migration into the “old” EU. This results in a wealth of material with a bearing on this part of Europe, but also, regrettably, in a paucity of facts and predictions about migration and its effects in the new member states. This necessarily reflects on the present study. The authors cannot exclude that research material on the new member states has escaped their attention. But such material, if any, would only exist in the native languages of the countries in question. Restricted by their linguistic capacity, however, the authors had to limit themselves to literature available in English (and, to a degree, German).

Second, the research on the particular subset of all migrants of interest here, the highly skilled, shows a defect. This defect is not a lack of literature. Quite the reverse: migration research has in recent years developed a special focus on this group. The problem is rather a lack of hard data. This troublesome state of things applies not only to future-directed predictions, but also to the present and past situation. The existing

set of data simply does not (and probably cannot) differentiate precisely enough between the totality of migrants and the highly qualified. Again, this is not without consequences for the present study: its focus on the highly skilled is less developed than the authors would have liked it to be.

The authors hope that regardless of the difficulties related to data and availability of scientific evidence on the movement of the highly skilled within Europe, the paper will give the reader a framework in which to question the common beliefs on post-enlargement migration, to critically analyse the meaning and plausibility of the given figures, and to evaluate the weight of the described impacts of the expected migration of the highly skilled.

3 *Conceptual Issues*

3.1 Migration

The term “migration” might appear clear-cut and unambiguous, but it is not. For most people, it carries the connotation of a physical move, often, but not necessarily, between countries, for more or less permanent settlement, or, at any rate, a long-term stay. In practice, the reality behind the term refers to a wide range of forms and types of movement or mobility. Moreover, as will become obvious below, the different types and forms of migration tend to overlap and blend into each other³.

The literature on migration classifies the phenomenon into different types, some of which are opposition pairs. First of all, there is the differentiation into “forced” and “voluntary migration”. Refugees, seeking asylum or at least temporary shelter in another country as a consequence of armed conflicts, persecution or serious discrimination in their country of origin, are a typical case of “forced migrants”. “Labour market migration”, i.e. mobility for the purpose of employment, is one frequent form of voluntary migration. Second, there is the distinction between “permanent” and “temporary” migration. A foreign student would be a classical case of a temporary migrant, whereas a husband joining his wife (or *vice versa*) is expected to stay in the destination country and therefore thought to be permanent. There are, however, groups (growing in size) who do not clearly fall into either category: cross border commuters, for example, who continue to (formally) reside in their home country, but work in another. Seasonal workers are hard to classify, too. This is why some researchers have suggested the introduction of an intermediate category, that of “incomplete migration”. Third, there is the categorisation into “legal” and “illegal immigration”.

Not only are the borders between the different categories fuzzy and floating. Status changes, i.e. the transition from one category to another, are frequent. A forced migrant might take up employment, after a period, and thus become a labour migrant. A foreign student, originally clearly a temporary migrant, can be offered and accept employment after graduation, thus turning into a permanent migrant. An illegal migrant

might be allowed to stay in the country as a result of a “regularisation” exercise, and become legal.

Moreover, some of the above seemingly straightforward categories can contain a set of vastly heterogeneous groups. Labour migrants are, on the one hand, persons who permanently settle in another country to take up regular employment, as professors and other knowledge workers, or manufacturing and construction workers, but there are also temporary labour migrants, such as household helpers, au pairs, cleaning staff, or crop pickers. As mentioned before, a number of groups exist whose classification as migrants is debatable. These contain highly diverse sets of persons, such as in-company secondees, cross-border commuters, or small traders. Since indications are that this latter group is growing fast (in Europe), their ambiguous treatment in conceptual and, especially, statistical terms could soon turn into a problem.

3.2 The highly skilled

The focus of interest of this study is on the highly skilled. The vast majority of the highly skilled are voluntary migrants⁴. Since their qualifications and skills are in demand in the destination country (and increasingly immigration policies tend to attract them), the overwhelming majority of them are legal immigrants. They are often, but not always, permanent migrants, but this might well be in the process of changing, as multiple migration seems to become an increasing trend among the highly skilled.

The highly skilled (workers) are also referred to in the literature under other terms: “qualified” or “highly qualified personnel”, “human resources in science and technology (HRST)”, “scientists and engineers”, or simply “brains”. There is no commonly agreed precise definition of the highly skilled, and certainly no standardised treatment of them in the statistics of different countries and organisations. There are, however, two measures, which play a role in practically all definitions of the highly skilled. The first one is related to prior educational qualification. According to this parameter, persons with a tertiary education qualification count as highly skilled or highly qualified. Whereas in most cases tertiary education is understood to comprise any education from ISCED 5 (sub-bachelor non-university tertiary education) upwards, in others tertiary refers to ISCED 6 and 7 only⁵. The second parameter is profession-based. In this understanding,

the highly skilled are identified by means of the type of work they actually carry out in the destination country. Under this definition, someone employed in the destination country in a position which would normally require tertiary education is classified as highly skilled. Some definitions, such as the one of the OECD for the human resources in science and technology (HRST)⁶, identify a person as highly skilled if he or she fulfils one of the two above conditions, while others rely on the one or the other. The difference between the two parameters might at first sight appear negligible, but it is not. A migrant engineer or university professor who works in the destination country as a taxi driver is categorised as highly skilled under the education-based definition, but not under the profession-related one.

3.3 Human capital, Brain Gain and Brain Drain ⁷

For most people, “capital” means cash, a bank account, company shares or real estate. Indeed, all of these are forms of capital: they are assets which yield income over time. However, there are forms of capital other than these tangible ones. Knowledge and skills also constitute a form of capital. Like other assets, they are commonly viewed as yielding dividends over time. Education and training (as well as expenditure on health) are regarded as key investments with regard to human capital formation. They will create private returns, i.e. they will at a later stage result in better employment and translate into higher income for the individuals concerned. But they are also seen as crucial for the performance levels of national economies: a higher education level of the workforce will, according to this view, produce higher economic growth and employment. Since growth in today’s societies and economies is to a much higher degree than in earlier ones driven by innovation and thus knowledge, such investment is seen as more important today than ever.⁸

Since people constitute capital, or rather their knowledge and skills do, this capital leaves the country when they emigrate to another. It is lost for the country of origin, and gained by the destination country. From the point of view of the country of origin, its earlier investment into the education and training of the emigrant has been a useless spending. What was intended to be an investment turned out to be simple consumption. This loss is obviously highest in case of the highly skilled. The destination country receives the human capital as a gift. It has made a “brain gain”, whereas the country of origin has suffered a “brain drain”. It should be noted that

one usually speaks of brain gain and brain drain only if there is a sizeable number of migrants, and if the balance of immigrants and emigrants is heavily disproportionate⁹. Situations characterised by sizeable numbers, but a relative equilibrium, are often referred to as “brain exchange”.

Although linked to (neoclassic) economic theory, the use of the brain drain metaphor transcended from its early days onwards the realm of strict science and got mixed up with political and ethical considerations. The term was originally used in the discussion about the emigration of British scientist to the US in the early 1960s, which was sparked off by a documentation of the Royal Society. It became better and more widely known, however, in a development policy context in the late 1970s and early 1980s. This debate was about whether or not it was defensible on moral and other grounds to accept that the rich industrialised countries benefited from investments in human resources that poor third-world nations had made, thus drastically harming their chances of economic and social development. An important question in the discussion was if it was justified to talk of brain drain at all, or if it was more adequate to talk of “brain overflow”¹⁰. While one school of thought, grounded in the economics of education, advocated regulatory strategies to limit and channel migration between the developing and the industrialised countries, the other, rooted in neoclassical theory, warned against any interventionist measures. As will later be seen, this debate about the loss and gain from the migration of the highly skilled continues to this very day. A third wave of the brain drain debate set in over the feared exodus of scientists and researchers from the countries of Central and Eastern Europe and the former Soviet Union to the West, which also touches on the theme of the present study. More recently, the brain drain debate has (also) returned to its origins in dealing with the issue of an (alleged) emigration of a sizeable number of highly qualified European young scientists, especially in the natural sciences, engineering and technology, to the United States of America. In parallel, measures to (re-)attract scientific high potential into single European countries were put in place. This organised attempt at a “reverse brain drain” led to a positively connotated version of the term, the brain gain. While the brain drain metaphor stresses the loss of the weaker, the brain gain image, which concerns the very same phenomenon, highlights the win of the strong, thus marking a change in paradigm away from cooperation and development towards competition.

The paucity of reliable and internationally comparable statistical material about the migration of the highly skilled, which was most severe in the early days of the debate, but still characterises the present-day situation, has contributed to the problem of correctly evaluating the size and effects of migration of this particular group. It is, for example, today possible to more or less correctly quantify the stock of (legal) migrants in a given country, and the flows into it in a given year or time interval. But it is hardly possible to track the movements of individuals over time. This is not only a theoretical problem. If a young scientist leaves his country of origin for good, it is certainly justified to speak of a loss of human capital. But if this scientist returns after a number of years, the original loss is being compensated and, what is more, additional human capital acquired during the research-training phase is being won. As long as these flows cannot be correctly established, it will remain a matter of conjecture who has made the brain gain. Therefore, it has been argued by some that, as long as emigration cannot be said to be permanent, it would be more appropriate to talk in more neutral terms of “brain circulation”, “brain mobility” or a “*circulation des elites*”¹¹. Even in those cases where migrants remain in their host country, and there is thus no return migration, it has not remained uncontested that the flow of benefits is in a one-way direction only. By keeping ties with their country of origin, migrants act as “bridges” which contribute to a transfer of technology and knowledge back to their country of origin. On these grounds, it has for example been argued that Indian expatriate engineers working in Silicon Valley have played a central role in starting India’s emerging software industry. While India’s software production is still a low-service industry employing cheap labour, the price and salary gap to the US decreased considerably over a ten-year span, and is likely to further narrow¹². In the same vein, it has been argued that the simple inflow-outflow balance of human capital does not correctly identify the full economic picture, because it does not include the effects of “remittance payments” (capital transferred by emigrants to their country of origin).

Further, the migration of the highly skilled does not in each and every case necessarily lead to brain gain on the part of the destination country. This is the case if a migrant nuclear physicist finds employment as a nuclear physicist (or a neighbouring profession adequately using his knowledge and skills) in the destination country, but it is not if he or she finds work only

below his education level, i.e. if he becomes a taxi driver or a bar tender. In this case of a mismatch between the skills offered by the individual and those demanded by the labour market (supply and demand mismatch), experts speak of a “brain waste”: there are only losers (the physicist and the country of origin) and no winners. The migration literature indicates that such cases are not at all rare. However, even brain waste is not irreversible. It appears that many immigrants start their employment career below their qualification level, and are thus originally a case of “waste”, but they may later work their way up the employment ladder.

3.4 Migration models

What makes people migrate? This question is addressed in the increasingly bulky set of literature on migration, and in particular in various theories or concepts of migration. It is interesting to note that, whereas migration research for the longest part of its history has concentrated on the conditions and motives that make people move¹³, there is a recent trend to complement this view by exploring the question why so very few people actually do. This development pays a late tribute to the reality that upward of 98 percent of the world population remains immobile.

Migration concepts

A good overview as well as a discussion of the relative merits and shortcomings of the different schools, models, approaches, and theories in the field of migration, which cannot be elaborated on in this report, is contained in a recent study by Hubert Krieger¹⁴. Contributions to migration research, which is an interdisciplinary subject, come from a very wide range of academic subjects, such as, for example, sociology, political science, population studies (demography), psychology and ethnology. A large share of the existing work has been produced by economists.

Regardless of the disciplinary origin of the researcher, all theories concede that economic considerations play a central role in the decision of an individual to migrate or stay. This aspect is, of course, given the most prominent place in economic theories. In neoclassical micro theory, migration is understood as an investment in human capital. According to this model, the potential migrant is a *homo oeconomicus*, who makes an (economically) “rational choice” by carrying out a cost-benefit analysis in order to decide whether to move or to stay on. If the analysis results in a

positive return on investment in case of migration, the person will decide to migrate. Such a calculation must, of course, be made for different target countries: the individual will then move to the country with the highest yield from investment. The chief element in calculating the economic advantage is the level of income gain the migrant can achieve. In order to calculate this gain at its net level, the costs need to be subtracted. The costs concern those of the physical move itself, as well as, obviously, those in the country of destination. The cost-benefit analysis cannot be based only on the situation at the time the calculation is made, but it must include a medium to long-term perspective. In other words, the return on investment is not calculated for the year of removal (in which it is almost certainly negative, as a result of the actual costs for the physical move), nor for the short term (in which the migrant faces a high risk of being employed below his possibilities), but for an extended period, after which there is an amortisation of the human capital investment. Those in the pre-enlargement EU who harboured the fear that their labour markets would be flooded by immigrants from the new member states after accession obviously perceived the potential migrants as the “rational agents” of this or similar theories (without being aware of this). They reckoned that the still large income differential between the EU-15 and the new member states would in any case result in a net economic advantage in the case of a move.

The neoclassical micro theory has been criticised of unrealistically reducing human beings to rational gain-maximising agents. To do justice to the economists of migration, it must be stressed that their vast majority has never denied that non-economic considerations play a role in decisions over migration. However, some have tried to convert non-monetary decision items, a number of which are discussed further below and which can contain such widely diverse aspects as language, climate, family links, or the simple stress of moving between countries (“psychological costs”) into monetary values. There are a number of problems linked to the rational choice model. The first one is how exactly to calculate the net migration result. First, this is difficult enough with the anticipated genuinely monetary costs, about which there may not be sufficient information available, and which anyway include a future-directed anticipation element which is based on expectations and extrapolations rather than safe knowledge. Second, it is even more difficult to (agree on a way to) value the

non-monetary items. What, for example, is the equivalent monetary value of not being separated from one's partner? Third, and perhaps most important, the theory certainly does help to explain why those who move do so, but it fails to account for the fact that some 98 percent of the world population do *not* move. One way of explaining the high immobility tendency is to assume, as some have done, that the vast majority of people never even undertake the cost-benefit analysis. But, if they do not, they cannot be "rational agents". Another, perhaps more promising, explanation of the widespread immobility is that the "natural inertia"¹⁵ of people establishes a high threshold level for cost-benefit calculations to actually result in mobility. In other words, the anticipated net gains would need to be very substantial in order to overcome the inertia and thus to result in an actual decision to migrate.

"Push" and "Pull" factors

Regardless of whether they do or do not postulate, as does the neoclassical micro model, the "rationality" of the potential migrant, or the preponderance of economic or quasi-economic rationales, most models presuppose in an analogous way an individual who takes into account or, rather, is influenced by, considerations of "pros" and "cons" when making a migration decision. Although these pros and cons are referred to under a number of different terms, they are mostly labelled as "push" and "pull" factors. Push factors relate to the country of origin and consist of adverse conditions (financial and other), which the individual is subject to. Pull factors relate to attractive conditions in the country of destination. Push factors come into play when the adverse conditions in the country of origin are greater than in the destination country. Pull factors presuppose that the relationship in terms of positive and negative conditions between the country of origin and destination is the other way round¹⁶.

When reviewing the literature for the most often cited push and pull factors, *economic and labour-market-related aspects* are in a top position. The absence of economic opportunities in the home country, and the expectation of their existence in the potential destination country, constitute push and pull factors. Considerably higher salary levels and a high level of employment in the destination country work as pull factors: a person who is unemployed in the country of origin and has a good chance of finding employment in the country of destination is experiencing a pull.

Trivially, the same goes for a person who can expect to earn double or treble as much after the move. Social security issues and costs of living also translate into push and pull factors, as does the original cost of moving. As a result, the seemingly unbeatable attraction (pull) of a three-fold salary in the destination country could be outbalanced by very high costs of living (housing etc.) and an underdeveloped social security system, which translates into additional costs, at present and especially in the future (pensions).

Personal relationships, i.e. *families, friends and relatives*, represent push and pull factors, too. But the picture with regard to this influence cluster is less clear-cut. For a person whose spouse lives in another country, the family link acts as a pull factor to migrate there. For a father who lives together with his wife (or partner) and his family, the prospect of migration to another country means separation from the near and dear, and represents, normally, neither a push factor away from the home country nor a pull to the potential destination, but as a deterrent for migration. On the other hand, the presence of relatives or simply compatriots in a potential destination country might constitute at least a “relative pull”, in the sense that this country of migration might be viewed as preferable over others by potential migrants. It is unlikely to act as a push away from the home country and a pull to the destination country in its own right, since, to take an example, a Czech is likely to still have more relatives in the Czech Republic than in Germany, but not in any other country apart from the Czech Republic. “Networks” of compatriots and relatives have been given a certain prominence in recent literature on migration: their influence on the choice of the migration country has, amongst other things, been attributed to the possibility of risk reduction, due to better information about and support in the destination country that the potential migrant has access to¹⁷.

Geographical distance is another factor influencing country choice (relative pull). The less the distance between the countries of origin and destination, the higher the inclination to migrate, as migration statistics clearly confirm. This is underscored by the fact that, of all legal migrants from the new member states into the EU-15 countries in the years up to 2004, the vast majority migrated to Germany and Austria. The relative proximity of the destination country makes it easier to stay in contact with relatives and

friends in the country of origin and reduces both the costs and the risks linked to a move.

Language plays a role too, again as an influencing element rather than as an absolute pull. Mastery of the language of the destination country, or the conviction to be able to learn it fast or easily, are usually a condition for labour-market access and thus reduce the risk of failure. It also facilitates access to vital information necessary for the choice of the destination country, and thus a realistic assessment of the benefits and disadvantages of migration. It is unclear if the domestic language of the destination country has the same importance for the highly skilled, or at least the sub-group of scientists and professionals in large multi-national companies (in-company secondments), since the environments they work in are increasingly characterised by the use of a third language, usually English.

It should be noted, though, that, whichever factors play a role in the decision of an individual to migrate, it is not necessarily the objective facts that guide this individual, but this individual's perception of these facts. This perception might be compatible with reality, but it need not be.

*Likely migrants*¹⁸

Who are the people most likely to migrate – or not? What are their characteristics? The widely held conviction is that the most likely migrant is young, male, single and well-educated, at any rate in Europe. To put it otherwise: age, gender, civil status and education level come into play when deciding over whether to stay or to move.

Age is a very strong determining factor, as the literature overwhelmingly confirms. Migrants are predominantly young people. Beyond the age of 40, very few people decide to move to another country. A classical explanation of this fact, from the human capital theory, is that younger persons receive higher returns on their migration investment, since the amortisation period for the investment is longer. But, perhaps, older people are also more tired than the young.

The majority of migrants to date have been males. Female migration, if and where it occurred, was mainly family-motivated (wives joining their husbands). However, recent studies indicate that *gender* might in the future

become less of a reliable indicator for the likelihood to move than it has been in the past. Those who expect an increased future share of female migrants explain their anticipation by the rising education levels of women, but also by unwelcome trafficking and work in the sex industry.

A high-level of formal *education* is generally assumed to favour migration. In other words: persons with a tertiary qualification, i.e. the highly skilled, are generally more mobile than lower-skilled persons. However, some recent studies¹⁹ have challenged this hypothesis.

As explained earlier, *civil status* is commonly held to strongly influence the inclination to migrate to another country. Being married or living in another form of “stable” relationship acts as a strong disincentive to migration. “Singles” are much more mobile. There could, of course, be an interrelationship with the age characteristic. Young people are more often “singles” than older ones.

Restrictions

The information provided in this chapter so far might lead to the conclusion that the decision to settle in another country is entirely up to the individual concerned. This is of course not the case. Migration is conditional on the preparedness of the destination country to admit the potential migrant. The exact nature of the restrictions put in place depends on the immigration policies of the country in question. This may, and usually does, mean a group-specific approach. Most industrialised (OECD) countries would, for example, discourage the immigration of poverty migrants, while they would try to attract health-care workers and the highly skilled, or at any rate, a subset of the latter (ICT professionals, natural scientists). Therefore, as a rule, the particular migrant group that this study is concerned with is usually to a lesser degree than other groups subject to immigration restrictions. Moreover, with full-degree free movement of labour guaranteed in the enlarged EU after a maximum transition period of seven years, whatever has remained of these restrictions after 1 May 2004 will disappear in the foreseeable future. This does not mean that there will be eventually an entirely obstacle free European Union. The recognition of qualifications and the transferability of social security entitlements, for example, are guaranteed in principle, but *de facto* still pose many hurdles.

3.5 Statistical issues²⁰

Almost every study which is empirically based or which uses empirical data beyond a minimum extent to prove its point starts with a warning that the available data leave much to be desired. The present study is no exception to this rule. This fact is stressed by most migration researchers although they also point out that there have been noteworthy improvements over the years.

Migration statistics either measure the *stock* of migrants in a particular country, i.e. the totality of migrants, or the *flows* of migrants, i.e. those who entered or left the country in a given year. Stock data are derived from population registers, residence permits, censuses, and surveys. The working part of the migrant population, i.e. the labour migrants, is captured via work permits and labour force surveys. In EU member states, flow data are produced on the number of those added to or dropping out of population registers or the issue or expiration of a residence permit. The precision with which these instruments can measure immigration and emigration is to a high degree dependent on the migrants' cooperation. Emigration registers are notoriously unreliable, since many people see no point in "deregistering". The willingness to register on arrival also varies, even with legal immigrants: in some countries, access to certain social benefits is conditional on registration, in others it is not.

Statistics on migration are deficient for a number of reasons. The first reason is obvious: a considerable share of migration is illegal. Illegal immigrants do not register, and their numbers can therefore only be estimated. These estimates are mostly extrapolations from data obtained in the course of regularisation schemes (where they exist). Other extrapolations are based on failed attempts at illegal entry (refusal of entry, arrests made at border-crossing attempts) or apprehensions and deportations. The data originate from police sources and are usually collected by the Ministry of the Interior or Justice of the member states of the Union. At a European level, they are collected in the form of unpublished confidential quarterly reports by the EU Centre for Information, Discussion and Exchange on Immigration (CIREFI).

Second, migration data are comparable only to a limited extent. At the root of this problem is the fact that there is no commonly shared definition of migration. Jahr, Schomburg and Teichler identify four definitions

underlying statistics on international migration²¹: nationality, country of birth or country of origin, country of residence, and country of (secondary) education. It is obvious that the application of the different criteria leads to different numbers of migrants. The nationality criterion, for example, is not able to capture return immigrants, whereas the principle of country of residence is. But even taken for themselves, not all of the criteria lend themselves to straightforward comparison. The application of the nationality principle, for example, contains distortions in international comparisons because the conditions for naturalisation (and thus status change) are more restrictive in some countries than in others.

Third, the various forms of incomplete or short-term migrations, such as cross-border work, petty trading, frequent work missions and working holidays, are hard to capture. So are in-company secondments, which appear to be quantitatively important in a west-east direction in the case of the highly skilled. Since experts are agreed that all these new forms of migration are rapidly gaining in volume in the enlarged EU (particularly for migration between the new member states and the former EU-15), the partial non-inclusion of the respective migrant groups poses a growing problem for the reliability of European migration statistics.

Fourth, immigration statistics are not differentiated enough. The demarcation lines between different groups of migrants are fuzzy. This creates a number of serious problems with regard to the particular group of migrants focused on in this study, the highly skilled. In the first place, their stocks and flows are often not separately measured. Mostly, they “disappear” in other or wider categories. Second, to the extent that there are separate statistics on this group, they are, due to the lack of a uniform definition, not always comparable between countries. Data sets based on previous education (tertiary qualification) contain different cohorts than data sets based on the type and level of work (“occupied as”) in the destination country. The data available leave the more to be desired the more differentiated information one seeks. The original intention for this study had been to differentiate between the highly skilled as a whole and those employed in an academic or research context in the country of destination. This has turned out not to be possible, because there is, small-scale studies apart, practically no statistical information available on this sub group.

Notes

- 3 Most of the information in chapter 3.1 is taken from John Salt, *Current Trends in International Migration in Europe*, Council of Europe (CDMG (2001) 33), Luxembourg 2001, pp. 4 sqq.
- 4 There are, of course, exceptions to this rule, and the picture in a particular country may well diverge from this general assessment. Sweden, for example, reports a sizeable number of skilled refugees.
- 5 For more information on ISCED = International Standard Classification of Education (ISCED 97), cf. OECD, *Handbook for Internationally Comparative Education Statistics. Concepts, Standards, Definitions and Classifications*, Paris 2004, pp. 77 sqq.
- 6 Cf. OECD, *International Mobility of the Highly Skilled*, Paris 2002, pp. 14 sqq.
- 7 The following is a dramatically simplified account of the human capital theory. For a more profound version, cf. the works of the “Chicago School”, especially *Human Capital* (1964) by the Nobel laureate Gary S. Becker. The theory of human capital is considerably older than Becker's work in this field. His foremost achievement is to have formulated and formalized the microeconomic foundations of the theory. In doing so, he developed the human-capital approach into a general theory for determining the distribution of labour income.
- 8 The European Union's Lisbon strategy, and particularly its “Education & Training 2010” agenda, is a perfect emanation of this view of things.
- 9 Sometimes, an attempt is made to quantify what is here called “sizeable numbers”. Based on empirical observations, Böhning concludes that in and out-flows of two per cent or more of the highly qualified population of a country can be regarded as brain drain (or gain), since this is the threshold for impact. Cf. Böhning, W.R., “Elements of a Theory of International Economic Migration to Industrial Nation States”, in Kritz, M., Keely, C., and Tomasi, C., *Global Trends in Migration: Theory and Research on International Population Movements*, Center for Migration Studies, New York 1981, pp. 31 - 33
- 10 Cf. Baldwin, G. B., “Brain Drain or Overflow?”, *Foreign Affairs*, 48/170, pp. 358-372.
- 11 This latter concept was introduced into the migration debate as early as 1970 by P. Ladame in his article “Contestée: la circulation des elites”, *International Migration Review*, vol. 8, no.1/2, pp. 39-49.
- 12 Cf. Saxenian, A. L., “Brain Drain or Brain Circulation? The Silicon Valley-Asia Connection”, 2000, <http://www.sims.berkeley.edu/~anno/speeches/braindrain.html>.

- 13 It is not that resistance to mobility has been totally ignored by earlier research. As early as 1972, Lee talked of a “natural inertia” of people standing in the way of migration (cf. Lee, E., “Eine Theorie der Wanderung”, in Szell, G. (ed.), *Regionale Mobilität* : Nymphenburger Verlagsanstalt, München, 1972, p. 119).
- 14 Cf. Krieger, H. et al., *Migration Trends in an Enlarged Europe*, European Foundation for the Improvement of Living and Working Conditions, Dublin 2004, pp. 79-93. Krieger’s overview categorises the theories into “neoclassical macro models”, “neoclassical micro concepts”, “new economics of migration”, “socio-economic macro models”, “socio-economic and socio-psychological micro-level models” and the “SEU model”.
- 15 Cf. Lee, *op.cit.*, p. 119.
- 16 The differentiation into push and pull factors is in many cases analytical and often describes two sides of the same coin. If a person lives in country A and his girlfriend in country B, and if this person would prefer to live with his girlfriend, the girlfriend’s absence in country A acts as a push factor, and the girlfriend’s presence in country B is a pull factor. The girlfriend constitutes the disadvantage and the advantage at the same time. The situation is, however, different, if the question of separation and proximity is related to a group of people, say, a wife and a lover. Suppose a potential migrant lives in country A with his wife, and has a lover in country B. He has come to loathe his wife, and he yearns to live with his lover. In this case, the wife is a push factor for leaving country A, and the girlfriend a pull factor to migrate to country B. There are two separate influences (factors), which work on the potential immigrant. Unless one assumes he has come to loathe his wife because he found the lover....
- 17 Cf. Krieger, *op.cit.*, p. 90 sq.
- 18 Most of the information in the following section is taken from Krieger, *op.cit.*
- 19 Cf. Bauer, T.K. and Zimmermann, K.F., *Assessment of Possible Migration Pressure and its Labour Market Impact Following EU Enlargement to Central and Eastern Europe*, A Study for the Department of Education and Employment (UK), IZA, Bonn 1999.
- 20 Most of the information contained in the following section is taken from Salt, *Current Trends*, 2003, pp. 7-10 and Volker Jahr, Harald Schomburg, Ulrich Teichler, *Internationale Mobilität von Absolventinnen und Absolventen europäischer Hochschulen*, Wissenschaftliches Zentrum für Berufs- und Hochschulforschung (Werkstattberichte 61), Kassel 2002, pp. 8-17.
- 21 Cf. Jahr et al., *op.cit.*, p. 15.

4 *Migration in Post-War Europe*

4.1 Migration trends after World War II

Throughout history, there has been movement of people across the borders in European countries. Since the end of the 19th century, the redefinition of borders and successive economic crises has given rise to population movements from Eastern to Western Europe. The main flows of intra-European movements are associated with wars (principally World Wars I and II) and therefore constituted forced migration. The period since the end of the Second World War has been one of continuous international migration: from then onwards, migration has been more or less intense, but at no point in time inexistent. While movement took place in all directions, the main flows went from the South to the North (especially during the first 30 years after the war) and from the East to the West (especially after 1990).

*Guest workers*²²

As a result of urban industrialisation, better education, higher productivity, mechanisation, and lower prices, there was a major exodus from the countryside and into the cities in Western Europe in the 1950s. Even though this improved the supply of workers available for the growing new industries, it could not fully satisfy labour demand in many Western European countries. A trend towards longer periods spent in initial education, combined with the effects of low birth rates and many war casualties, contributed to the labour supply deficit. To meet this demand, Western European countries tried to attract foreigners for temporary work in their industries.

The 1960s and 1970s were characterised by intense labour migration within Europe. Labour migration was facilitated by several bilateral agreements, for example between the United Kingdom and Republic of Ireland, or between the Nordic countries, and by “guest worker” arrangements, which mostly concerned the south-north movement of labour. Relative poverty and high unemployment levels in Southern Europe were important push factors and spurred emigration for employment in the North. Belgium, Germany, and the Netherlands, amongst other European countries,

received large numbers of workers from Spain, Portugal, Italy, Yugoslavia, and Greece. At the same time, the southern emigration countries were also receiving countries: immigrants from Poland and Albania moved to Greece between 1960 and 1980, and in the same period many African immigrants found their way to Italy, to mention but two examples.

Germany was the main receiving country of guest workers. It witnessed a sizeable increase in its foreign population after 1960, when the recruitment of guest workers started. In 1960, the country had some 686,000 foreign residents. Only ten years later, this number had skyrocketed to nearly three million, of whom two thirds were active on the German labour market. By 2000, the stock of foreign nationals had increased ten-fold compared with 1960, to more than 7 million²³. The share of those in employment decreased significantly over time. Immigration in the early phases was predominantly male and for work purposes. Later, the families of these “breadwinners” followed and most of them did not seek or take up work, at any rate not initially.

When economic and social conditions changed in both sending and receiving countries (as a result of the 1973 oil crisis and the ensuing economic recession), guest worker migration decreased and was, in some cases, even replaced by return migration. However, most labour migrants stayed on, since employment prospects in the home countries had not significantly improved in the meantime, and they had acquired the right to social benefits in the destination country. In addition, as indicated above, migration for family reunion strengthened the south-north flow of migrants even after the demand for guest workers had come to a halt. As a consequence, what had originally been intended by everyone involved as temporary labour migration of a maximum of a few years, led to the permanent settlement of most guest workers in the receiving countries. This unexpected development found expression in the aphorism that “there is nothing more permanent than temporary foreign workers”²⁴.

The guest worker schemes did not involve Central and Eastern Europe. But despite the “Iron Curtain”, east-west migration took place even before the opening up of Central and Eastern Europe around 1990. These movements were mostly illegal, and the estimated numbers are fairly small. The biggest single exception was Yugoslavia, whose citizens were allowed to work as

guest workers in various western countries already in the 1960s. In addition to the Yugoslavs, some ethnic minorities were legally allowed to emigrate with the strong support of a western country (for example the ethnic German *Spätaussiedler*). This way, a major exodus of Poles took place between 1980 and 1989. About 300,000 of them obtained an authorisation to emigrate, of whom almost 60 percent settled in Germany. It is estimated that close to another 500,000 illegally left the country in the same period. As a result, Poles today constitute the largest communities of Central European citizens in Western Europe ²⁵.

In the 1980s and 1990s, migration balances turned, for the first time, positive also in Finland, Ireland, and the UK, followed by Greece, Italy, Portugal and Spain. Apart from the UK, these had all been traditionally emigration countries. Other Western European countries had already moved from negative to positive net migration in the 1950s and 1960s, thus making of Europe an immigration rather than emigration region ²⁶.

4.2 Migration after southern enlargement ²⁷

The southern enlargement of the Union in the 1980s (Greece in 1981, Spain and Portugal in 1986) gave rise to fears of a large-scale influx of labour migrants to Germany, France and other EU-9 countries, as a consequence of different salary levels ²⁸. These fears did, however, turn out to be unfounded. Even after the end of the seven-year transition period in which the free movement for purposes of work was restricted, surprisingly little south-north migration could be observed. The latest figures show that less than two million citizens from the three countries currently reside in another EU country ²⁹. This is equivalent to about three percent of the combined population of Greece, Spain, and Portugal. Importantly, the numbers did not rise steeply after the final coming into force of free labour movement (in late 1987 for Greece and in early 1992 for Spain and Portugal) and the aggregate flows from these countries have been practically nil over the past ten years. Most of the two million Spanish, Portuguese and Greeks residing in other EU countries today had actually migrated prior to their countries' accession. In fact, only the stock of Greek migrants increased (by 135,000) after the introduction of free labour movement, while the total number of Portuguese and Spanish in the EU actually fell between 1992 and 1995. Even Greek migration fell below gravity model estimates ³⁰.

It is important to note that the aggregate figures mask important differences between countries (both sending and receiving). While the influx of the southern migrants to the European Union as a whole was less than expected, it was more significant in the case of some countries than others. Portugal, for example, with the highest propensity to migration, has some 8.5 percent of its total population living in other EU countries. Spanish emigrants to the EU represent only 1.2 percent of the country's total population³¹. The southern migrants moved mainly to France and Germany.

In conclusion: the pure economics might have suggested significant volumes of migration from Greece, Portugal and Spain to Western and Northern Europe. But migration remained relatively modest. The new southern members of the EU did not take extensive advantage of the free movement of labour. Indeed, while Europeans as a whole have so far used the possibility of free labour migration to a surprisingly little extent, the Southern Europeans were and still are the most sedentary of all EU citizens³².

4.3 Migration from Central and Eastern Europe to the EU after 1989

The guest worker period apart, the most intense migration period in Europe in the past century has been the 1990s. The movement from east to west – brought about by economic, political, and ethnic reasons – intensified after the fall of the iron curtain. The initially intense westward migration led to concerns, in the West, over the possibility of a large-scale permanent population transfer. But the movement, which peaked in 1989, declined rapidly and took on a temporary nature after 1993, due also to restrictive policies implemented by the main destination countries³³. Westward migration of course continued to persist, but at much lower levels than anticipated. From a Central and Eastern European perspective, the volume of emigration was, however, less insignificant. The Central and Eastern European countries “lost” nearly five million between 1960 and 2000, or about three percent of their aggregate population³⁴. More than half of the net outflow occurred in the last ten years of that period (1990-2000).

Due to an uneven distribution of these emigrants, some EU countries were also much more affected than others. Germany and Finland, for example, received substantial numbers of immigrants from the East at the beginning of the 1990s, especially as a result of the migration of ethnic minority

groups. Germany received approximately 620,000 *Aussiedler* (German nationals or their descendants residing in the Central and Eastern European countries). Finland saw a substantial inflow of persons of Finnish origin from the former Soviet Union and the Baltic States. Migration based on other than ethnic background remained relatively small all-over. Besides, employment of nationals from Central and Eastern Europe did not increase significantly in any of the receiving countries, with the exception of Germany³⁵. Austria was – and still is – another important recipient of eastern migrants. In total numbers it comes second only to Germany, but, as a result of its smaller home population, it has, in relative terms, by far the largest proportion of Central and Eastern European citizens of all EU countries.

Economic incentives to migrate from Central and Eastern Europe declined slightly in the second half of the 1990s and the early 2000s. At the same time, economic conditions in the target countries, such as Germany (the main receiving country), deteriorated³⁶. However, as the income gap remained high and the stock of the migrant population from these countries in the EU-15 was low relative to the income gap, the migration movement did not come to a complete halt. Per capita GDP in the countries of Central and Eastern Europe stands at about 23 percent of the average level in the EU-15. In terms of purchasing power parity (PPP-GDP), the average GDP of the eight new eastern member states was at about 46 percent of the EU average in 2002. This difference is larger than the one in the southern enlargement round: when joining the Union (Greece in 1981 and Portugal and Spain in 1986), Greece's PPP-GDP was at 65 percent of the EU average, and Spain and Portugal's at 66 and 70 percent respectively in 1986. However, the income gap between the EU-15 and the new eastern member states is very similar to the gap between Spain and Portugal and the present EU-15 countries in the 1960s and 1970s, when many guest workers were recruited from these countries into Germany, France and the Benelux. In addition, the gap is smaller than that of other main immigration source regions into the EU, such as Northern Africa and South-East Europe³⁷.

In the early 1990s, the average number of officially recorded net movements from Central and Eastern European countries to western countries was around 850,000, while in the three preceding decades it had been less than

a third of this³⁸. Between 1960 and 2002, the migration balance of the ten new member states was negative and emigration exceeded immigration by about one million (collectively). Most of this loss occurred in the last decade³⁹. At the beginning of this century, east-west migration was concentrated in the bordering regions and was mainly regulated by bilateral agreements (e.g. between Poland and Germany, or Austria and Hungary or the Slovak republic). However, the picture is more complex than might at first appear, since the countries of Central and Eastern Europe are no longer characterised only by east-west migration streams. They have become transition countries and, with immigration from citizens of their eastern and southern neighbours, receiving countries⁴⁰. In addition, the east-west migration has been very mixed since the first westward flows at the beginning of the 1990s: pendular, cross-border, and increasingly temporary migration have complemented and even partly replaced long-term or permanent migration. Movements have become more frequent, but also shorter in duration. Indeed, the quantitatively most important migration seems to have become that of workers under temporary contracts.

Recorded movements from Central and Eastern Europe into the EU-15 have generally declined in the last few years. However, the real numbers of citizens from the CEE countries in the EU-15 is unknown, as many of them have been, and still are, illegally residing and working in the EU. It is commonly believed that the latter form of migration has increased during the last decade and is still increasing, although this is not included in statistical data. Therefore, post-enlargement migration data in the EU-15 might show a sharp increase in the number of migrants very soon: work and residence permits will be much easier to obtain and illegal immigrants are likely to “go legal”.

East-West migration the highly skilled and scientists

As stated earlier, there is widespread consensus between researchers that the peak of east-west migration might lie in the past, or, to be exact, in the years immediately after the opening up of Central and Eastern Europe in the early 1990s. By the mid-1990s, flows had thinned out considerably. Interestingly, there are indications that in some countries a number of highly skilled, mainly intellectuals and scientists, migrated even earlier. This appears to be the case especially with Poland, which saw a politically motivated westward movement in the 1980s, after hopes in an easing of

political control vanished when the *Solidarnocz* movement initially failed to reach its aims⁴¹. Much earlier, in the late 1960s, the same happened in Czechoslovakia, after the end of the “Prague Spring”.

Unsurprisingly, there is a consensus that flows from the East to the West far outnumbered west-east migration of the highly skilled. However, Salt⁴² concludes that “while the bulk of this movement is still westwards, the continent is now seeing an increasingly complex pattern of brain exchange, akin to that long existing among the Western market economies”. In the same vein, Hillmann and Rudolph⁴³ report of “considerable” (“*erhebliche*”) west-east movements in the category of temporary or “incomplete” migration. These concern two groups: corporate staff seconded to newly created company outlets in Central and Eastern Europe, and specialists and consultants in restructuration schemes (“technical assistance”) of western governments, and European and international organisations. Much speaks for it, however, that the peak of this particular type of migration has long been passed. When western capital and companies first moved east, the specific management skills they required were not yet available in Central and Eastern Europe. However, a central task of the seconded staff was to train locals, who were expected to take over in the medium term. This has probably happened in the meantime. At the same time, the large technical assistance schemes, such as the European Union’s PHARE programme, have also come to an end, most likely limiting the inflow of western consultants and experts.

Although again leaving much to be desired, there are some quantitative indications about the migration of the sub-group of academic and research personnel from universities and research centres in Central and Eastern Europe. It appears that in almost every country of the region, the university and research sector, which had been “overstaffed” by western standards, went through a shrinking process in the first half of the 1990s, laying off a considerable number of academic staff from the universities and academies of science. This led to an exodus from the research system, which was further reinforced by the fact that an emerging private sector attracted scientists, particularly in the engineering and ICT fields, with salary levels the state-run universities and research centres could not compete with. In other words, there was also considerable in-country brain movement, into the corporate sector (and into unemployment). Salt concludes that the

majority of scientific staff went down this route, rather than leaving the country, and that the brain drain to the West has not been massive⁴⁴.

This is confirmed by a survey conducted for the European Commission's Directorate General for Research in 1997 by a research team led by Daniela Bobeva on the migration of researchers from ten Central and Eastern European countries⁴⁵. The main conclusion of the study is that the peak of the outflow of scientists was in the early 1990s and that, by 1997, this trend had been replaced by a more balanced "research exchange". It is amazing that the patterns and waves of the emigration of scientists appear to follow those of the highly skilled in general, and indeed of the totality of emigrants. The percentages of those scientists who left the universities and research institutes for western destinations range from 1.7 in the case of Slovenia to 15 in the case of Poland. These percentages form the two extremes of the range: 15 per cent represent a significant amount of the scientists of a country and indicate indeed some form of "exodus". Slovenia's 1.7 per cent could, on the other hand, be regarded as a very normal, if not low, level of international scientific mobility. It is, however, worth noting that the large differences in the study might be partly the result of discrepant survey approaches in the various countries, of which its author gives account.

The share of those amongst the remaining scientist with a serious intention to emigrate lies between 6.3 per cent in Hungary and one per cent in Lithuania. Bobeva claims that those scientists who emigrated were almost all of the highest calibre, and had often already spent periods at research institutions abroad aided by fellowship programmes. The main emigration destination was the United States of America, followed by European destinations. The following table summarises the findings.

Some studies make – in passing – references to students studying abroad as a source of brain drain. International students of this kind are not usually counted as emigrants. Very often, their study abroad phase is supported in the form of scholarships by the governments of their countries or international (non)governmental organisations as a measure to enhance the "internationalisation" of their education. Migration researchers have, however, pointed out that a substantial number of international students does not return to their home countries, especially those at the Masters or

Country	Emigrants (in %)	Serious intention to emigrate (in %)	Destinations (in % where available)
BULGARIA	3.6	2.3	• USA 28
			• GERMANY 16
			• CANADA 9.9
			• UK 5.7
			• NORDIC 8
CZECH REPUBLIC	4.0	4.4	• USA
			• GERMANY
			• CANADA
SLOVAKIA	11.3	3.0	• CZECH REPUBLIC 23.8
			• USA 20.8
			• GERMANY 7.5
SLOVENIA	1.7	3.3	• USA 40
			• EU 34
			• CANADA 10
ESTONIA	13.8	1.5	• NORDIC 45
			• USA 20.9
			• GERMANY 13
			• RUSSIA 7
POLAND	15.0	2.1	• USA 50
			• GERMANY
			• FRANCE
			• UK
LATVIA	3.6	1.5	• USA + CANADA 28.9
			• ISRAEL 26.4
LITHUANIA	NOT AVAILABLE	1.0	NOT AVAILABLE
ROMANIA	3.0	2.6	• GERMANY 27
			• USA 15
			• FRANCE 12

Ph.D. level. They have therefore indicated that scholarship programmes can turn into a subsidised form of human capital loss. Although studies mostly draw on the migration of European natural science and ICT students to the USA⁴⁶, the large imbalances in European student migration in favour of western countries might speak for it that a similar trend could be developing inside the enlarged Union.

4.4 Current situation⁴⁷

When the ten new member states⁴⁸ joined the European Union in May 2004, the Union's population of 308.8 million increased by 24 percent, i.e. by further 74.1 million inhabitants. The new citizens of the European Union will enjoy, after a transition period of a maximum of seven years, the same right to free labour movement within the Union as the citizens of the "old" EU of 15⁴⁹. Before trying to assess the future volumes of migration and their impact in the final chapter of this study, it is interesting to have a look at the migration and population situation in Europe today.

Foreign population in Europe⁵⁰

In recent years, the stock of Europe's foreign population has increased considerably, by about 11 percent from 1995 to 2001⁵¹. However, part of this increase (in statistics) is due to regularisation programmes, which converted the previously unrecorded (illegal) migrants into recorded ones. The total stock of the foreign population (including other Europeans) living in the whole of Europe in 2001/2002 was around 23 million. This equals about 4.5 percent of the total European population. The main part of this stock was residing in the EU-15, representing 5.5 percent of the population in that area. The aggregate numbers hide some important differences in the distribution of the foreign population across countries. Germany has about one third of the total, followed by France (15 percent) and the United Kingdom (12 percent). The numbers show that non-nationals make up only 2.9 percent of the new member states' population⁵²: the migration they have experienced has been modest, and comprised principally of return migration.

It is interesting to note that more than half (about 13 million) of the foreigners in European countries are fellow Europeans. In 2000, there were around 19 million foreign nationals in the European Union, about six million of which were nationals of other member states. These numbers

have been fairly stable since 1998. Again, the aggregate figures camouflage differences between countries: by way of example, in Ireland and Belgium, more than half of all foreigners are nationals of another EU country, and in Spain, France, and the UK, the share ranges between a half and a third. In most countries, however, the bulk of foreigners originate from outside of the European Union⁵³.

Of the total stock of approximately 840,000 citizens of Central and Eastern Europe residing in the “old” Union (about 0.2 percent of the total EU-15 population), 79,000 are reported as living in Austria, and 598,000 in Germany, corresponding to 1.1 percent and 0.7 percent of the population of these two countries⁵⁴. Taken together, the Central and Eastern European nationals residing in the two countries make up about 70 percent of the total in the EU, which suggests that old cultural ties as well as geographic proximity play a considerable role in the distribution of migrants across Europe⁵⁵. In 2001/2002, the number rose from 840,000 to around one million. Indeed, some authors believe that most potential migrants from the new member states have already moved into the EU-15 prior to enlargement in May 2004⁵⁶.

Foreigners and the European labour market

It is harder to know how many immigrants are active in the European labour market, mainly because many immigrants (even those with a legal status) take up unrecorded employment. In 2001/2002 there were about 9.9 million recorded foreign workers in Western Europe, representing an increase of 36 percent on the 1995 figures⁵⁷. This rise is, however, mainly attributable to the legalisation of the status of illegal workers. Indeed, the inflows of foreign labour have been modest in most European countries in recent years. In most Western European countries, the absolute numbers remain below 20,000 per year. The proportion of the foreign labour force of the total labour force in the EU varies significantly between countries. In Italy, Portugal and Spain, the percentage is under two, while in Austria, Germany and Belgium it comes close to ten. Increasing numbers of migrants from Central and Eastern Europe now move to Southern Europe and Ireland. Spain and Portugal have bilateral agreements with selected CEE countries for incoming workers⁵⁸.

Unemployment levels in the new member states differ both between themselves and with the EU-15 average. In some countries, the levels are similar to the EU-15 and on the decline (like Estonia, Hungary, and Latvia). In other countries, unemployment is high and growing (Slovakia, Poland, and Lithuania). Overall, unemployment in the new member states is higher than the EU average. In many cases, it is higher than in the EU-15 countries most hit by unemployment⁵⁹.

The total number of people from Central and Eastern Europe working outside their own country is unknown, though data on total numbers of foreign workers in certain European countries give some indication. For example, around 3,000 contract workers and 40,000 temporary workers from Central and Eastern European countries went to Germany (which has been all along the main recipient for workers from this area) each year under bilateral agreements⁶⁰. No visa is needed for new member state citizens for stays shorter than three months, which has even in the past made entry of EU-15 countries fairly easy. The three-month period is, however, often followed by overstay and undocumented work, which finds, of course, no expression in official statistics.

The position of the CEE countries on the labour migration map has become more mixed in the last few years. Now, the CEE are not only sending, but also receiving labour migrants and increasingly so, with their accession to the European Union. For some countries, like the Czech Republic, Hungary, Slovakia, and Slovenia labour migrants are a substantial part of their total workforce. Other countries, like Poland, Bulgaria, and Romania, have substantial but temporary labour migration and migrants are often an important, though illegal part of the workforce. Estonia, on the other hand, has very small labour migration numbers: foreign workers are mainly professionals, and usually come from the West⁶¹.

Highly skilled – measuring stocks

The emergence of the global migration market in the last couple of decades concerns migrants of any level of skill, but competition is growing especially over the highly skilled. Their migration across Europe as a whole has been steadily growing. While the bulk of the movement of the highly skilled in Europe is still westward, it is possible to observe, as mentioned earlier, an increasingly complex pattern of “brain exchange” or “brain

circulation". Since these movements follow a complex pattern and often involve more than two countries, they have also been labelled "international brain exchanges"⁶². There are signs that the migration of the highly skilled in Europe, while quantitatively still quite low, is becoming multidirectional, as managers and highly skilled workers follow their companies to Central and Eastern Europe⁶³.

Measuring the migration of the highly skilled is of great importance for strategic and policy purposes. It is therefore all the more lamentable that very little comprehensive information is available on this particular migrant group. Most of the available statistics do not draw a clear demarcation line between migrants in general and the subset of the highly skilled. Collecting accurate data is a difficult task also because the mere definition of the highly skilled is not commonly shared. Are the highly skilled those with a certain educational level (tertiary education), or those (and only those) employed as highly skilled? Differences between countries in definitions used in data collection can and do lead to incomparable figures, and indeed migrants can get "lost" on the way from the statistical system of one country to that of the next⁶⁴. According to the OECD, which uses a combination of both classifications, in 1997 the stock of highly skilled⁶⁵ in the European Union stood at about 65 million (or about 20 percent). 42 million of them were employed in science and technology fields, and 46 million had a tertiary level education. 23 million belonged to both categories. OECD data on foreign and national adult populations by level of education in five European countries (Germany, France, Italy, the UK, and Sweden) show some interesting details. The proportion of the highly skilled of the immigrant population is higher than the share of highly skilled of the native population in both Italy (13 percent against 9.5 percent) and the UK (39.3 against 27.3 percent). In Sweden, nearly one third of both groups have a tertiary qualification, whereas in Germany and France the percentage of the domestic highly educated exceeds that of the foreigners⁶⁶. The numbers indicate that, of the total immigrant population in these countries, 12 to 40 percent are highly skilled. The duration of stay of the highly skilled in the receiving country can unfortunately not be stated. It seems probable, however, that temporary migration is gaining ground also among the highly skilled and that short-term mobility is common especially among scientists and researchers.

The employment level of highly skilled migrants has increased steadily. Their unemployment rate is about half of that of the overall labour force. The EU average of highly skilled unemployment in 1999 was about 5.7 percent, compared with the 9.5 percent total unemployment⁶⁷. When measured by level of education (as opposed to level of education required by the current occupation), these figures do not tell, however, whether all (or even most) of the highly skilled – be they nationals or foreigners – are employed at a level that corresponds to their education. The numbers could well hide some “brain waste”, as migrants (and domestic workers) often take up jobs below their education level.

Notes

- 22 Guest worker programmes aim to add workers to the labour force without adding permanent residents to the population. The residence permit is limited in time to the needs of the labour market of the host country, and conditional on taking up employment in the given sector.
- 23 Martin, “There Is Nothing More Permanent Than Temporary Foreign Workers” in *Backgrounder*, Center for Immigration Studies, April 2001, p. 3
- 24 Martin, *op.cit.*, p. 1
- 25 OECD, *Migration Policies and EU-Enlargement- the Case of Central and Eastern Europe*, Paris 2001, p. 34
- 26 IOM, *World Migration: Managing Migration - Challenges and Responses for People on the Move*, 2003, p. 239. The turn happened earlier in countries, which had started to recruit guest workers already in the 1950s (e.g. Belgium, France, Germany and Sweden) and was then followed by other West European Countries some years later (due to economic and demographic reasons).
- 27 The interest of many researchers trying to predict migration flows after the eastern enlargement of the European Union in May 2004 has been on the southern enlargements of the Union in the 1980s. The belief is that regardless of the differences between the Southern Europe and the Central and Eastern European states (e.g. cross-border commuting possibilities, and larger income gap), the analysis of migration following the earlier enlargement can shed some light on the potential migration following this enlargement.
- 28 Similar fears had been expressed by Germany and France when, in 1957, they and the Benelux countries joined Italy to build the European Economic Community. They feared that masses of Italian labour migrants would enter their countries. However, the unexpected happened: only some Italians (and

even them usually for a short period of time) went north to become *Gastarbeiter* in Germany. Even if some more Italians moved from the South of Italy to the North during the same period, most of them never even thought about leaving their country. For details, cf. OECD, *Migration Policies and EU-Enlargement*, p. 79.

- 29 Cf. Pichelmann, K., "EU Enlargement, Migration and the Labour Market, A tentative assessment", in J. Addison and P. Welfens (eds.), *Labour Markets and Social Security*, 2nd Ed., Springer Verlag 2003, p. 1
- 30 The significant difference in income levels (GDP per capita was about twice as much in Germany than in Greece) and high unemployment (around 7.7 percentage points higher than in Germany in 1988) would have suggested higher migration numbers. OECD, *Migration Policies and EU-Enlargement*, p. 68.
- 31 These figures date to 1994.
- 32 Cf. Turmann, A., *A New European Agenda for Labour Mobility*, CEPS-ECHR Task Force Reports, 2004, p. 12. These findings indicate that differences (even when significant) in income and employment levels are not a sufficient motivation for people to leave their own country to move to another. What are the other factors that influence the decision is – as we have seen - a very complex issue.
- 33 Cf. OECD, *Migration Policies and EU-Enlargement*, p. 35
- 34 Cf. IOM, *Op.cit.*, p. 241.
- 35 Cf. OECD, *Migration Policies and EU-Enlargement*, p. 35
- 36 Germany was faced with a substantial GDP growth decline in 2001 and 2002, as well as with an increased unemployment rate.
- 37 The data in this paragraph come from Brücker, H. et al., *Potential Migration from Central and Eastern Europe into the EU-15 – An Update*, Report for the European Commission, DG Employment and Social Affairs, Berlin 2003
- 38 Cf. Salt, *Current Trends*, 2003, p. 16
- 39 In contrast to the negative net migration of the CEEC, as a result of a positive net migration, the population of the EU-15 countries increased aggregately by nearly 18 million people. The net migration was relatively low for the EU-15 until the end of 1980s, but since the 1999, the EU-15 population has increased by around one million per year as a consequence of migration. Part of the explanation of these increased numbers in the last 15 years is accountable to the large number of asylum seekers in the EU. Between 1990 and 2002 the total number of asylum applications in the EU-25 was over five million, most of this concentrating on the EU-15 (only less than 200,000 applications were made to the new member states). Cf. Eurostat, *Population*

- Statistics 2004*, European Commission, Luxembourg 2004, pp. 95- 96
- 40 Cf. OECD, *Migration Policies and EU-Enlargement*, p. 33
- 41 Cf. Hillmann, F. and Rudolph, H., *Jenseits des brain drain. Zur Mobilität westlicher Fach- und Führungskräfte nach Polen*, Wissenschaftszentrum für Sozialforschung, Berlin 1996.
- 42 Cf. Salt, *Current Trends*, 2003, p. 3.
- 43 Cf. Hillmann and Rudolph, *op.cit*, p.1.
- 44 Cf. Salt, J., *Current Trends*, 2001, p. 19
- 45 Bobeva, D. et al., *Brain Drain from Central and Eastern Europe*, European Commission, Brussels 1997
- 46 Cf. for example Casey, T. et al., *The Mobility of Academic Researchers. Academic Careers and Recruitment in ICT and Biotechnology*, European Commission/JRC Institute for Prospective Technological Studies, Seville, 2001
- 47 The figures on new member states of the European Union will concentrate mostly on the Eastern and Central European new members, i.e. excluding thus Cyprus and Malta. The situation of the latter two differs significantly for geographical, economical and historical reasons.
- 48 Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia
- 49 While the right to travel to, reside, and study in another EU country has been granted to the new citizens from the day their countries joined the Union, for labour market concerns of the EU-15, a transition period of maximum seven years has been granted, during which labour migration (i.e. issue of work permits) can be restricted by individual countries. To read more on the transitional arrangements, cf. chapter 5 of this paper.
- 50 "Europe" refers here to the geographical entity, not to the European Union.
- 51 Cf. Salt, *Current Trends*, 2003, pp. 11 and 12
- 52 Data is not available for Greece, and thus the "EU-15" figure includes in fact only 14 countries. Data on distribution of nationals and non-nationals is available for only seven of the ten new member states (excluding Poland, Slovak Republic, and Lithuania). Cf. Eurostat, *Population Statistics 2004*, p. 54
- 53 Cf. Salt, *Current Trends*, 2003, p. 14
- 54 Cf. Brücker et al., *Potential Migration*, p. 4. These data are from year 1998 and include as CEEC the eight new EU member states from the region, as well as Bulgaria and Romania. The data show the numbers of official immigrants, and therefore the real numbers are bound to be somewhat higher.
- 55 However, other European countries neighbouring the CEECs, like Finland, Sweden, and Greece, have migrant shares close to the EU average.

- 56 Cf. Krieger et al., *op.cit.*, p. 4
- 57 Cf. Salt, *Current Trends*, 2003, p. 21, and table p. 61
- 58 *Ibid.*, p.22
- 59 Cf. Brücker et al., *Potential Migration*, p. 8
- 60 Cf. Salt, *Current Trends*, 2003, p. 22
- 61 *Ibid.*, pp. 22-23
- 62 *Ibid.*, p. 32
- 63 OECD, *Migration Policies and EU-Enlargement*, p. 45
- 64 If the statistics of the sending country are based on education level, and those of the receiving country on employment level, a nuclear physicist (or a philosopher) working as a barman in the receiving country could be lost in the definition gap.
- 65 OECD uses the definition “human resources in science and technology”, which is however a wide classification and includes degree holders of all disciplines.
- 66 In Germany the national highly skilled make up 24 percent of the native population, of foreigners some 14 percent. In France the figures are around 22 percent and 12 percent respectively. Cf. OECD, *International Mobility*, p. 75.
- 67 *Ibid.*, pp. 18-19

5 *Legal frameworks and Government migration policies*

5.1 The legal framework

Since 1 May 2004, the EU legislation already in force in the EU-15 became law in the new member states, too. In principle, this applies also to the movement of the labour force. In this area, the Single European Act (signed in 1986 and entered into force in 1993) introduced the “single market” with its “four freedoms”, concerning the free movement of people (to live and to work), goods, capital, and services.

However, as a response to worries about massive labour immigration into the EU-15 after the accession of the ten new member states, the Union decided on a set of “transitional arrangements”, which, if applied, give each member state the right to limit the free entry of labour from the new member states in the first years after accession. Similar arrangements had already been put in place for a duration of seven years when Greece became a member in 1981 and Spain and Portugal in 1986.

In the first two years after enlargement (i.e. after 1 May 2004), access to the labour markets of the “old” member states depends on national measures and policies and possible bilateral agreements. Each country of the EU-15 can decide which measures to apply, and there is no requirement to notify the European Commission about the measures to be taken. The only restriction is that access to labour market cannot be made more difficult now than it was on the date of signature of the accession treaty, i.e. on 16 April 2003 (the “standstill clause”). The possibility of restrictions applies only to the eight CEE countries, i.e. they exclude Malta and Cyprus.

All EU-15 countries have decided to adopt some restrictive measures⁶⁸ for the two-year period. Even Ireland, the United Kingdom, and Sweden, who give unrestricted entry to the labour market, have applied special measures to limit access to welfare provisions by tying them to employment and/or minimum periods of residency. In other countries, different measures have been taken to restrict the number of labour migrants, usually by setting an annual cap to the number of work permits to be issued to the labour force from the new member states.

At the end of the first two-year period, the Commission will report on the functioning of the transitional arrangements. The EU-15 can then decide whether to continue with the national measures for a further three years (until May 2009) or to allow free movement of workers. In both cases, they need to notify the European Commission of their decision.

After May 2009, the EU-15 countries could still apply restrictive national measures for a final period of two years. However, their application requires the authorisation of the European Commission and presupposes the existence of very strong reasons. Member states need to demonstrate that unlimited access would *cause* or would *risk causing* serious disturbance on the labour market of the country in question. The two countries expecting the biggest flows of labour migrants from the new member states, Austria and Germany (the former in proportion to its population and the latter in absolute numbers), are generally expected to extend the restrictive measures for the further two years. After expiry of this final period (i.e. by May 2011), unrestricted labour market movement must be granted by all EU member states.

Each of the new EU member states can freely decide to impose equivalent restrictions on the nationals of those EU-15 countries which have themselves imposed restrictions to the access of their nationals. For example, Poland could restrict in similar manner and for the same number of years the access to its labour market of workers from Germany as Germany is restricting the entry of Polish workers. So far, only Hungary, Poland and Slovenia have been reported to apply some restrictions. The new member states can also restrict labour migration from the other new member states (with the exception of Malta and Cyprus, on which no restrictions can be imposed). So far, none of the new member states have indicated an intention to make use of this right. Malta may restrict the entry of any European labour migrants in application of the “safeguard clause”, meaning that it can limit entry, but only if it can demonstrate that unrestricted access would create serious turbulences on its labour market.

Simulations based on earlier experiences with transitional measures of the above kind predict that their impact on the flows of migrants is going to be marginal (cf. Chapter 6 of this study).

5.2 Attracting the highly skilled

It is probably not unfair to say that no single European Union country, nor the Union as a whole, has a fully-fledged migration policy, if this term is to denote a pro-active concept which concerns the entirety of the different forms of immigrations and types of immigrants coming. Government action is mostly reactive (to upcoming crises and other developments), and rather piecemeal, i.e. there is no integrated concept for the phenomenon as a whole. However, some overarching trends have developed in recent years. One of them is a growing reluctance to admit large numbers of immigrants without looking at the consequences. To put it more bluntly: governments attempt, to varying degrees, to limit the inflow of the poor and those with low qualifications. At the same time, there is a development to put into place measures to attract the highly skilled.

European countries were somewhat slow to react to the emergence of a global market for highly qualified labour. According to Salt⁶⁹, the first countries to introduce measures aimed at recruiting foreign highly skilled workers were Australia and Canada in the 1980s, and the US in the 1990s. European countries made, until some years ago, no systematic efforts at brain gains in the global migration markets. But this has now changed. A number of European countries have implemented measures and schemes targeted at the highly skilled.

Most of the measures are aimed at redressing specific skills shortages on the domestic labour market. An exception is the UK's "Highly Skilled Migrant Programme"⁷⁰, which is targeted at persons with high human capital in general, i.e. it is (largely) profession-unspecific. The programme, which was started in 2002, applies a point system to select from among applicants. Points are awarded, amongst other things, for educational qualifications, prior work experience and achievement, past income, and priority areas (predominantly foreign doctors). There are also points based on age (those under 28 have priority). The scheme is intended for permanent immigration.

However, most other initiatives differ from the Highly Skilled Migrant Programme in at least two respects. First, they target groups of a particular profession, or with particular skills. In most cases, the latter means persons with advanced skills in information and communication technologies

and/or (paramedical) health sector workers, mainly nurses. Second, they tend to limit the period of time for which access to the labour market (and the country as a place of residence) is granted. In some countries, however, these limited permits are renewable.

The most often quoted example of this type of initiative is the German “Green Card”. The scheme, which entered into force in August 2000, targets ICT specialists from non-EU countries. An ICT specialist is defined as a person with a tertiary degree in an ICT-related subject, or as a person with the offer of a work contract with a German employer in the ICT sector with a minimum annual salary of 50,000 Euro. There is no point system, i.e. anyone who fulfils the required conditions will be accepted. The scheme is designed for up to 20,000 green cards. Applications are submitted by the German employer and processed by the central labour administration, in an unbureaucratic fast track procedure. The green card may not be issued if there is an equally qualified German or EU national who can fill the post, i.e. it requires a “labour market test”. This test is no longer needed if the green card holder changes employer. Foreign ICT graduates from German universities have priority (status switch): nearly 15 percent of the first ten thousand green cards issued went to this group. The work and residence permit issued is limited to a maximum of five years. Three years after the scheme’s introduction, 15,000 cards had been issued, most of them in the first year. The scheme will come to an end in December 2004 and in January 2005 a new comprehensive immigration law will enter into force in Germany.

The green card system is essentially a scheme that eases work (and residence) permit requirements for a particular group of people for a limited period of time, with a guarantee of speedy handling. Other European countries have introduced similar measures, though they are usually less comprehensive and cover only elements of the green card-type solution. Some of these schemes concentrate on the exemption of the highly skilled from rules and regulations governing the employment of foreigners with lower skill levels. These include the issue of work permits without the requirement of labour market tests, as is the case in the Netherlands and in Denmark. In the Netherlands, labour market tests for spouses of foreign highly skilled have also been abandoned. Ireland has lowered its requirements for some categories of the highly skilled,

particularly in-company seconded staff. Denmark has set up a scheme, which, interestingly, also includes highly skilled but unemployed migrants already residing in the country. The Irish initiatives of this sort, which also include the facilitation of highly skilled returnees, seem to have been particularly successful. The reduction of restrictions for work permits for the highly skilled alone has resulted in the entry of 6,000 in 1999, 18,000 in 2000 and another 18,000 in the first half of 2001. Numbers in other countries are relatively (and often absolutely) much lower. Denmark, a country comparable to Ireland in terms of population, issued 3,600 permits in 2000 and 2001. In the same period, France issued 11,500 work permits for highly skilled migrants. Increasingly, work permits are being available for foreign graduates of the domestic universities: next to Germany, which offered this route as part of its green card scheme, the UK and France allow for a change in the migration status.

In spite of their undisputable successes, these schemes also encounter problems. Countries report difficulties in assessing the skill and qualification level of applicants and language often forms a barrier. The fact that most countries allow only the possibility of temporary stays reduces their attractiveness. There are also unresolved issues, for example what to do if the highly skilled foreigner becomes unemployed. Obviously, the success of such schemes and mechanisms crucially depends on the demand of the labour market for the skills in question, and this demand fluctuates as a result of economic cycles. The above figures refer to a period of economic boom, and there are indications that, in line with the downturn of the economy in most European countries from 2002 onwards, numbers declined.

5.3 Return migration of scientists ⁷¹

Among the overall group of the highly skilled, researchers and scientists play a particular role. Although amazingly little statistical data are available, the generally shared assumption is that the main flows of scientists are into the United States of America, and away from all other world regions, including the EU-15 and the EU-25. In order to stop the brain drain of scientists, governments all over the world are revising their policies with a view to enhancing their own attractiveness, to retain top-notch domestic scientists, and to re-attract those who left the country.

Outside of Europe, China has been among the first to try to lure back leading scientists it “lost” to the US. The “National 863 Programme”, the “National Climbing Projects” or the “Spring Light Programme” offer considerable amounts of money for returning scientists themselves, and for research funding and infrastructure. Part of the target group are Chinese graduates from US universities, i.e. promising young or future scientists. Schemes of a similar intent have been set up in Australia and Canada.

This movement has also reached Europe now, although documentation of the existing programmes and initiatives is sketchy at best. Many schemes try to combine efforts to retain domestic scientists, to attract foreign researchers and to re-attract emigrated academics. Casey et al. mention the existence of specific return programmes or programmes including a return-facilitating element in Austria (“Erwin Schroedinger Scholarships”), Flanders (“Independent Academic Personnel”), Finland (Academy of Finland reintegration grants), the UK (Wellcome Trust), Italy (“Telethon Foundation Career Project” and Ministry of Universities’ grants), Greece (Ministry for Development), and Spain (Ministry of Education “reintegration grants”). It is interesting to note that some of these schemes try to marry the needs of scientists to research abroad and the human capital interests of their country: they fund a period abroad, but the schemes contain a re-integration period at the end, to make sure the scientists are not forever lost for the country.

Little systematic knowledge exists about the impact of such initiatives. On the one hand, it appears that many emigrated scientists do want to return to their country of origin, and that instruments for reintegration of the individual are therefore welcome. On the other hand, it is often maintained that efforts aimed at individual integration fall short of solving the underlying European problem. This problem is said to be structural: research career prospects are underdeveloped, salaries are often not competitive, research infrastructure leaves much to be desired, and inflexible hierarchies prevent especially young researchers from the possibility of independent research. Those who highlight the structural deficits of European research therefore predict that the brain drain to the US can only be marginally limited by return schemes. They maintain that the key to preventing brain drain from Europe is to build attractive institutions.

Notes

- 68 Note that there are no restrictions for self-employed persons, or for students. There are also no restrictions in terms of residence.
- 69 Cf. Salt, *Current Trends*, 2003, pp. 32-35, and Salt, *Migration Policies towards Highly Skilled Foreign Worker. Report to the Home Offices*, University of London, London, 2002, from where most of the information in this section is taken. Cf. also IOM, *op.cit.*, p. 249 and OECD, *International Mobility*, p. 344.
- 70 http://www.workpermit.com/uk/highly_skilled_migrant_program.htm
- 71 Most of the information in the following section is taken from Casey et al., *op.cit.*

6 *The future: Predictions and impacts*

Which quantities of migration from the East to the West – and vice versa – can be reasonably expected after the enlargement of May 2004? What types of migrants are there going to be? What will be the main destinations and directions of the migration to be expected? Will migration be essentially one-way, from the East to the West, and which will be the main destination countries and regions? What type of migration are we going to be confronted with – temporary or permanent migration, labour-market migration or migration for other purposes? These and similar questions have been the concern of political decision makers, strategists, researchers and the general public in the period leading up to the accession of the ten new member states of the Union.

A second set of questions asked concern the likely impacts of the migration to be expected. What will be the consequences of future migration in economic terms? How will the expected migration impact on employment in general, and on particular segments of the employment systems? What will be the effects on salary levels, and where? How will migration impact on social security systems? What will be the consequences of migratory movements on social cohesion – both in the East and in the West? What is the impact on population development?

The above questions are also those addressed in this final chapter of the present study. In trying to formulate answers, this chapter draws on two major types of sources. First, it is based on the information and analyses provided in the previous chapters, i.e. on the history of migration in Europe, on policies restricting and facilitating intra-European migration, as well as on the analysis of the factors shaping individual migration decisions (and thus migration flows). Second, it draws heavily on the existing stock of literature on the issue. Ever since the opening up of Central and Eastern Europe around 1990, researchers and policy analysts have engaged in predictions and estimates of the migration volumes and flows to be expected in the future.

When reading the following predictions, the reader should be cautious. Why is this so? First, of course, predictions and estimates constitute hypotheses only. The future reality can, and most probably will, deviate from the scenarios made today. But this applies to predictions in general, and is therefore trivial. A second reason is not. As stated various times already, this study in general relies strongly on the existing set of literature, and so does this chapter. But these studies are not unproblematic. Of their many traits, three in particular are questionable.

First of all, most studies are guided by a monolithic concern: will the “old” members of the Union be swamped by migrants from the new member states in the aftermath of the latter’s accession. This perspective has a number of implications, of which two are especially important. Its guiding question is *negative*, and, in some cases, even *angst*-ridden, and focuses on the possible problems rather than the opportunities linked to the free movement of people and workers (even though the studies do not confirm these worries). Further, it is very “*western*”, and therefore, in a sense, displays a pre-enlargement attitude, i.e. one characteristic of the division rather than the re-unification of Europe. As a consequence, the studies deal mainly with east-west migration (and its problem potential), and only marginally with west-east migration and its consequences. The studies also rarely address the impact of migration on the new Union as a whole.

Second, the studies all make a host of assumptions, which they rarely make explicit, and which may well be challenged. These assumptions are too many and too diverse to elaborate on here, but one example might highlight the problems inherent in them. Most reports and studies were produced before 2002, when the economic climate in many European countries (and the world as a whole) was still upbeat, and had been so for an exceptionally long period. The optimism originating from this climate leads most researchers to assume that Europe will keep its place as one of the strongest economic regions of the world and that the economic gap between the old and the new member states will dwindle – sooner or later. But this development is far from certain. What if Europe as a whole will become weaker, and what if the new member states will not catch up? Will this not, by necessity, impact on intra-Union migration and, perhaps even more important, on migration between Europe and the rest of the world?

Third, the studies tend to take a less “holistic” view than might be desirable. They often look at individual impacts of migration, without putting them in perspective. Thus, discussing the labour-market implications of the emigration of a sizeable number of young and well-qualified people from the East, one report points out that the employment prospects for the non-movers remaining in the country could improve considerably. That may well be so in the short run. But what about the implications for production and consumption and economic growth in general, what about the long-term demographic implications, what about the medium-to-long-term effect on the health of social security systems, and – in turn – the effects of all those consequences on the absorption capacity of the labour market?

The chapter is structured in two main parts. The first one looks at migration as such: it tries to estimate expected volumes; it seeks to create a typology of future intra-Union migrants; it attempts to forecast the main directions and destinations of migration; it investigates motives of migration and it addresses the likely duration of stays. The second part attempts to analyse the impact of the above estimates. In other words, it tries to identify the likely consequences of the estimated migration, for the economies of the countries involved, their labour markets, populations and social security systems.

6.1 Recent studies on future migration potential

6.1.1 Volumes of migration

The approaches guiding the majority of studies trying to predict future migration in an enlarged Union can be classified into two broad categories. The first set of studies uses the recent migration history of Europe as a starting point for estimates of the quantities and flows to be expected after the eastern enlargement⁷². In other words, these studies extrapolate from past experience. A second set of studies develops its predictions on the results of opinion polls or surveys in the new member states⁷³. These studies base their forecasts on stated intentions. Interestingly, regardless of the approach taken, most studies come to similar conclusions and agree in predicting a long-term migration potential ranging from one or two percent at the low end, to four percent of the current population of the ten Central and Eastern European countries⁷⁴ at the high end. In absolute numbers, this amounts to between two and four million individuals.

*History as a basis of prediction – the southern enlargements*⁷⁵

A good number of studies have used data of the recent European migration history as a basis for complex econometric calculations to determine the range of potential future labour (and other) migration in Europe. The assumption of these studies is that the experience with migration after (and before) the Union's southern enlargements in the 1980s can be used as the calculation basis of the extent (and flow) of migration after the 2004 enlargement to the East. The studies do take account of the differences between the two enlargement rounds. For example, the then "old" EU suffered from a shortage of manual labour before when the southern countries joined the Union, whereas they have a considerable level of unemployment now. The labour force in the Central and Eastern European countries is highly educated compared with that of the southern countries in the earlier decades. Most important, the gap in economic prowess (and thus in salaries) between the EU-15 and the new eastern members is much more pronounced than that between Greece, Spain and Portugal and the then EU-9 (measured in GDP).

In order to allow for these differences, the studies in question depart from the quantitative outflow from Greece, Portugal and Spain in the 1980s, but calculate their estimates by adjusting the values for the variables they use to the situation in the new eastern member states. OECD, for example, takes into account the following variables:

- Differentials in wages and wealth expectations (the larger the difference, the more migration is to be expected);
- Difference in unemployment rates (the larger the difference, i.e. the less unemployment there is in the potential destination country compared to the sending country, the more people are likely to move);
- Number of immigrants from the country of origin already living in the destination country (network effect: people are more likely to move to a country or city where there is already a substantial number of immigrants from their home country);
- Geographical distance between the (capital cities of the) sending country and receiving country (cost of moving, transport problems, and cultural differences are likely to increase with distance, and therefore reduce the probability that a person will move).

A complex calculation based on these variables results in an estimate of some 270,000 to 340,000 migrants per year moving from Central and Eastern Europe into the EU-15 under the conditions of free labour mobility⁷⁶ These quantities translate into less than 0.1% of the EU-15 population - and hence indicate that the effects of the east-west migration on the EU-15 as a whole could only be marginal. Furthermore, it is important to note that this and similar projections have been calculated on the basis of migration quantities from the Southern countries into the EU-9 in the years immediately following the introduction of free labour mobility for immigrants from Spain, Portugal and Greece. As their annual emigration rates decreased after the early years, so are the above numbers expected to significantly drop over time. Other extrapolation exercises, which use the real south-west/north migration flows of the 1960s as a reference point, conclude that around 200,000 migrants per year, and thus less than predicted by the OECD, will move from the new to the old member states over a period of 15 years.

With regard to both estimates, it is important to note that the figures refer to the gross inflow of migrants from the new member states to the EU-15, and do not take account of migration in the reverse direction. They therefore do not state net migration (balance between incoming and outgoing migration). This raises the interesting question how large reverse migration flows are expected to be. To the knowledge of the authors of this study, no predictions exist on the quantities of west-east migration.

Survey-based studies

The point of departure of the studies referred to above is the past. Studies based on surveys, the second large category, have the advantage of directly addressing the potential movers. Such surveys and polls usually target a representative sample of the (relevant) population and enquire about their future plans. However, this approach has other limitations. First, it is next to impossible to assess the honesty and accuracy of the responses given in the survey. Second, surveys can only identify *inclinations* and *intentions* (to move or to stay). How many of those intending to or inclined to migrate will actually do so is another matter. In fact, most respondents' general inclination to move will never materialise in an actual move⁷⁷. Third, surveys provide information on the "supply side" only: they do not assess the capacity of the destination countries' labour markets to accommodate

the potential incoming workers. A further problem arises with estimating migrant stocks: as migration from the Central and Eastern Europe (into the EU) is increasingly temporary in nature, the number of people who indicate a willingness to move, or indeed move, is bound to be significantly higher than the actual stock of migrants in any given country at any given moment in time. People who have some migration experience in their lives exceed in numbers those who are currently migrants⁷⁸. This will be increasingly the case, as intra-European migration is assumed to be more frequently only temporary in nature. Therefore, unless a survey addresses also the question of the planned length of stay, the data is unlikely to give any real indication of potential migration stocks.

A recent study by the European Foundation for the Improvement of Living and Working Conditions⁷⁹ attempts to assess and estimate the future migration flows and to provide a typology of potential migrants from the new EU member states into the EU-15 countries after May 2004. The predictions on movement are based on data from a Candidate Country *Eurobarometer* survey on living conditions (April 2002). The study evaluates the survey findings by comparing them with other migration flow estimates in recent studies, and aims to identify the main motives behind the intended moves.

The study assesses the potential to migrate into the EU-15 (as opposed to moving within the country of origin, or further away to another continent) by investigating different degrees (of seriousness) of a disposition to move: a “general inclination” (equivalent to not being opposed to the idea), a “basic intention” to move, and a “firm intention” to move. In order to be categorised in one of the latter two groups, respondents need to have conducted some preparatory work related to a possible move, as a “seriousness test”. Taking into account only the respondents in the “hardest” category (“firm intention”), the study predicts that around one percent of the working age population (15 years and older) of the new member states and the remaining candidate countries (Bulgaria, Romania, and Turkey) will (have) migrate(d) into the “old” EU member states between 2002 and 2006 under conditions of free movement⁸⁰.

These results concur with the results of the econometric study of the European Commission from 2001⁸¹. The Commission study predicts an

absolute number of 1.1 million migrants from the new Eastern member states (excluding thus Cyprus and Malta) and Bulgaria and Romania between 2002 and 2006. Distributed over the five-year span, this translates into an annual average of around 220,000 migrants. These annual quantities are expected to decrease significantly over the next 25 years: the study predicts higher flows in the first years followed by a steep decrease (340,000 migrants in 2002, decreasing to below 150,000 within ten years and to less than 3,000 in 2030)⁸².

A study by Bauer and Zimmermann⁸³ forecasts migration in an order of magnitude between two and three percent of the population in Central and Eastern Europe in the course of the next 10 to 15 years. The potential annual flows into the EU-15 would be in the range of 200,000 migrants, or 0.05 percent of the EU population. Fassmann and Hintermann⁸⁴, who base their prediction on a survey of intentions to move, arrive at an estimated two percent of the Central and Eastern European population after assessing the “seriousness” of intentions of their surveyed.

Labour movement will not be free into all EU-15 countries for the first five to seven years after the accession of the new member states into the European Union⁸⁵. This is expected to lower annual migration into the EU-15 in the transition period, but not overall numbers in a longer time horizon. Taking into consideration this “postponement effect”, gross migration into the EU-15 in the period up to 2006 is likely to remain significantly under one million. But, as the results of a simulation exercise show, the long-term impact of the transitional period (i.e. postponement of the free movement of labour from 2004 to 2006, 2009, or even 2011) yields only a marginal reduction in the net increase in the number of migrants after free labour movement is finally introduced. The migrant stocks are likely to converge rather rapidly to the same long run levels both with and without transitional arrangements. In other words, the transitional arrangements seem only to postpone the peak of the migration inflow, but do neither influence the overall flow volumes over time, nor the stock of migrant bodies in the countries involved⁸⁶.

Summing up the above research results, the following trends emerge. The long-run migration potential from Central and Eastern Europe (and, most importantly for the present study, from the eight new member states⁸⁷) into

the EU-15 is estimated to be modest, ranging between two and four percent of the total population of Central and Eastern Europe as a whole, and standing at around one percent for the eight new Eastern member states. In terms of concrete flows, predictions range from 200,000 to 340,000 migrants per year. These annual volumes will decline after an initial period, though the exact point in time when this trend will set in is seen as dependent on the speed of economic development in the new member states, and thus difficult to predict. Accordingly, estimates of the total long-term migrant stock vary. Beyond these factors, the demographics of the new member states will also set a natural limit to the emigration potential towards other countries⁸⁸. In any case, the results of the different studies seem to be pointing in the same direction: large-volume east-west migration flows will not occur even after the introduction of free labour movement, and migration volumes will be, to a significant degree, similar to those observed after the Southern enlargement of the European Union in the 1980s. Disconcertingly, the studies yield no material at all which would allow any predictions on west-east migration. This might be taken to indicate that researchers expect west-east movement to be a *quantité négligeable*, which is therefore not worth investigating. But it could also be a simple reflection of the exclusive focus of current research on the consequences of EU enlargement for the “old EU”, and thus, ultimately, of neglect.

6.1.2 Typology of migrants

The overall quantities of migration quoted in the above section are, by necessity, a rather coarse measure. They do, for example, not yield any information on the composition of the expected migrant bodies. Who is going to move in the coming years, and who will probably stay? This question will be addressed in the current section.

The data presented by Krieger in *Migration trends in an enlarged Europe*⁸⁹ show that people from the new member states with either a “general inclination” (a soft indicator) or a “basic” or “firm intention” (harder indicators) to move into an EU-15 country are usually young, single, male, and – interestingly for us – highly educated. The study thus validates mainstream migration theories, which regard exactly these groups of persons as the most frequent migrants. Each of the specific characteristics of the groups to be expected to migrate most deserves some scrutiny.

More than 90 percent of the total number of those expressing a firm intention to migrate were under 40 years old, and half of them under 25. If Krieger's findings are only a faintly accurate reflection of future migration reality, they signal the new member states and the candidate countries stand to lose between two and five percent of their youngest age group, amounting to a "youth drain". This is bound to have an unwelcome effect on the (already negative) population growth in the countries concerned, and, as a result, on the stability of social security systems.

Nearly three quarters of those with a firm intention to move are single. Whether their intention to migrate is mainly due to pull or push factors is unclear, but one of the reasons is surely that the move of a single person is both less complicated and less costly (both in terms of monetary and "psychological" costs) than that of an entire family⁹⁰. The high proportion of single potential migrants would appear to indicate, amongst other things, that the inflow into the EU-15 of those in need of social assistance (young children, sick family members, the elderly and old-age pensioners, etc.) could be expected to be relatively low.

While male migrants are still expected to be in the majority, migration is nevertheless becoming more "feminine". The numbers are already nearly even (55 to 45 percent), and the trend of increasing female migrants shows no halt.

A further factor often considered particularly significant for determining migration decisions is the employment status of the potential migrants. Indeed, the study by Krieger shows a correlation between the intention to move and unemployment, but one much weaker than could have been expected. While 31.5 percent of those with a firm intention to migrate were unemployed, nearly as many (27.3 percent) were in employment. Interestingly, the largest group, by employment status, belongs to neither category: 40 percent of the potential migrant body is made up of students in higher education. If one expects them to easily find employment after graduation, due to their advanced qualification level, and thus categorises them as (future) employed, the latter group would make up about two thirds of the potential migrants.

The relatively small share of the unemployed among potential migrants can be explained in many ways. First of all, moving is always costly, and unemployed people may avail of the necessary tools (e.g. a web-linked computer) and resources (money) to plan and realise a move to another country. Secondly, the relatively high percentage of employed with a firm intention to migrate could be attributed to their desire to improve their salary and career prospects in another country. The move would therefore not be one caused by immediate necessity, but rather by an expectation of improved opportunities. The unemployed planning to move into the EU-15 make up only about two percent of their countries aggregate population. Therefore it seems that contrary to some fears, the social security systems and labour markets of the “old” EU member states would not be swamped by unemployed people looking for jobs⁹¹.

Last but not least, a breakdown of respondents by level of education shows that a large share of the potential migrants from the new member states into the EU-15 are highly educated: around 70 percent hold a tertiary degree, or are studying to obtain one in the near future. Indeed, as was mentioned before, the percentage of students intending to move is significantly high. It is interesting to note that the correlation between an intention to move and the realisation of this intention is usually higher among the well educated than any other group. Bearing all of this in mind, the high proportion of highly skilled and young people of the totality of the potential migrant population in the new member states could indeed be indicative of a possible brain drain out of these countries.

The results of other studies deviate considerably from Krieger’s findings, however. A survey-based study by Fassmann and Hintermann finds that only about 12 percent of the potential East-West migrants possess a tertiary-level degree. 30 percent in this survey consist of holders of a secondary qualification and 14 percent have only completed compulsory schooling. However, even though these figures are significantly lower than those of Krieger, they suggest, too, that east-west migrants are, on average, not only better educated than the average population in their countries, but also better educated than the average population in the destination countries⁹². The same tendency is confirmed by the European Commission labour market report in 2001⁹³.

A study by Stephen Drinkwater⁹⁴ also indicates that the most highly qualified individuals are on average more willing to move than other groups. However, he points out that there is very little clear evidence of the characteristics of international migrants, making their classification a risky endeavour.

There are, to the knowledge of the authors of this study, no separate predictions for the particular subset of the highly skilled of researchers and academics working in universities and research institutes. The earlier-quoted study by Bobeva et al.⁹⁵ does cover, on top of emigration which had already taken place, also intentions of the scientists still remaining in Central and Eastern Europe. The share of those with a serious intention to migrate ranged from one percent in Lithuania to 6.3 percent in Hungary. But even if these intentions resulted in actual migration, most of them will have taken place by now, since the study was produced in 1997. Moreover, many of those intending to migrate had non-European destinations as their first choice.

Indeed, much speaks for it that the peak of outbound migration of Central and Eastern European scientists into the EU-15 lies in the past. This thesis can also be supported by the relatively low pull forces originating from the science systems of many EU countries. As earlier quoted, the European Union expects a future additional “demand” of some 700,000 researchers in the hard sciences and technology in the medium term, most of which could be expected in the EU-15 countries. However, this “demand” is largely hypothetical. It is based on the number of scientists the Union would need if it was to attain its well-known Lisbon (and other) objectives. But the Union is, by and large, still far from reaching these aims, and the many vacancies do therefore not exist. Next to the fact that vacancies do not come in large numbers, the attractiveness of many (continental) Europe’s universities and research institutes is rated low in comparison with its competitors in the United States. Uncertain career paths, a paucity of adequate conditions for young researchers, a not always appealing infrastructure and, in some places, a competition-unfriendly preference for domestic researchers, are among the factors which make it unlikely that the bulk of Western European research institutions is going to exert a magic attraction on scientists from Central and Eastern Europe.

6.1.3 Destinations and directions of migration

Overall volumes of east-west migration are likely to be modest. However, that does not mean that all countries will be affected in the same way and to the same degree. Rather, future migration can be expected to be very unevenly distributed. This applies to the distribution of migrants between the various countries of origin, as well as the destination countries. Many EU-15 countries will remain virtually unaffected by post-enlargement immigration (especially as far as labour migration is concerned), others can expect significant inflows. The earlier-quoted European Commission report of 2001 estimates that two thirds of all migrants from the new member states and remaining candidate countries will head for Germany, and more than 10 percent for Austria⁹⁶. This distribution corresponds to the distribution of those Central and Eastern Europeans already residing in the EU-15⁹⁷ and in part explains the concerns that these two countries have expressed on the impact of enlargement on their labour markets and economies⁹⁸. According to this study, Italy, the UK, and Sweden could each expect to receive some three to five percent of the total Eastern migrant body entering the EU-15. According to this prediction, the numbers moving into the individual EU-15 countries would be dramatically different. Assuming an annual east-west migration volume of 300,000 (a high-end estimate), Germany, with a population of some 82 million, would receive 200,000 immigrants. Italy and the UK, countries with a population not far below that of Germany (some 60 million) would only receive between 9,000 and 15,000 new-member-state immigrants. Austria, with a population of some 8 million, would take in 30,000 per year, while Sweden, with a similarly sized population, was to expect only between 9,000 and 15,000. Likewise, the share of these immigrants of the total population of the countries of destination would deviate dramatically from the 0.1 percent expected for the Union as a whole. In Italy and the UK, the share would remain almost below measurement level; in Austria and Germany, it would come close to half a percentage point per annum.

The geographical distribution predicted appears to confirm central assumptions of mainstream migration theory, namely that geographical proximity (and especially shared borders), existing cultural and historical ties, a knowledge of the destination country's language, and the existence of considerable numbers of own nationals in the destination country, all enhance future migration flows. Geographical proximity and shared

borders, in particular, are likely to increase “incomplete” migration, namely cross-border commuting and “pendular” movements of workers.

A survey by International Organisation for Migration (IOM) of 1998, which addressed a sample of 1,000 persons from ten Central and Eastern European countries⁹⁹ likewise inquired into the favoured destinations of potential migrants. Its results confirm the overall popularity of Germany as a destination country (number one destination in all Central and Eastern European countries, except Slovenia). Amongst Poles, the share of those intending to go to Germany was higher than anywhere else (36 percent, against four to six percent for any other EU-15 country). Interestingly, Czechs had a more even distribution of preferences across Germany, Austria, France, and the UK. Overall, Austria was the second most preferred European destination. According to this survey, Germany and Austria are likely to receive around 70 percent of all potential movers from the Central and Eastern Europe. Other EU-15 countries would receive only small contingents.

Not all new post-enlargement migration flows will be from the new member states to the EU-15. The accession to the EU will most likely also enhance migration between the new member states, too, especially from the less developed of them to the more developed. In addition, the movement of highly skilled from Europe as a whole into the US is expected to persist and could even grow: some researchers even predict that the transitional arrangements restricting the access of nationals of the new member states to EU-15 labour markets in the post-enlargement years will direct these highly skilled to the US and thus make them leave Europe altogether.

6.1.4 Duration of migration

Information on the length of stay of migrants, together with information on the destination country, is important in order to assess the extent of brain drain and the pressures that the migration potentially exerts on the welfare and social security systems of the receiving country. Importantly, the geographics of the new EU of 25 allow for easy cross-border and pendular migration between the “old” and new member states (especially between those sharing borders). It is predicted that this will increase the number of foreign workers in the countries and cities close to the Western

borders of the new member states. If this was to be the case, it could alleviate some fears of the “old” EU citizens. A good deal of future east-west labour migration would be short-term or pendular (i.e. migrants would maintain their residence in the “sending country”) which would not entitle migrants to welfare benefits in the country where they work, and would thus not exert a strong pressure on the local social security system.

Much speaks for it that a good deal of east-west migration is going to be for short periods of time. The intention to migrate is highest for very short stays, and lowest for permanent settlement. The IOM survey revealed that up to 50 percent Slovaks, Poles, Romanians and Czech were “most likely” or “likely” to emigrate into the EU-15 for a *few weeks*¹⁰⁰. The number of people intending to work abroad for a period longer than a few months was significantly lower. Between 20 and 27 percent expressed an intention to migrate for a few years, and only 7 to 14 percent intended to settle permanently. Extrapolating from these findings, and including a “seriousness check”, the study concludes that potential permanent migration into the EU-15 will be as low as two or one percent, but short-term migration will be considerably higher. Interestingly, the intention of permanent migration was slightly higher for destinations outside the European Union, such as the United States, Canada, and Australia.

If movements are indeed going to be mainly temporary, it would be inappropriate to talk of a brain drain: return migrants bring back into their country of origin not only the originally accrued human capital which they ensuingly exported, but additionally the new human capital (hopefully) acquired during their temporary absence. Thus, what might have first resulted in a (temporary) loss of human resources comes back with “interests”. In other words, there is a human capital “dividend” for the country of origin.

6.1.5 Motives for migration

In general, i.e. on a global scale, the motivation to migrate can be, according to Krieger, categorised into three clusters: work, income and family motives¹⁰¹. These motivations can further be differentiated into push and pull factors¹⁰². What are going to be the main motives for migration in the enlarged European Union?

First, European migrants are expected to be much more “pulled” than “pushed”. This is attributed to the relative absence in the EU-25 of classical push factors, which make life unbearable, such as wars and political unrest, famine, and ethnic or racial discrimination and persecution, amongst others. From among possible pull factors, employment and economically-related considerations will play the main role. Therefore, second, the motivation clusters of work and income will take precedence over family motives. In line with this, Bauer and Zimmermann¹⁰³ state that the main motives for migrants from the Central and Eastern European countries into the EU-15 are the possibility to achieve a higher income, enhanced employment prospects, and better social security systems.

However, the overall dominance of motives related to the labour market and employment does not mean that no other factors are going to play a role in individual decisions. Wallace concludes that “there is no single explanation for migration potential but rather a combination of explanations”¹⁰⁴. The predominant influencing factors will vary with the type of migrant (employed/unemployed, young/old, highly educated or low skilled), the kind of migration (long or short term, labour or family reunification), and even with the country of origin and destination. The hierarchy of motives could also change in the long term. Most authors expect east-west income differentials and labour market disparities to decrease in the long term, and therefore expect a stronger role of family and personal migration motives to come into play in the more distant future¹⁰⁵.

Given the relatively modest overall volume of migration in the enlarged Union, it is worth looking not only at the reasons for migration, but also, and perhaps more so, at the reasons against it. Put differently, the question is: why do so few people intend to migrate? Krieger presents four main explanations for the rather modest numbers of potential movers from the new member states into the “old” EU¹⁰⁶. First, he argues that most potential movers from the new member states (Estonia, Lithuania, Latvia, Poland, Czech Republic, Slovakia, Hungary, and Slovenia) are already residing in the EU-15 and thus the conditions of free labour movement can increase present numbers only slightly¹⁰⁷. In other words, the migration potential of the new member states is near to reach its limits. Second, referring to a commonly held but possibly daring assumption, Krieger argues that the

ongoing population decline in Central and Eastern Europe will, in the foreseeable future, result in job vacancies and generally a much improved employment situation, thus reducing the importance of unemployment as a push factor. In order for this argument to be tenable, one must of course assume that the people in Central and Eastern Europe themselves expect such a development to take place. Third, transfer of capital, means of production and other resources to the new member states, increased international trade, and inflow of EU funds will all accelerate economic development in Central and Eastern Europe and thus decrease migration potential. Fourth, assessing past labour migration inside the EU-15, which has been low, he argues that West-Europeans are generally migration-reluctant and that it is also likely to be the case with nationals of the new member states.

Another recent study¹⁰⁸ supports Krieger's last argument. It found that Europeans in the new member states are even more attached to their native soil than other Europeans. 40 percent of respondents to a survey in the Central and Eastern European countries reported that it was very important for them to spend their entire life in their own country¹⁰⁹. They also felt closer to their own country than their international counterparts. In addition, Europeans appear in general to be fairly satisfied with where and how they live. In a *Eurobarometer* survey of 2001, this was one of the main motives (81 percent) cited for not moving¹¹⁰. In the same survey, language was rated by 70 percent of respondents as a deterring factor. Family, work, and financial reasons were here cited as less important reasons for staying at home¹¹¹.

These findings seem to support those researchers who argue that a high threshold must be overcome before people consider migrating to another country at all, and start to behave as the "rational agents" of the human capital theory, by calculating the wins and losses of a potential move. Indeed, so it seems, most people never even consider migration as an option. In addition, sometimes the risks and costs involved with a move, or related legal problems reduce the attractiveness and feasibility of migration¹¹².

6.2 Expected impacts

What would be the effects of migration in the range of the above predictions? In which way will this impact be different for the new member states, for the “old ones” and their different countries and regions? What about for the Union as a whole? How will it affect individual groups, such as the employed and the unemployed, the low skilled and the highly qualified, the particular group of scientists and academics? What will be the effect on population growth (or decrease) and demographics, what on economic growth and income levels, what on employment figures? This final section of the present study will attempt to provide some - cautious - answers to these questions. Since they are derived from a set of literature which itself can offer only predictions, it goes without saying that these answers cannot but be “informed guesses”.

Before going into any further detail, the authors want to make three points of principle. They believe that a good deal of the present public and political debate about migration in the enlarged Union is characterised by an unhealthy focus on worries and fears, rather than on opportunities. The bulk of migration literature, even though attempting to prove these fears wrong, is nevertheless influenced by the alarmist undertones of this debate, in that it often takes the worry-ridden scenarios as a point of departure and thus lets them guide the formulation of their principal research questions. In this general climate, it is worth bringing into recollection that the Union, and its single market inclusive of the free movement of people and labour, was created on the conviction that migration is a good thing. The single market was created to make it possible for workers to move to where employment is on offer - and not to stay at home unemployed. It was created to balance out country and regional mismatches between the demand for and supply of work. This was, and still is, believed to be conducive to economic growth and material well-being of, if not everybody, at least the proverbial “greatest number” of the utilitarians. After all, it has always been maintained that one of Europe’s problems is that its labour market mobility is only about one third or less of that in the United States.

Second, when discussing the implications of a single factor - migration - for the future of the Union and its constituent countries and regions, one must be aware that other factors play an important role, too. It is important

to point out that their impact is in many cases likely to far outweigh that of migration. An example is the recent habit of large (multinational) companies to threaten to move their production sites to low cost countries if their employees would not agree to substantial wage reductions. If this trend is to continue or grow, as can be expected in a globalised economy characterised by increasing cost pressure, it is clear that its consequences for salary levels in the “old EU” are going to be much more powerful than those possibly emanating from wage pressures brought about by the inflow of migrants.

Third, any impact of migration in the enlarged Union will depend to a considerable degree on the patterns of migration to come. If most or all of the future migration is going to be permanent, the impact in some areas could be palpable. If, on the other hand, it is going to be temporary, or to a large extent “pendular”, coupled by a sizeable return migration at a later stage, the medium-term effects on both sides will probably be small, and tend to balance themselves out.

Population

In terms of impacts on the population structure, a maximum of four million east-west migrants is a *quantité négligeable* measured against the present total population in the EU-15. It corresponds to around one percent of the latter. It will therefore not influence population development in the EU-15 as a whole. Due to the very uneven distribution of immigrants over the “old EU”, the effects will even be less in most western countries of the Union. They will, however, be more marked in Austria and Germany, where immigration accumulated over time might result in inflows between three to five percent. Although these immigrants are mostly young, even these percentages are not likely to substantially relieve the demographic problems Germany and Austria will be faced with in the long term. It must also be borne in mind that migrants will tend to move to centres of economic activity in the destination countries, rather than focus on a country in general and that, as a consequence of this, the quantitative impact of movements are sure to be felt more in some cities and sub-regions than in others in the target countries.

The consequences of migration on the size and structure of the new member states’ populations are likely to be much more palpable. An

outflow of up to five percent of the population can make itself felt – if immigration is to be permanent. These effects are likely to become visible especially in the long term, since most emigrants are expected to be young. Given that population growth in many Central and Eastern European countries is already negative, and given that the demographic patterns are not healthy even today, emigration to the EU-15 could have serious consequences. While the outflow of the young is significant for the sending countries, in proportion to their population, the total numbers are too small to have on the other side a positive demographic effect in the receiving countries (the EU-15), whose aggregate population is about four times as big as the new member states'. However, the ultimate demographic picture will depend on net migration rates, which on the one hand include further emigration to countries other than those in the EU-15, but also, immigration into the new member states from further east, and elsewhere.

Economic development

The greatest winners of free labour mobility are expected to be the migrants themselves, whether skilled or unskilled, since their wages adapt to those of the destination country. But what will be the overriding economic effect of migration? There is a general consensus that the numbers of those expected to move are too low to have a Union-wide impact on overall economic development in the medium and long term. Economic growth in the area, or the absence of it, will most likely be much more determined by other factors. The organisation of industrial relations, corporate and private tax policies, approaches to unemployment and welfare provision, and also the innovative capacity of the EU's industries will probably play a much stronger determining role. In most countries of the EU-15, very little impact of migration on overall economic development can be expected. As has been seen, the expected inflows into countries such as Italy or the UK are simply too small in quantitative terms to impact in a visible way on these large economies. In Germany and Austria, the effects are going to be more sizeable, but they should remain limited even there.

The fact that overall economic performance in the EU-15 is not going to be affected in a major way by east-west migration does not mean that there cannot be winners and losers on an individual level. Gains and losses will most probably not be distributed equally. Factors complementary to migration are supposed to gain, while factors which can be substituted by

immigrant labour may lose out. Indeed, it is often feared that unskilled labour in the receiving countries will lose out from immigration in terms of wages (and employment prospects), if they need to compete with the incoming blue-collar workers¹¹³. Most empirical studies find only what they consider small effects of intra-European immigration on wages in the EU-15: Bauer and Zimmermann¹¹⁴, who assume a yearly inflow of 200,000 immigrants, put the potential wage decrease in the EU-15 in the first year at an absolute maximum of 0.81 percent. However, in case of an inflow of two to four million persons in the medium term, this would add up to two-digit percentage points – a value most of us would not regard as insignificant, but one probably too high.

The salary-lowering impact of immigration - at any rate in the middle and lower echelons of the labour market – might be enhanced by other developments under way in (some of) the EU-15 countries now. The effects of strong pressures on production costs could cumulate with those of migration. If this was to take place, it need not only be an unwelcome development even if the individuals will surely view it exactly as that. But, in the long term, it might help to secure Europe's leading position on world markets. There are ample indications that salaries in some European countries – in the lower and lower middle labour market segment – are uncompetitively high, and thus act as an obstacle to economic development in the long run. A moderate reduction in wages – brought about also by immigration – might well avoid a “hard landing” and thus secure rather than endanger reasonably high wage levels in Europe in the future.

The economic impact of emigration from the new member states will depend to a large extent on the composition of the migrant bodies. If Central and Eastern Europe can expect to lose mainly young and highly qualified persons (a combined youth and brain drain), the economic effects of emigration in the order of up to five percent of the population are likely to go far beyond this percentage. For these five percent would constitute, in economic terms, a particularly innovative and productive segment of the total population and the labour force of the new member states, and thus exercise a “multiplier effect” on the local economy. What their absence will mean in terms of salary levels for those not moving is unclear. In line with expectations of better employment prospects as a result of a weaker supply of labour, some researchers expect improved salary conditions. It is,

however, possible that such effect could be short-term and balanced out by the impact of reduced overall growth, which would in turn negatively impact on wages.

While immigration of highly skilled may have a positive impact on the economy of the receiving country, because of the multiplier effect, there is also a risk of a “lose-lose” situation, or – in other words - of “brain waste”. Historical evidence confirms that highly skilled migrants often take up jobs that do not correspond to their skills level. In this way, brains “drain” from the “sending” country, but no gain is made at the receiving end. This could be due, for example, to lack in language competence at an appropriate level, at least for the first years: people may take up less qualified jobs before they can communicate efficiently in the required language and then move up as their abilities improve. Nevertheless, it is too early to tell to what extent brain waste will be common with the migration flows following the May 2004 enlargement, and thus to assess its impact on the overall economy.

Employment

Unemployment is high in the European Union. This is worrying in itself: the effects are beginning to drastically show on Europe’s growth record, as the unemployed do not spend (and thus generate economic activity) and the employed refrain from consumption and save for fear of future unemployment. The fear of unemployment in the EU-15 has been further fuelled by the expectation of a mass inflow of labour from the new member states after enlargement. How will unemployment in the “old” member states and the new member countries be affected by intra-EU migration?

The majority of researchers view the overall impact of enlargement on unemployment in the EU-15 as small. Bauer and Zimmermann¹¹⁵ predict a rise in unemployment of a maximum of 0.54 percent during the first year. Given the enormous efforts it takes right now to keep unemployment in check in Western Europe, let alone to reduce it, this figure does not strike the authors as marginal as others view it. Again, this average would be very unevenly spread over the EU-15 zone. The effects in the immediate neighbour countries Germany and Austria would be three to four times higher than the average. In Germany, this rise would come on top of an

already high unemployment rate of 10.6 percent¹¹⁶, and would thus clearly have a measurable effect. It would also add considerably to Austria's unemployment which, however, is one of the lowest in the EU. These figures might, however, be challenged as too high. Boeri and Brücker, for example, argue that the impact of migration on the labour market performance of domestic workers in the receiving country is much smaller than widely believed, because migrants tend to move into prosperous regions or sectors where demand is higher than the national average, and unemployment lower. In these areas output and investment would adjust according to the increase in labour supply¹¹⁷.

As pointed out a number of times, a significant share of future east-west migrants are likely to be highly skilled and young. The highly skilled are as heterogeneous a group as labour migrants in general: they can be active or inactive in the labour market, self-employed or salaried, and employed in different fields (for example as researchers and university teachers, professionals, or in jobs requiring only lower skills)¹¹⁸. Because of this variety, their impact on the labour market is mixed and difficult to assess. However, the expectation is that highly skilled immigration is positive for the receiving countries, and the EU-15 can on average expect a highly qualified labour supply of young people who can contribute to improving their short- and long-term economic base. Their influence, because of the "multiplier effect" that knowledge work may produce, must furthermore be expected to be greater than the numbers alone might suggest. This would seem to offer more opportunities than risks to the EU-15: while there may be concerns (in the receiving countries) over the potential "crowding out" of nationals from the academic and industrial labour markets, it is widely sustained that in any case benefits will exceed the costs of highly skilled immigration.

Some studies raise doubts about the quality of the human resources (including the highly skilled) from the new member states, though. The Commission study¹¹⁹ bases its evidence on the results of the adult literacy survey from 1994 and 1996 conducted in some acceding countries and several member states. The results show that the population in Poland, the Czech Republic, and Slovenia lag behind EU average literacy levels, especially in understanding and text analysis. Also the ability of the adult population to communicate in a foreign language is lower than in the EU

member states (on average). Surprisingly, the literacy levels of the younger generations correspond to those of the older. Lack of language competences might turn out significant: on the top of making skill specific employment at high levels difficult, it also is an obstacle to integration and social inclusion in the receiving country.

The common but perhaps daring assumption is that emigration will have a positive impact on employment levels figures in the countries of origin, i.e. the new member states¹²⁰. It is widely assumed that those who stay behind can also benefit from migration: those who leave will reduce labour supply, and, as a consequence, the employment prospects of those who stay will improve. But while emigration is indeed likely to decrease unemployment figures (either because employed migrants free jobs as they leave, or because they are unemployed and by leaving reduce the country's unemployment statistics), it is not necessarily the case that all or even many of the non-migrating unemployed will find a job as a result. A reduction in labour supply is not necessarily followed by an increase in labour demand. Indeed, since a good part of the movers are likely not to be in employment at the moment they leave their country, the labour oversupply in the sending country may continue¹²¹. In addition, labour markets, just like salaries (see above) are linked to overall economic performance and the question is therefore how emigration will impact on output and consumption and, in the last resort, on employment.

Concerning the highly skilled, their emigration to the West would be expected to result, in the medium term, in a shortage of "brains" in the new member states, and in an increased demand on the labour market. This assumption is, however, only tenable if one can expect the knowledge-relevant employment sector to at least keep its present volume and not to shrink. Given the large differential in west-east wage levels, and the fact that the cost-benefits of Central and Eastern Europe are likely to continue to attract western and multinational companies in the knowledge-intensive segment, this is likely to be the case. It is improbable that emigrated western companies will continue to mainly employ expensive western expatriates, as they did in the early years after the opening up of Central and Eastern Europe. Instead, they are likely to employ local workers. After all, the fact that those could be found there at lower cost than in the EU-15 was one of the reasons for their relocation. One should therefore

reasonably expect a rising labour-market demand for the highly skilled in the future, obviously at lower salary levels than in the EU-15. The new member states might therefore see a considerable degree of return migration of the high-skill workforce in the medium to long term. Therefore perhaps an appropriate term to describe the migration of the highly skilled within Europe would be “brain circulation” (rather than brain gain or drain), as the “brains” move back and forth, thus benefiting in turns the receiving country and the home country.

Impacts on welfare systems

The length of stay is an important variable when assessing long-term impacts of migration. As could be seen, “incomplete migration”, rather than conventional (permanent or long-term) migration, has the potentiality of becoming an important type of east-west movement¹²². The fact that temporary (especially cross-border and pendular) migrants are likely to leave their families behind will result in reduced demands on the welfare provisions (e.g. child care, education, etc.) of the destination country (where they work). In the short term, the “old” member states should therefore not face strong additional pressures on their social security systems: especially if most movers are young and single, there will be fewer migrants in need of social assistance, such as elderly persons or pensioners, sick relatives, etc.

However, it is not realistic to expect all, or even most, migrants to be net contributors to the welfare state. Many labour migrants will still move their home and bring their families with them, be it even just for a few years. In addition, there are probably going to be even some “welfare-shoppers”, that is, people who move with the precise intention to take advantage of welfare provisions, which are often better in the EU-15 countries than in the new member states. The “welfare-shoppers” will probably make up a small minority of all movers and, again, the risk is highest in the bordering regions. On balance, the overall impacts of intra-EU migration on welfare systems are likely to be small. In addition, the welfare systems of the EU-15 will be affected to an even lesser degree during the transitional period: all EU-15 countries (including those who have not imposed any restrictions on work permits) have restricted access to welfare provisions, by making the latter dependent on a minimum period of residence and/or employment in the given country.

It is less clear whether the new member states will not see some impact of outward migration on their welfare systems. The unfavourable demographic development in Central and Eastern Europe, even compared to an ageing EU-15 region, poses a medium-to-long-term threat to the health of welfare systems anyway. The fact that many emigrants are young is likely to further aggravate this trend. Since many of them are well-educated, and thus, potentially good earners, the loss of social security contributions from this group is likely to be disproportionately large for the finances of the systems as a whole.

6.3 Major conclusions

Summing up the main findings of this chapter, the following conclusions can be drawn.

Quantities

- 1. Overall migration volumes from the East to the West are likely to remain modest, from a western perspective.**

The maximum number of east-west migrants expected is 4 million in the long term, or 340,000 annually, corresponding to just over one percent (long term) or 0.1 percent (annual) of the EU-15 population. Most estimates range below these levels.

- 2. East-west flows will, however, be very unevenly distributed between EU-15 countries.**

Germany is expected to be the destination of some two thirds of all migrants, and Austria of a further 10 percent. Other countries (UK, Italy) are expected to receive only three to five percent. Measured against the present populations of Germany and Austria, the medium-to-long-term intake of both countries could amount to five percent.

- 3. The new member states can be expected to lose up to five percent of their present population.**

From the perspective of the new member states, the loss of a maximum of four million persons is obviously more severe than from that of the destination area (EU-15).

4. A large number of expected east-west migrants is highly educated.

Many emigrants from Central and Eastern Europe will be in the category of the highly skilled. Predictions as to their exact percentage vary considerably. Including also students (future highly skilled), the highest estimate puts their percentage at 70.

5. Next to being highly educated, future east-west migrants are predominantly expected to be young, single and male.

Surveys thus confirm mainstream migration theories, which identify this group (young, male, single, highly educated) as the most mobile of all.

6. There are indications that many east-west migrants may not be permanent settlers.

It is ultimately a matter of conjecture if the majority of east-west migrants are going to settle permanently or for a long term, or whether they will return back after a shorter stay. According to stated intentions, a large number of potential migrants plan only short stays. This is in line with an apparently growing trend towards cross-border and “pendular” mobility.

7. There are almost no data on west-east flows.

The volumes of west-east movements are almost impossible to quantify. Since there must at least be some, it is worth pointing out that the above-quoted figures represent gross, not net flows. Net flows are at any rate lower than gross flows.

Impacts

8. Population development in the EU-15: gains from migration.

At the overall EU-15 level, immigration from the new member states is going to be too low to seriously impact on population growth. However, in the key destination countries Germany and Austria, the long-term intake could amount to an equivalent of up to five percent of their present population. In all other EU-15 countries, the effect on the size of the population would be negligible. In both cases, however, migration is not likely to redress the unfavourable demographics of the EU-15.

9. Population development in the new member states: negative consequences.

The departure of up to five percent of the population would further aggravate the highly unfavourable demographic curve in Central and Eastern European countries. This applies all the more since a large share of the leaving population is young and thus still in their reproductive phase.

10. Economic development and salaries in the EU-15: contradictory information.

Researchers tend to label the consequences of east-west migration on economic development and salaries in the EU-15 as small. This stands in some contradiction to estimates of up to 0.81 percent salary loss per year, which would add up to significant figures over a 10-to-15-year period. At any rate, if these estimates are half realistic, immigration will hit Germany and Austria hard (to be multiplied by factor 4). On the other hand, there is a tendency in a good part of migration research to expect beneficial economic effects of migration into the EU-15, due to the large share of highly skilled immigrants (and their economic potential). Such effects might especially show in the main immigration countries Germany and Austria. There are signs, though, that the science sectors in the EU-15 will not, by and large, profit from a major influx.

11. Economic development in the new member states: detrimental effects.

The fact that not only a sizeable number, but especially young and highly educated persons can be expected to leave the new member states is no good sign for these countries' economies. This exodus does not bode well for sustaining and extending the knowledge-intensive economic sectors. Expectations relating to the emigration of the particular group of researchers and scientists on the other hand, though based on thin empirical findings, appear not so bleak. The main exodus in this area probably lies in the past.

12. Employment in the EU-15: an unclear picture.

On the one hand, the fact that a large share of eastern immigrants are highly skilled and can possibly satisfy so far unmet labour market demand in the EU-15 makes many researchers expect no major negative labour market impact. On the other hand, one study estimates the potential for unemployment growth as a result of immigration at about half a percent

per year. Extrapolated over a 10-to-15-year period, this amounts to a horror scenario at least for Germany and Austria.

13. Employment in the new member states: high-skill shortage.

The partial brain drain of a sizeable number of highly qualified workers could be expected to create, at some stage anyway, a shortage of this group on the labour markets of the new member states. In more general terms, some observers expect unemployment to ease as a result of vacancies created by emigrating workers. The latter might be naïve, since it does not take into account the overall economic effect of emigration, which in turn impact on labour market demand.

14. Finally: many unknown factors.

The impact of migration in an enlarged Union is only one of many factors with a bearing on overall economic performance, salaries and employment. First, overriding developments in the world economy caused by globalisation and the pressures it exerts are most likely to be stronger determining elements. Therefore, the effects sketched below might well be balanced out or even superseded by these forces. This might lead to a (downward) redefinition of Europe's role in the world, but also to changes in the intra-European east-west balance. Second, it is, for example, not inconceivable that European and multinational companies will increasingly move to the new member states, thus reversing the predominant flows of migration and bringing economic prosperity and healthy employment to this part of Europe. Third, the assessment of whatever sort of impact crucially depends on the duration and nature of the migration to expect. If most migration (in both directions) is going to be of short duration, its consequences are, at any rate in the medium and long run, going to be minimal.

Notes

72 Many have made estimates following complex econometric calculations using as a model the southern enlargement of the European Union in the 1980s and the migration flows preceding it. Cf. for example Hille and Straubhaar, 'The impact of the EU-enlargement on Migration Movements and Economic Integration: Results of Recent Studies, in OECD, *Migration Policies and EU-Enlargement*, 2001; Bauer et al., *op.cit.*; Boeri, T., Brücker, H. et al., *The Impact of Eastern Enlargement on Employment and Labour Markets in the EU Member States*, Report for the European Commission, DG Employment and

Social Affairs, Brussels 2001

- 73 Important examples are the study by Krieger et al., *op.cit.*, and Wallace, C., *Migration Potential in Central and Eastern Europe*, IOM - Technical Cooperation Centre for Europe and Central Asia, 1998
- 74 The eight Central and Eastern European new member states, as well as Bulgaria and Romania.
- 75 Most of the information comes from Brücker et al., *Potential Migration*, 2003.
- 76 These numbers do not represent accurately the current situation, as they include Bulgaria and Romania, who are not yet members of the Union. In addition, the calculations exclude of course Malta and Cyprus from among the new member states.
- 77 Some surveys suggest that ten to 30 percent of the CEEC population has a “general preference” to migrate into the EU. However, only about two percent will actually move. Cf. Brücker et al., *Potential Migration*, 2003, p. 10.
- 78 For example, if 200,000 people have been temporary workers in a given country in the course of one year (the flow of migrants), the actual stock of migrants could still have been 50,000 in any given time, if we assume that each migrant stays for a quarter of the year only.
- 79 Cf. Krieger, *op.cit.*
- 80 Cf. Krieger, *op.cit.*, p. 65
- 81 Cf. Boeri et al. *The Impact of Eastern Enlargement*, 2001
- 82 *Ibid.*
- 83 Cf. Bauer and Zimmermann, *Assessment of Possible Migration Pressure*, 1999, p. 82
- 84 Cf. Fassmann, H. and Hintermann, C., *Migrationspotential Ostmitteleuropa*, ISR Forschungsberichte 15, Institut für Stadt- und Regionalforschung, Vienna 1997
- 85 Cf. chapter 5 of this study.
- 86 Brücker, et al., *Potential Migration*, p. 41
- 87 Excluding thus Cyprus and Malta.
- 88 Salt, *Current Trends*, 2003, p. 23. Please note that studies use different measurement methods: some figures indicate the estimated yearly inflows (e.g. 0.1 percent, or 200,000 people), others the total estimated migration stock in a certain number of years (e.g. two percent, or 1.1 million in the next 15 years). In addition, some figures are expressed as percentages of the total number of inhabitants in the EU-15, others as a proportion of the inhabitants in the new member states or the Central and Eastern European countries.

- 89 The Eurobarometer data from 2002 has been analysed and elaborated by Krieger, *op.cit.* Information in this section refers widely to this publication.
- 90 Krieger, *op.cit.*, p. 32
- 91 Stephen Drinkwater offers an overview of studies that have come to similar results on the “profile of the potential migrant”. Cf. “Go West? Assessing the willingness to move from Central and Eastern European Countries”, University of Surrey, Guildford 2002
- 92 Cf. Brücker et al., *Potential Migration*, p. 11
- 93 Cf. Boeri et al., *The Impact of Eastern Enlargement*, 2001
- 94 Cf. Drinkwater, *op.cit.*
- 95 Cf. Chapter 4 of this study.
- 96 Cf. Boeri et al., *The Impact of Eastern Enlargement*, 2001
- 97 Cf. chapter 4 of this study.
- 98 Indeed, Germany and Austria are expected to apply national regulations on labour migration from the new member states up until 2011 (thus taking advantage of the maximum transitional arrangement period of 7 years).
- 99 Wallace, *op.cit.* The survey data is analysed by Bauer and Zimmermann, *op.cit.*, p. 35. The data refers to Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Romania, and Bulgaria.
- 100 Bauer and Zimmermann, *op.cit.*, p.33
- 101 Cf. Krieger, *op.cit.*, p. 35
- 102 Cf. chapter 3 of this study.
- 103 Cf. Bauer and Zimmermann, *op.cit.*, p. 37
- 104 Cf. Wallace, *op.cit.*, p. 30
- 105 Cf. Krieger, *op.cit.*, p. 41
- 106 Cf. Krieger, *op.cit.*, p. 4
- 107 Statistics could of course be slightly falsified by the so far illegal migrants who become illegal and thus appear for the first time, maybe even after years of stay, in the official statistics.
- 108 Cf. Drinkwater, *op.cit.*
- 109 Cf. Drinkwater, *op.cit.*, p. 25
- 110 Cf. Turmann, *op.cit.*, p. 12
- 111 This seems to contradict the fact that financial and work motives are still considered the main pull factors of migrants within Europe (while for older age groups family motives exceed these in importance). This is not, however, necessarily the case: reasons that people consider important for staying need not be reversely comparable with reasons people have to actually move.
- 112 Cf. Wallace, *op.cit.*, p. 29

- 113 The situation is made more complex by the fact that many highly skilled migrants have thus far taken and are expected to take also in future jobs that are below their skills level. They have a "bargaining advantage" in respect to less qualified workers, if they are ready to take up blue-collar work.
- 114 Cf. Bauer and Zimmermann, *op.cit.*, Chapter 3
- 115 *Ibid.*
- 116 Data for July 2004, Bundesanstalt für Arbeit, Nürnberg.
- 117 Cf. Boeri et al., *op.cit.*, p. j
- 118 Cf. OECD, *International Mobility*, p. 85
- 119 Cf. Boeri et al., *op.cit.*
- 120 Cf. OECD, *Migration Policies and EU-Enlargement*, p. 90
- 121 About 27 percent of potential movers are in employment. The remaining part is composed of people who are not active in the labour market, i.e. unemployed, students, and pensioners.
- 122 It is, however, hard to correctly assess cross-border commuting potentials, especially since historical experience offers little orientation in this respect: the previous Southern enlargement differed both in geographical terms and with regard to wage differentials.

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