



Panel 2

BRAIN GAIN: A EUROPEAN APPROACH

Introduction

TITO BOERI

Bocconi University and
Fondazione RODOLFO DEBENEDETTI

Why is skilled migration so important for Europe?

Skilled immigration contributes to economic growth in the recipient country insofar as it increases the share of skilled workers in the population. By increasing its per capita human capital endowments, the immigration country can support stronger growth rates, rather than simply experiencing a once-for-all, level increase in GDP. A crucial factor is the integration of skilled migrants into the EU labour markets and their relatively rapid assimilation. This generates positive spillover effects via skill acquisition and learning by doing also of native workers as well as competitive pressures on the latter to acquire more skills.

Europe has been lagging behind the United States in its capacity to attract skilled workers, notably from non-EU countries. There are two main sources of information in this respect. The first one is the most widely used by the literature on migration. It draws on population census data or on labour force surveys to capture the distribution of the

workforce by educational attainment (highest degree completed or number of years spent in schooling). This is a rather crude, strictly quantitative measure of human capital. The second measure draws instead on international surveys, such as the IALS (International Adult Literacy Survey), assessing the level of competences on prose, document and quantitative literacy of the population aged 16 to 65.

Figure 1 uses the first source of information and suggests that some brain gain (and brain drain) would seem to have occurred mainly within the borders of the European Union, more lately in the context of its eastern enlargement. From the standpoint of the

Figure 1

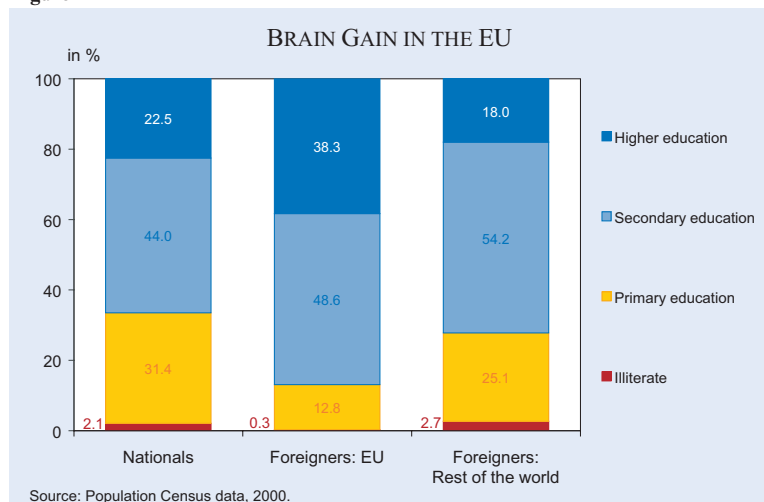
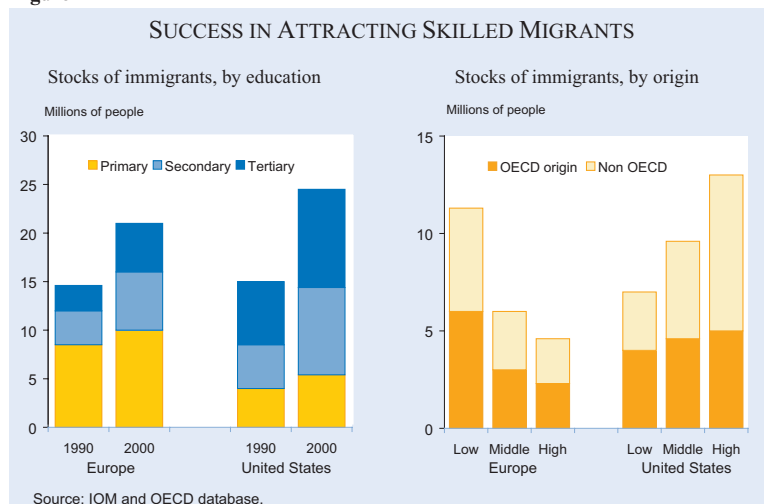


Figure 2



(enlarged) EU as a whole, there has been less significant immigration of talents.

Drawn from the IOM and OECD database on expatriates and immigrants, Figure 2 indicates that the United States has been much more successful than Europe in attracting skilled migrants.

Figure 3 draws on IALS test score data to further document the relatively low educational content of immigration to Europe. It displays the ratio of the median score of migrants to the median score of natives in prose, quantitative and document tests scores in the EU (Belgium, Denmark, Finland, Germany, Ireland, Italy, Netherlands, Sweden and the UK). The message is rather clear: the median migrant has significantly lower test scores in all of these fields than the median native.

Notice that migrants not necessarily have lower skills than natives. For instance in countries with a Point-Based System (PBS) like New Zealand, migrants have almost the same median quantitative scores as natives (see the right hand side of Figure 3).

**How to attract more skilled migrants:
The role of labour market institutions**

The aforementioned fact suggests that increasing the skill content of migration to Europe requires much more than simply adjusting migration policies. It also involves the design of labour market institutions, notably collective bargaining systems. Countries with centralized wage setting institutions and large

excess coverage rates typically generate compressed wage structures, decreasing the attractiveness of their labour markets to highly skilled workers. Centralized wage setting also reduces the links between productivity and wages, imposing automatic adjustments of earnings to seniority in a firm, rewarding relatively long tenures. This prevents young and talented migrants from obtaining relatively high wages for short tenures and makes job-to-job shifts (typically higher among migrants) more costly.

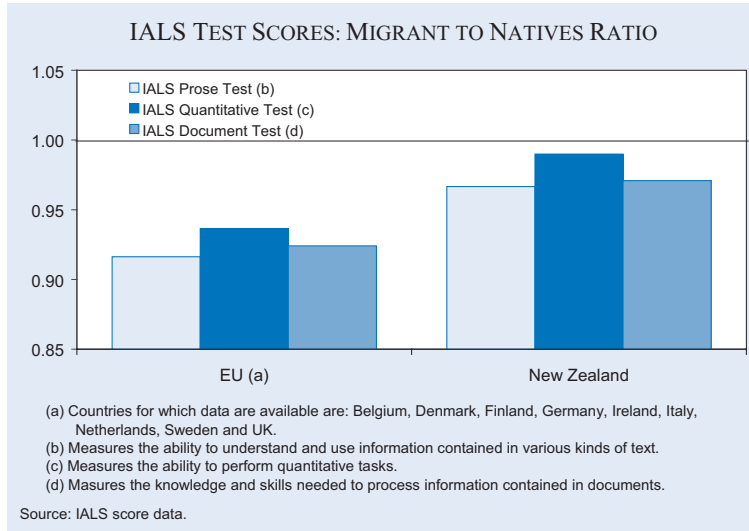
The self-selection of low skilled migrants to countries with compressed wage structures can be characterized in terms of the 1951 Roy model. Consider first that the choice to migrate involves two decisions. The first decision relates to *whether* or not to migrate. The second decision is on *where* to relocate. The two decisions are clearly interdependent, but they can be conveniently characterized as sequential choices.

Let us focus first on the decision on whether or not to move to another country. This choice is based on a cost-benefit analysis, weighing pros and cons of migration. Typically the costs of migration are frontloaded – they are all paid at the time of changing residence. These costs are sizeable as they include not only transportation and relocation costs, but also the psychological costs related to abandoning the family and the network of relatives and friends. The stream of benefits associated with migration comes from the earning differentials between the destination country and the country of origin. In particular, the cost-benefit test is given by:

$$NPV_M = \sum_{t=1}^{t=T} \delta^t (w_F(t) - w_H(t)) - C_0$$

where NPV_M denotes the net present value of migration, C_0 are the frontloaded migration costs, δ is the subjective discount factor, T is the expected length of the working life and w_F and w_H are wages in the destination (F as foreign) and origin (H as domestic) country respectively. The higher this wage differential, the lower the mobility costs and the longer the expected length of the working life (the

Figure 3



younger the individual), and the higher is the probability that the individual migrates. Insofar as skills are rewarded more in the destination than in the origin country (immigration countries are specializing in human capital intensive activities), we also expect the individuals with higher educational attainment in the source country to be overrepresented in the pool of migrants.

The second decision relates to where to relocate. Supposing for simplicity that the initial mobility costs are independent of the final destination (e.g. the individual is choosing among different states of the US or within the EU), the choice of where to move will depend entirely on the potential earnings in the different destinations. Suppose for simplicity that the migrant can only choose among two alternative destinations, say country 1 or country 2, and that the only relevant dimension affecting the potential earnings of migrants is skill as in the Roy model. The choice faced by the migrant is illustrated in Figure 4, displaying, on the horizontal axis, the skill level of a given individual, and, on the vertical axis, her earnings, net of migration costs. As shown by the panel in Figure 4, the most skilled workers (those with skills higher than s^*) will go to country 1, where their skills are better rewarded, while the least skilled will go to country 2, where they are paid more.

Because of the self-selection of migrants, wage compressing institutions are rather ineffective in containing inequalities. Indeed, they encourage larger inflows of unskilled migrants which end up increas-

ing the earning inequalities in the destination country. Skilled migration instead reduces earning inequality in the recipient country.

The role of migration policies

Starting from the late 1960s a growing number of countries have adopted immigration policies specifically aimed at selecting and attracting highly skilled labour. However, there is no coordination of these policies across the EU. This means that the EU is not a large and unified labour market for highly skilled non-EU workers. A co-ordinated approach at the EU level would significantly increase the attractiveness of Europe to highly-skilled workers. Such a coordinated policy need not to impose the same rules in all countries. For instance, a selective migration policy, based on a points-based system (PBS), may well involve different criteria in allocating points at lower skill levels depending on national (or local) labour market conditions.

A PBS has been adopted by Australia, Canada, New Zealand and, in Europe, by Switzerland. Britain is likewise introducing a PBS while the draft migration law recently approved by the Italian government envisages a similar selective mechanism in allocating quotas. In a PBS, each application is allocated a score based on explicit criteria which typically reward educational attainment, experience, and language abilities. "Bonus points" can also be given for employment in occupations and regions where there is a shortage of workers. A point-system adopted by Europe vis-à-vis third country nationals would encourage more skilled migration not only in relative, but also in absolute terms, enhancing the growth potential of migration and reducing negative externalities via unemployment. An additional advantage of a point system is that it could simplify migration regulations, e.g. removing the need for ad-hoc policies for highly-skilled migrants and integrating asylum policies into a broader framework by, for example, granting "humanitarian" points.

But how effective are points systems in selecting migrants? Some indications may come by comparing the distribution of 2004 IALS (International Adult Literacy Scores) of migrants vs. natives in a country without a points system (Germany) and in a country with a PBS in place, like Canada (Figure 5). The difference is quite striking in terms of both, absolute skill levels (the average IALS for migrants was

Figure 4

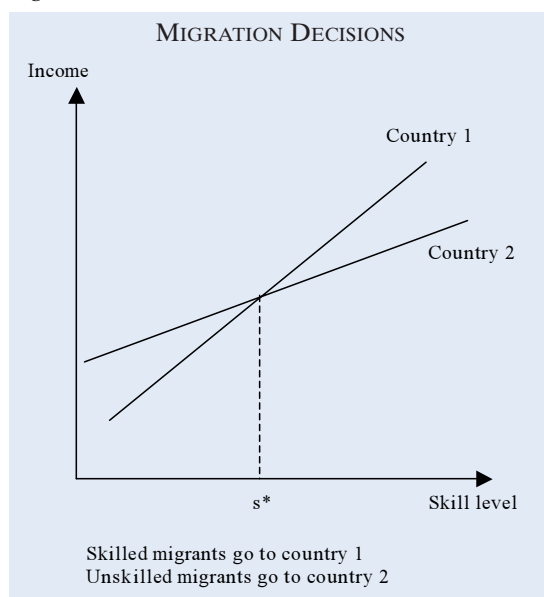
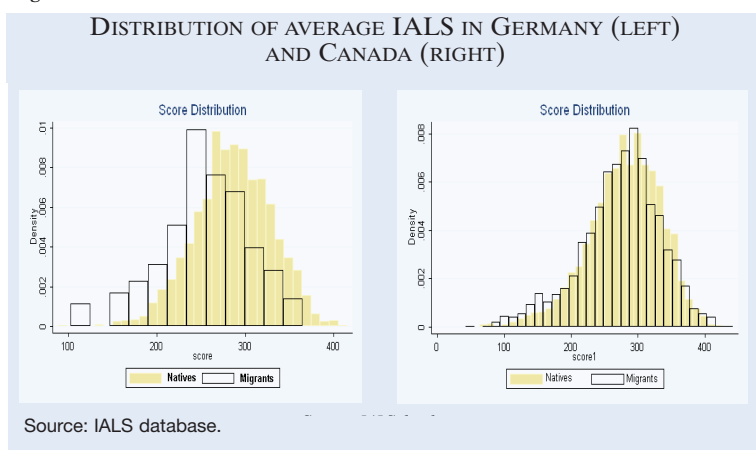


Figure 5



roughly 300 in Canada compared with 250 in Germany) and relative to natives. In Germany, the skill distribution of migrants is visibly tilted to the left, while in Canada it almost perfectly overlaps with the distribution among natives. Difference-in-differences analysis, comparing changes in the skill composition of migration in Canada after the introduction of the point system and comparing these variations to evolutions in the United States, also confirm the effectiveness of the PBS in selecting migrants. In Canada, the fraction of migrants with tertiary education increased by 5 percentage points from 1987 to 2002, while it decreased in the United States over the same period of time. Also, in Australia the share of workers with tertiary or higher level of education increased substantially after the adoption of a point system and there are indications of similar developments in New Zealand after introducing a PBS. Thus, a PBS is likely to counteract the self-selection of low-skilled migrants in countries with strong wage compressing institutions.

There is, however, an important drawback of a PBS – its negative effects on growth, via the so-called brain drain, in the sending country, which may in turn increase migration of unskilled workers in the future. However, selective immigration policies increase the individual incentives to invest in human capital in the sending countries, so that the impact of migration on human capital formation in the country of origin is ambiguous. Moreover, since migration to Europe is mainly temporary, human capital acquired in the country of destination could be subsequently transferred to the country of origin promoting growth in the sending region.

Finally, for skilled migration to exert significant and positive spillover effects in the country of destina-

tion, migrants should also be rapidly assimilated. This allows skilled migrants to transfer their human capital to natives, enriching their culture with a different approach to problem solving, while possibly acquiring themselves more human capital via interaction with local colleagues. This is another issue and one requiring more in-depth analyses and better data than those available in Europe to date.

PANEL

Panel chairman **David Wighton**, City and Business Editor at *The Times*, fresh back in London after a six-year stint in New York, told about having lived there first-hand the brain gain in the United States, with “*all these highly-qualified French guys*” from the financial institution next door coming daily to his gym. And then, in London, he was chauffeured by a taxi driver who was, by profession, a lawyer. So, brains appear to be streaming into the United Kingdom as well. Still, he was struck by so much concern in Britain about emigration of talent. Even the Bank of England expresses concern that if the immigrants from Eastern Europe were to return to their countries of origin the UK’s labour market would become much tighter. On top of that, a new tax code affecting foreign nationals in Britain is apparently prompting an exodus. Taxes, remarked Mr. Wighton, are part of “*the battleground in the global competition for talent*”.

Siegfried Russwurm, Member of the Managing Board, Head of Corporate Human Resources with special responsibility for the economic regions of Europe, Africa and CIS at Siemens, cited the lack of available skills for the need of companies to move production to other locations. In some areas, he said, “*this shortage has become a bottleneck for our business activities. When we talk about shifting our development activities elsewhere, it is not for cost or market reasons, but simply because we cannot find enough qualified developers here*”. So, he said, “*what we need is a People Excellence Initiative for Europe*”. This, he explained, entails appropriately educating and training our youth, encouraging women to better utilise their potential, and motivating people of all ages to embrace life-long learning. “*We are gradually beginning to realise*”, he

pointed out, *“that we cannot afford – financially and socially – to send people with an average life expectancy of 80 into retirement in their mid-50s.”* At present, companies are actually engaged in applying for talent: providing a job is no longer an “act of mercy”. *“We must give up the idea that non-Europeans should be happy if they can work and do research in European countries. That is a mistaken belief. The fact is that we now have to seek and compete for the best and brightest people from around the world; they will not simply come running to us.”* Migrants, in short, are not a threat but an opportunity.

Georges Lemaître, an International Migration Specialist at the OECD Directorate for Employment, Labour and Social Affairs, started out by offering a bit of historical perspective: Ireland 20 years ago, he said, with 20 percent unemployment rate and 24 percent expatriation rate of its highly qualified people, would have been considered a basket case. But it clearly did not turn out to be that way: now Ireland ranks with the best. The Irish government has continued throughout to invest strongly in the education of its young people. Other factors played a role in Ireland’s rise, of course, like the availability of EU structural funds. *“But this gives you an idea”*, he pointed out, *“that even a high rate of brain drain is not necessarily a recipe for disaster.”* Still, he acknowledges that a skills-shortage looms: in the near future, he said, the cohorts coming into the labour market will be 20 percent smaller than the ones leaving it. So it is important, as other speakers also remarked, to make the most of the existing skills in the population, including of course women and older workers, and accepting some equivalence of education and experience. But, he said, *“I want to add another one: making the most of the skills of the immigrants’ children.”* The brains we need, he pointed out, are attached to bodies, and these bodies have spouses and children, who they bring with them. So, it pays to try to make the best not only of immigrants, but of their families as well. *“There is more here than the mere migration of single individuals.”* Lastly, language proficiency is a seldom-broached subject that has a real impact. *“Even if the workplace language is English”*, he said, *“you do need proficiency in the host country language before you can perform at a level that is commensurate with your qualifications.”*

Sharan Burrow, President of the International Trade Union Confederation, succinctly defined the framework for discussion: *“the economic migration and labour mobility is increasingly a feature of the global*

economy, so let us just get used to it and let us work out how we manage it.” In her country, Australia, 87 percent of the jobs available require a post-school qualification but barely 50 percent of the population have achieved this standard. On top of that, she added, *“the demographic challenge is certainly on.”* Skills, then, obviously need to be made available. In this regard, she said, two crucial factors are at play: first and foremost, education and, second, labour mobility. We are faced with *“the reality of a global labour market.”* But, she warned not to think that *“if you open the gates to migration you will not spawn entire spurious migration businesses that charge extraordinarily high illegal fees to some of the poorest people in the world. So you have to get the management systems right.”* Australia has been very successful in attracting migrant workers, a factor that has had reasonable success in building the country’s economy, but not in matching people with qualifications and jobs. Therefore, *“we must have better recognition and respect for qualifications”*. Furthermore, there must be a rights-based approach to migration, providing collective bargaining rights, social security, and co-development, particularly when considering that we are absolutely gaining from someone else’s investment in skills. Brain circulation, she said, is increasingly a natural phenomenon and will happen by choice. *“I think it is absolutely wrong to mandate the return of migrants or restriction on their mobility, because it ultimately will fail. We will have to learn to manage it.”* Finally, she pleaded for expanding participation, particularly that of women, and that we should not lose sight of the moral responsibility and economic wisdom of migrant rights and equal treatment: *“equal treatment lies at the heart of civilised society.”*

During the ensuing discussion, **Fabian Zuleeg** of the European Policy Centre pointed out that not only skills and talents are necessary, but also soft skills such as motivation and the willingness to do certain jobs: *“there are many jobs in our societies that no one wants to do anymore where we need migrants to do them.”*

Katinka Barysch of London’s Centre for European Reform pointed out that the German government appears to be sending a contradictory signal, not only to Germans but to the best and brightest the world over. On the one hand, it tries to convince its citizens that immigration is ultimately a good thing, but at the same time vows to keep at least part of the immigration policy very restrictive.