

# What does it take for brain drain reversal initiatives to be effective?

Author : Editor

Date : 26 November, 2014



After the fall of the iron curtain 25 years ago, many scientists left Eastern Europe. The exodus [peaked](#) early in the 1990s. Yet, new emigration flows stemmed from the 2004 EU enlargement to ten countries including the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia. Further emigration arose as Bulgaria and Romania joined the EU in 2007. In addition, the financial crisis in 2008 triggered new population movements.

As a result, a number of Central and Eastern European countries face a current lack of scientific work force. This does not bode well for government attempting to follow the EU policy centred on creating a knowledge-based economy. In this context, many countries therefore try to bring scientists back through various returnee schemes. The trouble is that there is not one-size-fits-all when it comes to attempting to reverse the brain drain.

## The long return path

So what makes scientists turn to their home country? "It is often a personal decision, partly based on family reasons or even home sickness," says Zaiga Krisjane, professor of human geography at the University of Latvia, in Riga. Indeed, "the paths differ individually," agrees Caroline Hornstein-Tomic, senior researcher at the Institute of Social Sciences Ivo Pilar in

Zagreb, Croatia. But “each migration is also about where people are well and where they are better off,” she says.

In the EU member countries, such as Hungary, Poland, Slovenia, the Czech Republic and the Slovak Republic, “there is already a lot mobility,” says Hornstein-Tomic. Still, several policies are in place to bring scientists back. Government motivation to do so, is clear. “Highly skilled returnees have better networks. They bring knowledge, methods and possibly management skills,” says Gábor Lados, junior lecturer at the department of economic and social geography at the University of Szeged, in Hungary.

For example, the Czech government is spending about €19 million on a programme called [Návrat](#), which means ‘return’ in Czech. It has been running since 2012 and is due to continue until 2019. It provides grants to attract excellent expatriate scientists back to the country. Such programme was deemed necessary even though the country has been increasing [funding](#) for research since its 2004 accession to the EU. It therefore offers domestic career opportunities for scientists. This was highlighted in a 2013 [report](#) studying trends and policies related to return migrations, in the context of the [Re-Turn](#) project partly supported by the EU’s regional development fund.

### **Balancing skills flows**

By contrast, Poland and Hungary have now become so-called emigration-immigration countries, according to the Re-Turn report. These countries have set up concrete measures to ensure funding for returning researchers.

For example, the Hungarian Academy of Sciences spent about €9 million between 2009 and 2013 on the [Momentum](#) programme. By providing grants to Hungarian and international scientists, this programme aims at reversing the emigration of young scientists and to attract talented researchers back to Hungary. The programme is still ongoing. So far, 97 returnees have found support. “This is just a small amount,” Lados says. But “the programme allows returnees to group and bring in their skills. Those skills in turn are beneficial for Hungary,” he notes.

Other successful examples are the [Welcome](#) and [Homing Plus](#) programmes from the private funding body, the [Foundation for Polish Science](#). It is worth noting that both programmes have been co-financed by the [European Regional Development Fund](#). With a budget of almost €8 million, Homing Plus provided research subsidies and stipends to encourage young Polish and international scientists to continue their research in Poland. 117 young researchers have so far benefitted from the programme; the vast majority of them being returnees.

But not all brain reversing programmes are aimed at scientists. For example, the Slovak programme [Slovensko Calling](#) that has been running since 2009 has targeted high-skilled professionals in general. It provided information and services for potential and actual returnees. This programme has been particularly successful due to its good communication strategy, Lados says.

## Combined support to tackle emigration

So what does it take for such programme to be successful? A clear communication strategy, cooperation with other projects or other initiatives supporting returnees and a clearly defined target group are essential for effective brain gain programmes, Lados points out. Moreover, “the amount of money spent for a programme and the number of returnees is clearly linked,” Lados and colleagues state in the Re-Turn project report. An example for a successful international programme is the EU-funded [People programme](#), under the EU Marie Curie Actions, the report authors note.

It appears essential to adapt government response, as reasons for emigrating vary from one country to another. Among the Baltic countries, Latvia, for example, has particularly suffered from emigration due to the financial crisis. Graduates and researchers have emigrated at a significant rate. What is more, the country is unable to attract non-nationals, according to the 2014 progress [report](#) of the European Innovation Union (IU). “Science is still under crisis funding,” notes Krisjane. Only last year, the Ministry of Economics set up a [re-migration plan](#) targeted at skilled professionals, emigrant families with children, and young people studying abroad. “At least the government has demonstrated interest in this issue,” Krisjane comments. “I hope that the situation will improve in the future”, she adds.

Combining grants for targeted populations of scientists is also a strategy adopted by Latvia’s neighbour, the Russian Federation. In particular, the 2020 Strategy offers [grants](#), such as the mega-grant programme, to encourage the return of leading Russian scientists whereas the so-called [presidential grants](#) target young scientists. “These grants provide new possibilities, particularly for young researchers,” says Dmitry Poletaev, director of the [Migration Research Centre](#) of the Russian Academy of Science, in Moscow. The trouble is that there is little transparency in grant giving procedures, Poletaev notes. Established scientists often control the grants, which hampers young scientists in pursuing their careers, he says. Above all, “the system is often very bureaucratic,” he adds.

Since the Russian Federation has also suffered from severe brain drain in several waves since the Perestroika in the mid-eighties, it is no mean task to reverse it. Figures from a [report](#) prepared by the Russian Ministry of Economic Development (MED) and other groups show that between 1989 and 2004, about 25,000 Russian scientists left their home. As elsewhere in Europe, the demographic change towards an ageing population adds to the problem. These factors, once combined, mean that there is now a skills gap that is difficult to close, the Russian MED reports notes.

## Returns subject to degree of attractiveness

If some brain drain reversal strategies have brought some successes, there are, however, additional problems. For example, low salaries are amongst the reasons that countries such as Bulgaria still lose more scientists than they gain, according to the EU’s Innovation Union progress report. In Romania, poor financing of the research and innovation sector has had the same effect, the report says. But while political goals exist to make the country attractive for excellent and experienced scientists, [projects](#) to bring back and integrate Romanian

researchers working abroad were discontinued. “I am not aware of a governmental programme to specifically attract returning scientists,” says Victor Zamfir, professor of nuclear physics at the National Institute for Physics and Nuclear Engineering in Bucharest, Romania.

Zamfir acknowledges that salaries for Romanian scientists are still about two to four times less than in countries such as Germany. Zamfir himself left Romania in February 1990 and returned 14 years later. He now heads the [Extreme Light Infrastructure – Nuclear Physics](#), financed by the Romanian government and the European Regional Development Fund. This new infrastructure will boost the country’s research focus on physical research, Zamfir hopes. Offering salaries as in other parts of the world will make the infrastructure attractive for excellent scientists from around the world, he says. Of 60 newly appointed scientists, about the half are returnees; one third is from abroad.

Low salaries and a lack of infrastructure are also the major obstacles for South-Eastern European countries to successfully attract highly skilled returnees, says Daniel Göler, professor for geographical research on migration and transition at the University of Bamberg, Germany. “The region lacks strategies on how to offer people job perspectives and how to bridge the gap between the higher education sector and industry,” points out Hornstein-Tomic. In fact, [emigration rates](#) of highly skilled people from the Western Balkan and countries of the Eastern partnership, such as the Republic of Moldova or Georgia, are estimated to be high.

### Engagement with the diaspora

When brain drain reversal programmes are not as well suited for less research-intensive countries, other strategies have also been implemented. They are based on collaborations with each country’s diaspora . Moldova, for example, also tries to encourage scientists to return. Although this is considered to be a less realistic option, “because the country has only little to offer,” Hornstein-Tomic says. Instead, setting up stronger networks with the diaspora is seen as a promising approach. For example, a [programme](#) funded by the European Commission aimed to encourage expatriate scientists and young researchers to return for a short period to their home country. The idea was to share expertise and foster cooperation between the diaspora and Moldovan scientists.

Several programmes run by international or bilateral organisations in former Yugoslavian countries, such as Bosnia and Herzegovina, Serbia or Montenegro, also focus on involving expatriate scientists. Experts consider some of these efforts as [good practices](#) because they deal with brain-drain issues in a constructive and systematic way. For example, the [Brain Gain Programme](#) set up by the Albanian Government and the [UNDP](#), included efforts to create a policy framework for encouraging return as well as engagement with the Albanian diaspora. Between 2006 and 2013, the project succeeded in bringing 140 highly skilled people back. Still, “the return rate of highly qualified to Albania is alarmingly low,” Göler points out.

In Croatia, the World Bank and the Croatian Ministry of Science, Sport and Education have been funding the [Unity Through Knowledge Fund](#) since 2007. The aim is to connect Croatian researchers to the diaspora to foster the country’s development towards a knowledge-based society. “This programme was positively evaluated since it provided participating scientists with

valuable experiences through networking,” says Hornstein-Tomic. For example, scientists and institutes have achieved a higher success rate in EU-FP7 funding calls. The fund is due to continue until 2017.

However, the return part of the Croatian programme has been dropped. “The success rate was low. Those, who returned via the fund would have returned anyway,” says Hornstein-Tomic. “But they received some institutional help, at least,” she adds. Croatia may now benefit from a programme called [Newfelpro](#), co-funded by the European Commission’s Marie Curie People programme. It encourages and supports mobility of Croatian and foreign researchers, including the return of expatriates. Participating in such a programme “is a big step forward for the Croatian society to increase internationalisation and competitiveness,” concludes Hornstein-Tomic .

### **Not a simple task**

All experts agree that the general political framework and stability in science policy and funding are major prerequisites for a country to be attractive for scientists. Moreover, a policy has to be in place that encourages young scientists and offers them perspectives in the labour market, Zamfir stresses. Particularly in South-Eastern Europe brain gain policies should be linked to labour market strategies, Hornstein-Tomic contends. However, the question of retaining and regaining talents is not confined to Central and Eastern Europe but should be dealt with across Europe, she believes: “In the end, it is the same problem everywhere.”

Constanze Böttcher

Constanze is a freelance science journalist based in Oldenburg, Germany.

Photo credit: [Mário Tomé](#)

**Go back to the [Looking East Special Issue](#)**