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Polish medical brain drain: fleeing from the relative deprivation?

Abstract

Poland is a traditional country of migration, with the history of mass migration dating back to the 19th century. However, the contemporaneous outflow of labor force (after the fall of the iron curtain) varies considerably and has evolved over the past 20 years. In the 1990s, the dominant trend was migration of unskilled workers. In the 2000s, skilled migration arises as a dominant tendency.

The paper analyses the migration of health professionals from Poland, with the particular emphasis on the causes of the phenomenon. One may expect that the main driving force, which pulls the physicians from their homeland, are the wage differentials: for instance a Polish doctor earns ten times less than his counterpart in Great Britain.

However, the main thesis of the article is somehow surprising: the main determinant of intensive outflow of Polish physicians might be rather the relative deprivation than the wage differentials. Polish health sector is still under the public control and the official income of physicians is considerably lower than in other professional groups of reference (lawyers, scientists or even construction workers). Thus, not only the international wage differential that matters, but also the internal (home) wage differentials. Some implications for the Polish economic and migration policy are presented.

Keywords: medical brain drain, push-pull theory, relative deprivation

1. Introduction – Polish migration patterns

Poland has experienced mass migration from its territory for a long period of time. The history of Polish Diaspora, which is estimated from 10 to 20 millions, dates back to 19th century, i.e. the time when Poland was under the partition of three Powers: Prussia, Russia and the Austrian empire. Massive outflow of people from the Polish homelands begun mainly due to economic reasons: areal land partition, decreasing prices of agrarian commodities, poor living conditions. Thus it was mainly a labor migration, which had continued till the first World War, with the main destinations in Germany, France, the United States, Canada, Australia, Argentina and Brazil. After 1918, Polish state has been reconstructed, however the outflow of labor force from the country was

also intense, with pretty much the same destination countries (migration to the US was limited due to the quotas imposed by the American government).

A dramatic change occurs during the Second World War and afterwards. In years 1939-1945 hundreds of thousands, if not millions of Poles left country as refugees. Others were displaced or forced to migrate – to German Reich as *de facto* slave workers, or to Kazahstan and other distant parts of Soviet empire as involuntary settlers. After 1945 Poland is placed behind the Iron Curtain and the communist regime is implemented. Many refugees, afraid to go back, stayed in Western countries. Thus, this part of Polish Diaspora is created more due to political reasons. Under the communism, Poland should had been expected to close its borders to migration. It was only partially true – after the Stalin death in 1956 the travel regulations were partially dismantled: there were some periods of relative movement freedom (i.e. some categories of citizens were allowed to migrate: either on seasonal or definitive basis), combined with the phases of retreating, when the government was closing the borders again. Another pattern of migration was the politically driven one – hundreds of thousands of Germans or Poles with the German passports were de facto expelled to German Federal Republic, dozens of thousands of Polish Jews were expelled in years 1967-1969: most of them went to Israel or the United States (Stola, 1992).

However, the period of communist regime was to a large extent conceived as a phase when migration was mostly limited and available only to the more privileged individuals. The massive migration started again in 1980s, when the communist regime was slowly falling apart. This migration is seen be the West observers as politically-driven one (due to the Martial Law, introduced in 1981), but ass the matter of fact the dominant motive was the economic one. The inefficiency of centrally-planned economy was at this time clearly visible and many Poles sought to leave the country in search for the better living conditions. Unfortunately, the large fraction of those who left abroad were the most skilled citizens: scientists and medical staff. But it would be unfair to describe this migration as a brain drain – it was rather the fleeing of brains from the poor living conditions than the draining by the Western economies.

After the falling of the communism in 1989, borders had been opened and all citizens were allowed to move freely abroad. In 1990s many Poles actually did so. It was a considerable outflow of labor migrants, most of them semi-skilled or unskilled, who went mainly to the United States and Germany. The striking difference between 1980s and 1990s is a dramatic decrease of well-educated Poles in the migration flows (Okólski, 1996). Skilled workers were relatively less interested in leaving the country, because the new, market-oriented economy gave them new opportunities. University diploma started to be highly-rewarded on the labor market. Demand for the skilled staff in the private sector in the first years of transition was so high, that not only economists, engineers but also

sociologists, psychologists, historians or even philosophers begun working in the public, private and transnational corporations as managers, creating the myth of the "polish yuppie".

Only two groups of skilled workers did not benefit directly from the transformation: scientists and medical staff. Polish science and health sector were publicly financed before and after 1989, so the wages were relatively low compared to those in the private sector. In most national companies, the R&D departments were very small (if they even existed), and the transnational companies didn't see a need in creating additional research centers in Poland. But scientists could easily change the occupation in order to work in private sector, and many of them benefited from the boom in educational sector. After 1989, the tertiary enrollment rate has been increasing at a very high pace, leading to the creation of many private universities. Many scientists benefited from additional working place, although time devoted to teaching meant less time for research and personal development.

However, medical sector remained unchanged. Polish health care system is publicly financed, with all the citizens employed or on receiving retirement pensions, having the right to free assistance. The resources devoted to the health care were relatively low, so the salaries of doctors, nurses and administrative staff remained[1] at a very low level too. Moreover, only some of the doctors, like stomatologists were able to open their private offices. The nurses remained in the most difficult situation, with *de facto* no additional possibility of gaining additional source of income. It was easy to predict, that this situation cannot last forever, and that unsatisfied with the living condition medical staff may migrate to other countries. The outflow of medical staff become visible in the end of 1990s, and was intensified after 2004, when Poland entered the European Union and the qualifications of all Polish doctors and a to some extent[2] nurses became recognized in all member countries.

This increasing medical brain drain is a source of great concern for the Polish politicians, scientists and society as a whole. Poland has one of the lowest rates of doctors per 1000 habitants among the OECD countries, and the Polish society is becoming to face the problems of ageing, so the demand for nurses and doctors in the next years will clearly grow. The aim of this paper is to present the scale of migration of physicians from Poland, its causes and possible consequences. Special emphasis has been put on the analysis of neoclassical theory of migration (push-pull framework) and the new economics of labor migration (the relative deprivation concept). The author will try to demonstrate, that the main driving force of migration of Polish health staff is the feeling of the relative deprivation, compared to the other groups of reference (i.e. lawyers, scientists, businessmen

[1].

[2] In the case of nursery, the qualifications are recognized in all EU member states, but only in the case of those nurses, who have tertiary education attained (i.e. university degree). There are many nurses in Poland, who obtain their professional training on the secondary or semi-tertiary level.

or even construction workers). The structure of the paper is as follows: in the second section two competing theories of migration are presented and evaluated, namely the neoclassical theory and the new economics of labor migration. In the third section, a short analysis of wage structure and evolution during the transition in Poland is carried out. Then, in the fourth section, the theory of relative deprivation is analyzed within the frame of migration of healthcare professionals from post-communist countries. The fifth section concludes and brings some political guidelines and implications.

2. Theories of migration

There are several rivalry theories of migration, and it is not the author's intention to described them all – there is vast list of reviewing articles, just to mention works of Arango (2000), Massey et al. (1998), Brettel and Hollyfield (2000). However, when talking about the skilled migration, it is the neoclassical theory that clearly enters in mind. The most renown part of this theory, the push-pull framework, is still widely used to describe and research migration movements[3]. In this view, agents move due to the set of both pushing and pulling factors, and the most important one are the wage differentials. Individuals move to the places where their private human capital (skills, education) would be better paid. Consequently, we should expect a greater intensity of movement from the country where wages are low, to the countries where there is higher net income (after subtracting the travel expenses and other costs).

However, the international movements of people only to some extent confirm the predictions of the theory. The main shortcoming of the neoclassical approach is that the magnitude of the international migration flows is weakly correlated (or even uncorrelated) with the scale of the international wage differences. To be more precise: some countries with low wages send more migrants, while other countries, with relatively the same low income have small outflow rates. The same case is with the immigration – not necessarily the countries with the higher income are those who receive biggest amounts of foreign workers (even in relative, not absolute terms). Lastly, there are specific migration systems, involving two or more sending and destination countries, where the migration lasts for a long period of time, even when the wage differentials decrease over time (Arango, 2000).

[3] Surprisingly, most of the researchers who use the push-pull framework think that it is inherently connected to neoclassical theory. However, this way of describing migration movements was already present in the literature at the end of 19th century. Moreover, the push-pull framework was developed in a seminal paper of Everet Lee (1966), who was an demographer, not economist.

The critics of the neoclassical approach argue (Massey et al., 1998), that this theory omits important factors, especially political, historical and cultural ones. Countries as political actors still have power and will to regulate and manage migration flows. This administrative tools may be introduced in order to stop or facilitate outflow and inflow of migrants. One should also take into the account the politics of migration and migration policies of different countries. History of given nations or states is also important, when studying international migration. Former colonies are still linked with the old metropolises and these political, economical and cultural ties influence migration flows. Common culture and especially language is obviously the important pull factors, for instance professional football players from Brazil would rather choose to play in Portugal, than in Norway, because the adaptation to the new environment is easier in the former.

The new economics (of labor) migration is a theory, that was developed partly as the response to the criticism of the neoclassical approach. In this view, migration flows originate not only due to international wage differentials and in response to the international supply and demand of labor, but also due to the imperfections on local markets in the country of origin. People may migrate in order to secure additional source of the income of a given household. The diversification of resources of households means that there is no need for great wage differences between two countries in order to create migration flows: people would migrate also when there are credit constraints or exists insecure labor market situation at home.

An important discovery of the new economics of labor migration is the theory of the relative deprivation. The relative deprivation has entered in the dictionary of social sciences in the late 1940s, meaning simply “feelings raised by social inequalities” (Stark and Yitzhaki, 1988, p. 57). However, only in 1980s it has been applied in labor economics, in order to explain labor migration. In the formal models, developed mostly by Oded Stark and his affiliates, deprivation function is described as the opposite to the utility function. “An individual's utility is a function of the commodities he has, whereas deprivation is the loss in forgone utility, due to not having commodities” (Ibidem, p. 58). While u(x) can be described as an index of satisfaction from having x, -u(x) could be used as an index of deprivation of having no more than x.

Yet, the relative deprivation is a concept that is different to the utility, as it depends not only on individual’s income but also depends on others income. For a given individual exists a “reference group”, i.e. a group he(she) compares his (her) income to the others (mostly: the whole society), ranking himself (herself) in the social hierarchy. Thus, it is possible that an agent will increase his satisfaction (feeling of “having”) when his income is rising, but as his rank in the society remains intact, his deprivation will not be affected.

An individual who has the possibility of migrating, will move abroad more likely, when satisfaction would rise (that is: migration is connected with the increase of personal income), but also

when deprivation would be reduced. The problem that arises, however is: what is the reference group for a migrant, as the income structure in the area of origin and in destination are different. The question is non-marginary, as the deprivation is the concept defined in relation to others. The authors assumed, that in the short run, migrants associate themselves with the origin reference group, while in the long run they evaluate themselves in relation to the society in the destination country. Moreover, their models usually covered the latter situation, assuming the perfect substitution of the reference groups (Stark and Yitzhaki, 1988).

The theory of relative deprivation has been applied to explain the labor migration, i.e. movements of rather unskilled workers. Most of the empirical analyses were carried out within the Mexico-US migration system, or – in a larger scale, covering South-North migration. In this paper, however, I am turning back to the old concept of relative deprivation, to describe the migration of healthcare professionals from Poland and other transitional economies. I will argue, that this theory might be applied also in order to explain skilled migration. To do so, it is necessary to analyze the wage structure in Poland during the transition from centrally-planned economics to the market-oriented one.

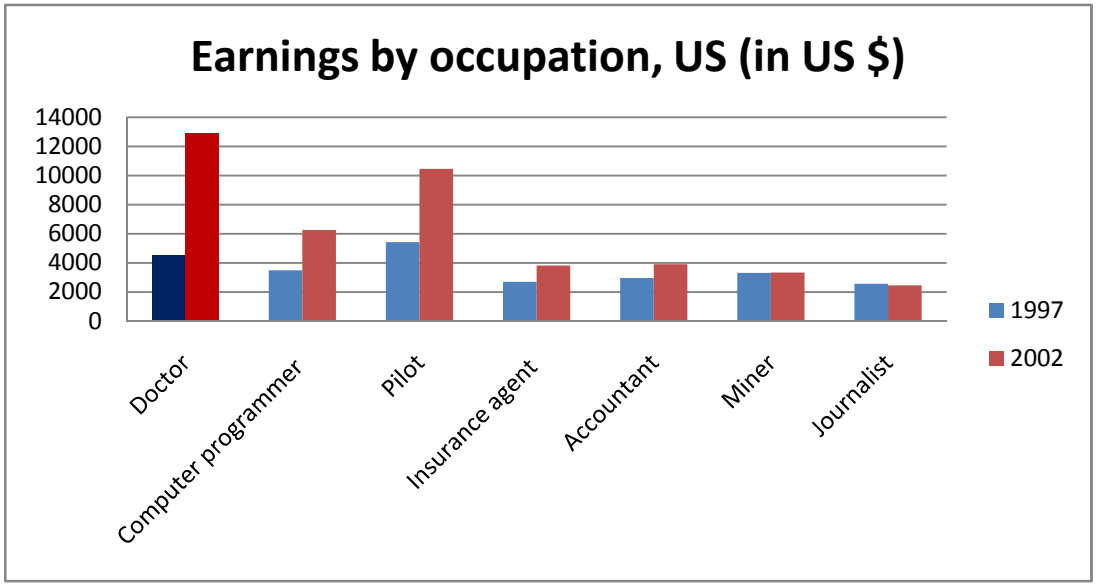
3. The earnings of medical staff in Poland

One would expect, that the physicians, as highly-skilled workers, would have high earnings, placing themselves at the upper-middle part of the income distribution in the society. For instance, in the US in 1997, the mean monthly income of a statistical doctor[4] was US$ 4,5 thousand. With these earnings, doctors were relatively well-paid in relation to other occupations, as computer programmers, accountants or insurance agents. In 2002, the statistical mean monthly income of doctors jumped to impressive US$ 12,9 thousand, surpassing the earnings of pilots, who earned more than doctors in 1997 (see figure 1).

That was not the case of Poland and other socialist economies during the communist regime. The country was a centrally-planned economy, which meant that all wages were established by a central-planner, not by the market. The wage grid was rather flat, with better paid employees earning only 5-7 times more than the worst paid workers (data for Czechoslovakia, provided by Münich et al.,2005). Highly skilled and well-educated workers, as scientists and doctors had their wages kept at artificially low level in relation to the low-skilled ones, to create the impression of egalitarianism in the socialist country.

[4] By income of a statistical doctor one understands the mean earnings for all physicians, without taking into the account the variations within the specialties.

Figure 1.

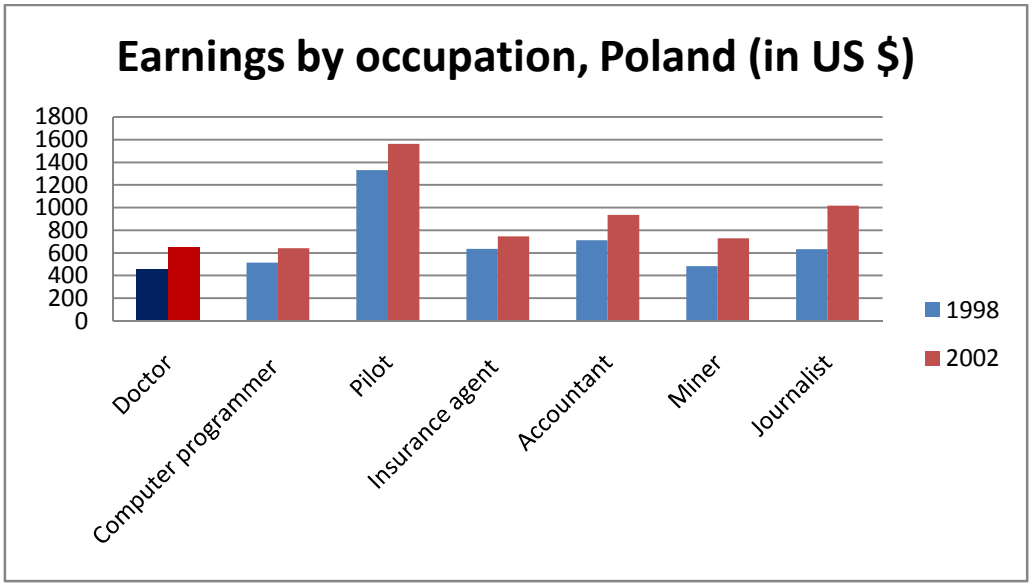


Source: Oostendorp (2005)

With the introduction of free-market mechanism, it should have been expected, that the income inequality in post-communist societies would rise, leading to the higher remuneration of highly-skilled workers. It actually did so, and individuals with tertiary education attainment were the ones who benefited the most in the first years of transformation, receiving premium for their private stocks of human capital. However, the medical sector remained under the public control. The hospitals have not been privatized yet, and the healthcare system remains in its core characteristics the same, as it was under the communist regime. Therefore, the earnings of the medical staff stood unchanged, or even worse: they changed in relation to other occupations. Lawyers, managers, accountants, IT workers, engineers, journalists – all of them benefited from the free-market economy, and their income rose in relation to the physicians earnings. As the consequence, in 1998, when the Polish transformation was already at the advanced stage, a statistical doctor was earning a modest US$ 453 a month, sum corresponding to 71,5% of a journalist monthly income, or to 63,7% of an accountant. Four years later, little has changed for physicians – although their monthly earnings have jumped to US$ 651, they still received less for their work, compared to pilots, accountants, journalists or even miners[5] (see figure 2).

[5] Relatively high earnings of miners in Poland is also a heritage of communism. In centrally-planned, socialist economies, workers from mining, steel and shipbuilding industry were privileged within the wage grid system.

Figure 2.



Source: Oostendorp (2005)

4. Relative deprivation: can it explain Polish medical migration?

Having the specific picture of income distribution by occupation in Poland, one can turn back to the theory of relative deprivation. I argue that this theory is relevant, to explain the migration of healthcare professionals from Poland and other transforming economies. It is difficult to envisage doctors as a group that feels "deprived" in the society: originally groups of workers that were analyzed by scholars interested in the relative deprivation hypothesis, were at the bottom of social hierarchy, performing unattractive and difficult jobs and living mostly in rural areas. However, from fragmentary data on wages one can see that physicians in Poland are surprisingly disadvantaged on a labor market, with earnings below the level obtained by most of the highly-skilled workers, specialists (for instance airplane pilots) and even some manual laborers (miners).

Moreover, the physicians themselves are aware of their situation: they compare the earnings not only with their counterparts in Western countries, but also with other workers in Poland. Marek, young cardiologists describes his experience in this field in such way[6]:

They were the "elite" of workers class and therefore, they were generously remunerated (this included not only high salaries, but also additional social benefits). During the transformation, miners – due to the strength of their trade unions and the importance of coal mining for the energy industry (most of the electricity is produced from coal) were able to keep some of the benefits, as well as the (relatively) high salaries, even though the coal mines remained under a public control.

[6] All quoted doctors were interviewed (in-depth interviews) in June, 2009.

"There was one event that made me think about my life and work in Poland. Recently, my friend had a wedding party... The photographer received 2 thousand zloty[7] for his work. In order to receive 2 thousand zloty, I have to work every day, from 7 am to 2:30 pm in my hospital [for a whole month]. The divergence between our earnings and those from the private sector is too big. It's not my goal to earn »golden mountains«, I just want to live normal life and not to take extra hours. I want to have my mind clear of financial problems... My dreams are not extravagant – I would like to have my own apartment, car and to be able to go for a holiday to the mountains and to ski a little".

Dominika, Marek's workmate, adds:

"The medical profession in Poland is certainly underpaid (...) We should earn at least 200-300% more, around 3-4 times the average monthly earning in the economy [9000-12000 zloty]. Physician stands low in the social hierarchy, as compared to the other specialists. Our input and responsibility connected with our duties are uncorrelated with the salaries. We should earn the same money as good lawyers do".

Marek and Dominika do not complain only for the sake of complaining. Both of them have migration experience: for each year, they make 2-3 short trips to Great Britain, where they work in public diagnostic centre. They know how much the doctors in Great Britain earn, but also have information on the earnings distribution in this country. So they are perfectly aware of the wage differential in:

- absolute terms – the difference between the earnings of a doctor in Poland, compared to doctor in UK;
- and relative terms - ie. what is the position of a British doctor in the British income distribution, compared to position of a Polish doctor in the Polish society.

In the same situation, as Dominika and Marek are, are hundreds of Polish doctors. In Western Europe, the demand for foreign physicians is almost unlimited, and the qualifications of Poles are recognized in the whole European Union. They are usually hired according to their qualifications, and paid as well as natives are. Polish physicians moving abroad, increase individual satisfaction (because they increase personal income) and reduce deprivation – irrespectively whether they move on short-term basis, or migrate for longer periods (or even permanently). The seasonal migration, as in the case of Dominika and Marek, helps to secure additional source of income and obtain desirable social status in Poland. However, the long-term movements are also connected with the desired and adequate (ie. according to the expectations) social position in the destination country. As describes Danuta (psychiatrist, from 2005 working permanently in England):

"We receive the same money as English doctors do. They cannot even pay less, because there are strict rules on wage rates (...) Our skills are not worse than the natives', I would even claim that sometimes we [Poles] are more competent. A lot of Polish doctors work here and all of them are respected and have a high opinion. (...) My colleagues also migrated to England, and they won't go back".

[7] Polish currency, 1 zloty = ca. 20 Eurocents.

5. Concluding remarks

The problem of intensive migration of doctors is very serious in Polish case. Poland is one of those countries of Central and Eastern Europe, which face the problem of ageing population. It is expected, that the demand for healthcare services would grow systematically in the next 20 years. However, between 1991 and 2004 the number of doctors working abroad increased by almost 2 thousand, of which 1 thousand after the year 2000 (Bhargava and Docquier, 2006). Medical migration after 2004 (when Poland entered the EU) was even more intense, however there is no precise data on the phenomenon. It is estimated, that in some areas of medical specialization the number of active physicians fell by almost 10%, already creating shortages on peripheral and poorer regions of Poland.

According to the most of scholars and journalists, the most important factor that influences outflow of healthcare professionals from Poland are the wage differentials. It is so indeed: according to doctors themselves[8], the earnings of a statistical doctor in West are usually 7 to 10 times bigger in absolute (ie. excluding the higher costs of living) and ca. 5 times bigger, when one includes the cost of migration, integration and acculturation, as well as the higher costs of living. However, this conclusion may lead to the simple political guideline: in order to keep physicians at home, they should earn the same as in the West. This recommendation is not only totally unrealistic and impossible to implement (due to the lack of funds), but probably untrue. What should be rather taken into the account, is the economic position of Polish doctors within the society. It might turn out, that migration of doctors from Poland would be less intense, if their earnings would increase in relation to other workers in the country - but not necessarily to such high level, as in the Western states. Therefore, the hypothesis of relative deprivation being one of the most important factors affecting migration decisions of doctors in Poland should be analyzed with caution and be verified empirically.

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[8] At, least, those that I have spoken to.

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