

Unraveling the "brain drain"

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Global migration has increased greatly in the last 40 years. In 2005, 191 million people, or about 3% of the world's population, lived outside their country of birth. This is an increase from 2.3% in 1965.

With migration, many countries are concerned about losing highly skilled workers scientists, doctors, nurses, engineers and others who move abroad to seek better opportunities.

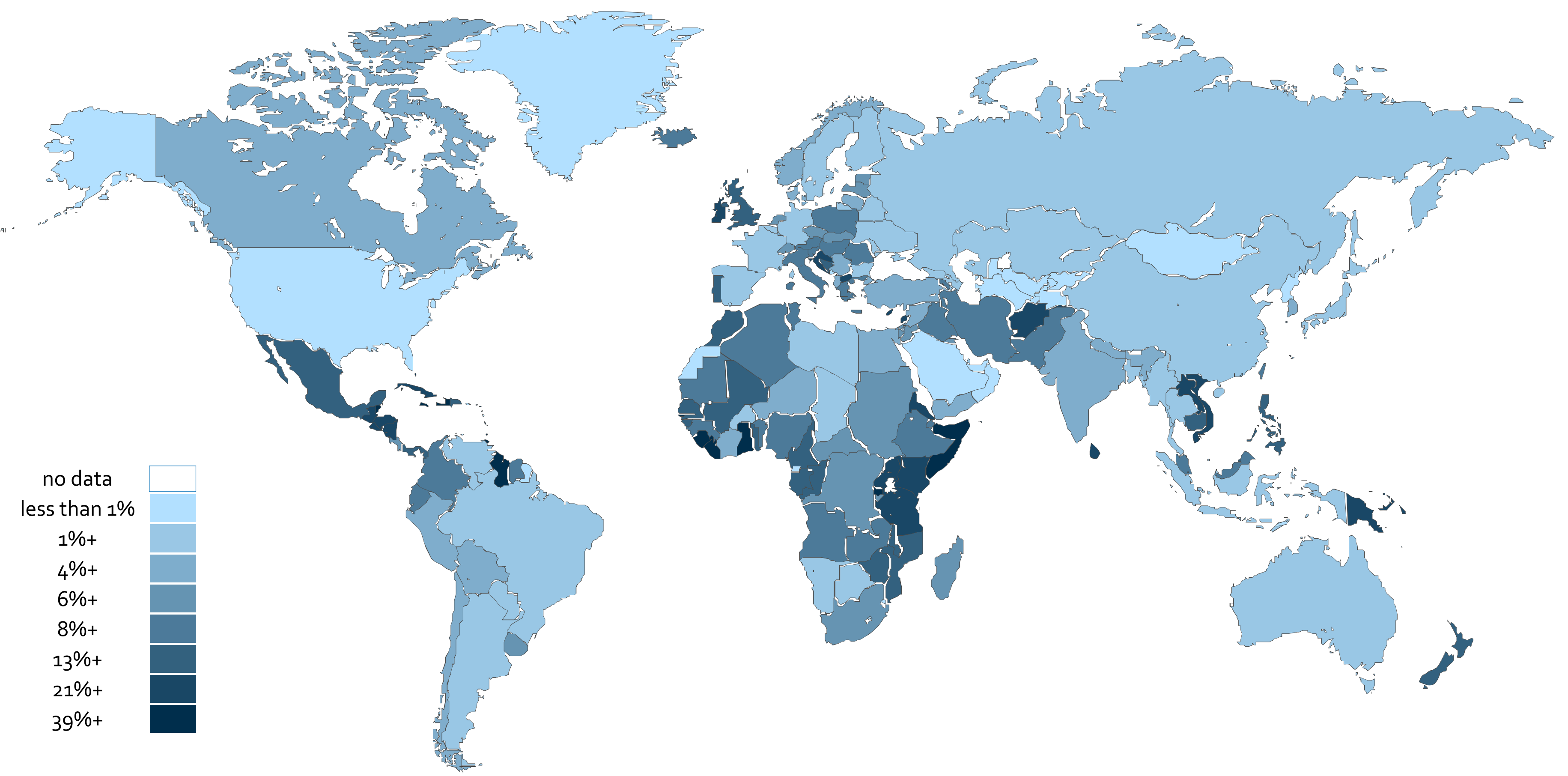
We looked at this so-called "brain drain," and learned that the issue is complex, with often both positive and negative effects for the sending and receiving countries. Many skilled workers eventually return to their home countries. Overall, the movement of skilled workers can promote transfer of knowledge and financial resources in many directions, and promotes international trade and cultural exchange.

For countries where skilled labor leaves due to crises (such as war), the effects are more clearly negative for the sending country. The scale of the brain drain is often misunderstood (particularly in the United States).

There are even fewer statistics available for deriving comprehensive information about migrants' return to their countries of origin; this is an area needing further study. Moreover, there are many reasons for the return phenomenon, adding to research complexity.

Highly skilled emigration in 2000

In the literature, highly skilled is defined as having tertiary schooling, low skilled is defined as only primary schooling.



Information from Schiff, M. & Sjoblom, M.C. (2000).

Big country, small "brain drain"

The emigration rate for people with tertiary education from China was just under 4% in 2000.



Information from Beine, M., Docquier, F., Rapoport, H. (2006b).

A brain drain crisis

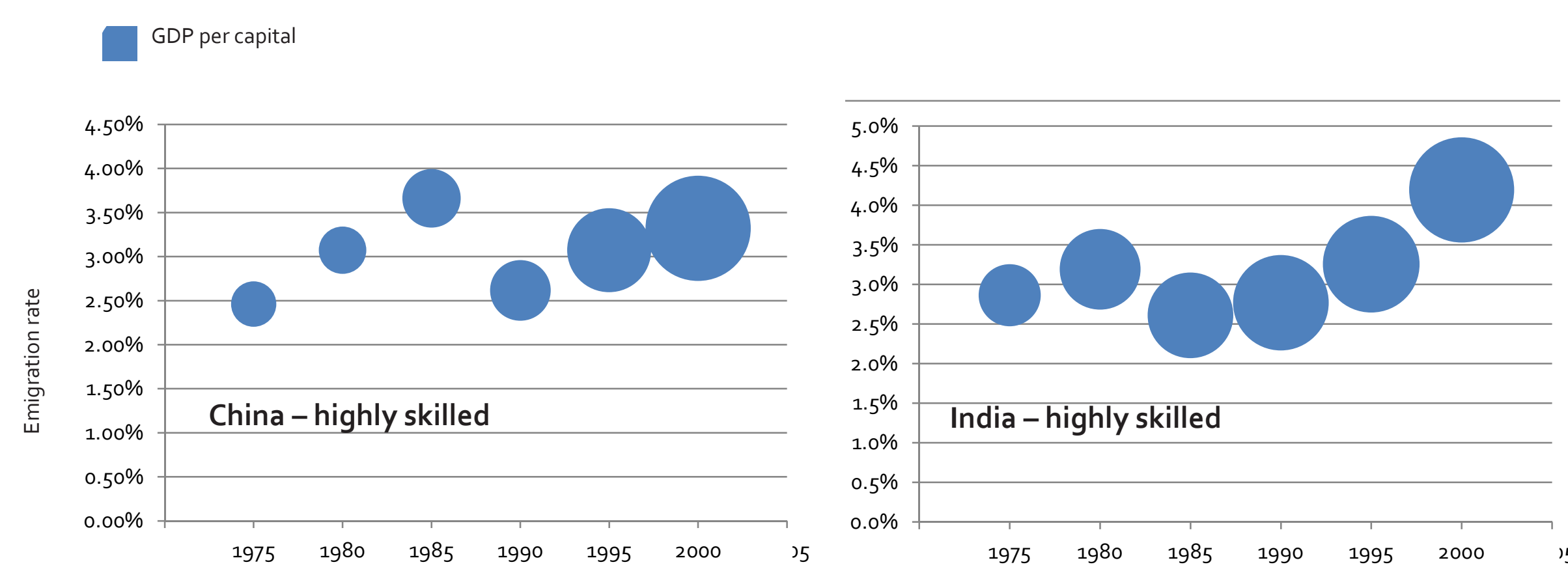
In war-torn Liberia, over 80% of nurses were outside the country in 2000



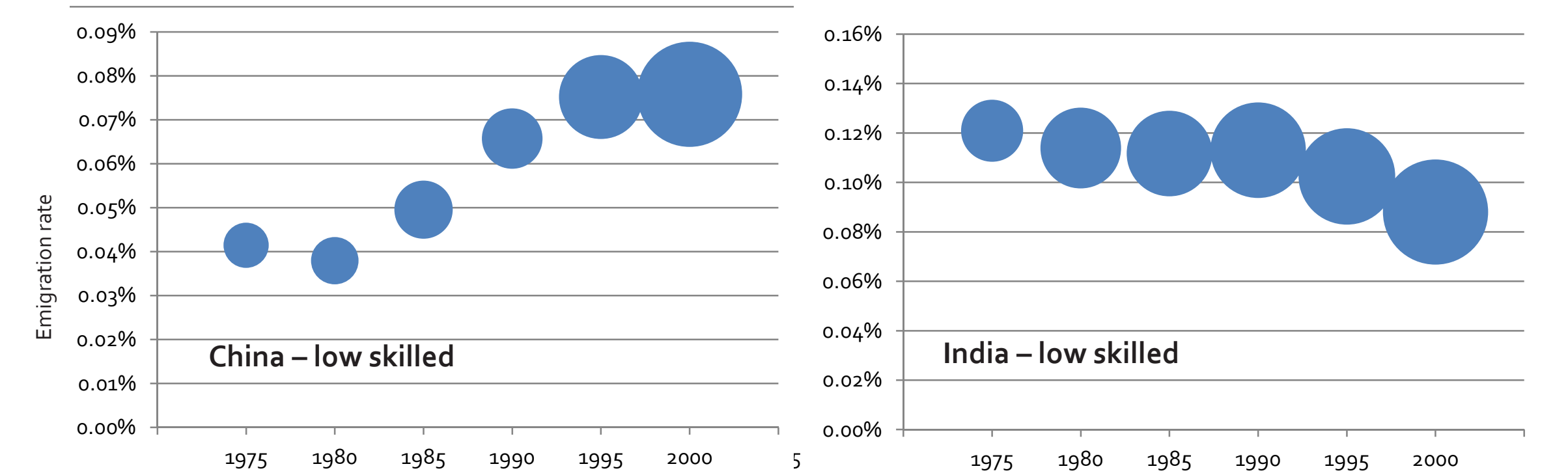
Information from Clemens, M.A. & Pettersson, G. (2006).

Brain drain and economic growth

In China and India, highly skilled emigration seemed to increase as their economies grew, with some set-backs.



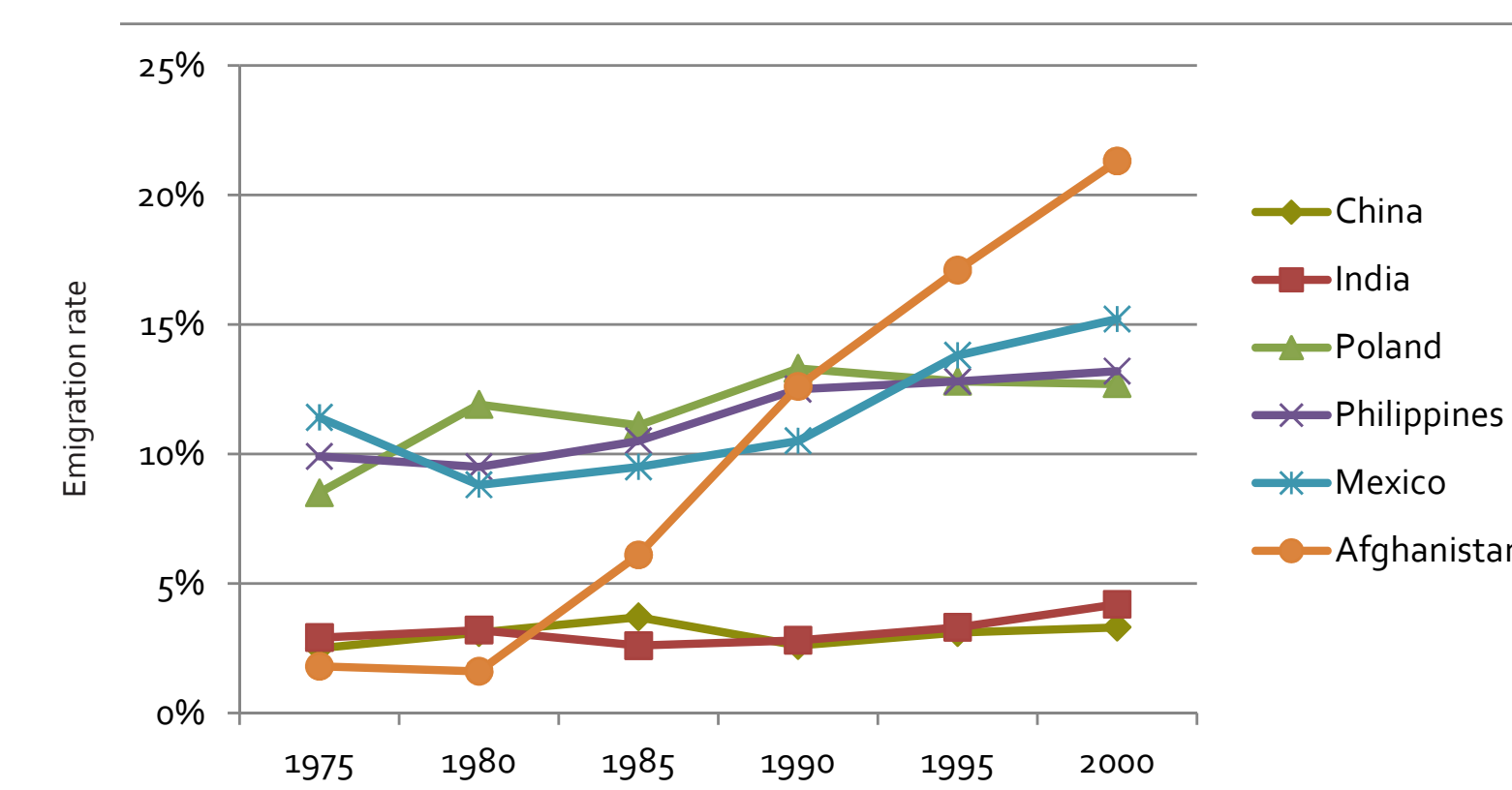
More low skilled workers also emigrated from China as its economy grew (and the country became more open), but in India fewer left over time.



Information from Schiff, M. & Sjoblom, M.C. (2000); World Bank (2011).

Rates of skilled emigration can vary greatly

There is tremendous variation between countries. Rates of emigration also vary over time. In particular, a crisis – such as political violence and 1979 Soviet invasion in Afghanistan – can increase it rapidly.



Information from BBC; Beine, M., Docquier, F., Rapoport, H. (2006b).

Much immigration is temporary

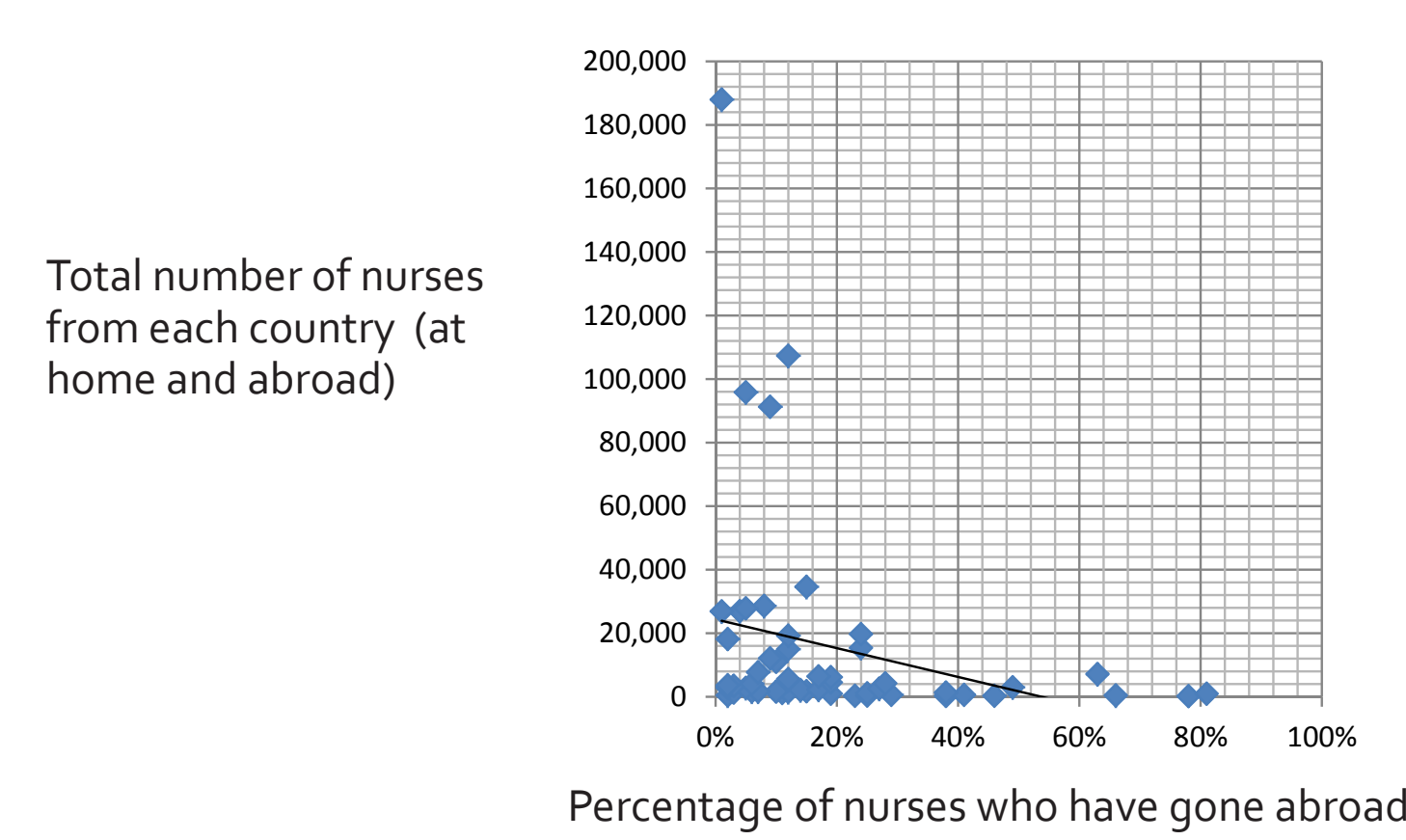
About 40% of migrants (all skill levels, age 15+) in the United Kingdom leave after just three years.



Information from Organisation for Economic Co-Operation and Development (2008).

Scarcity and brain drain

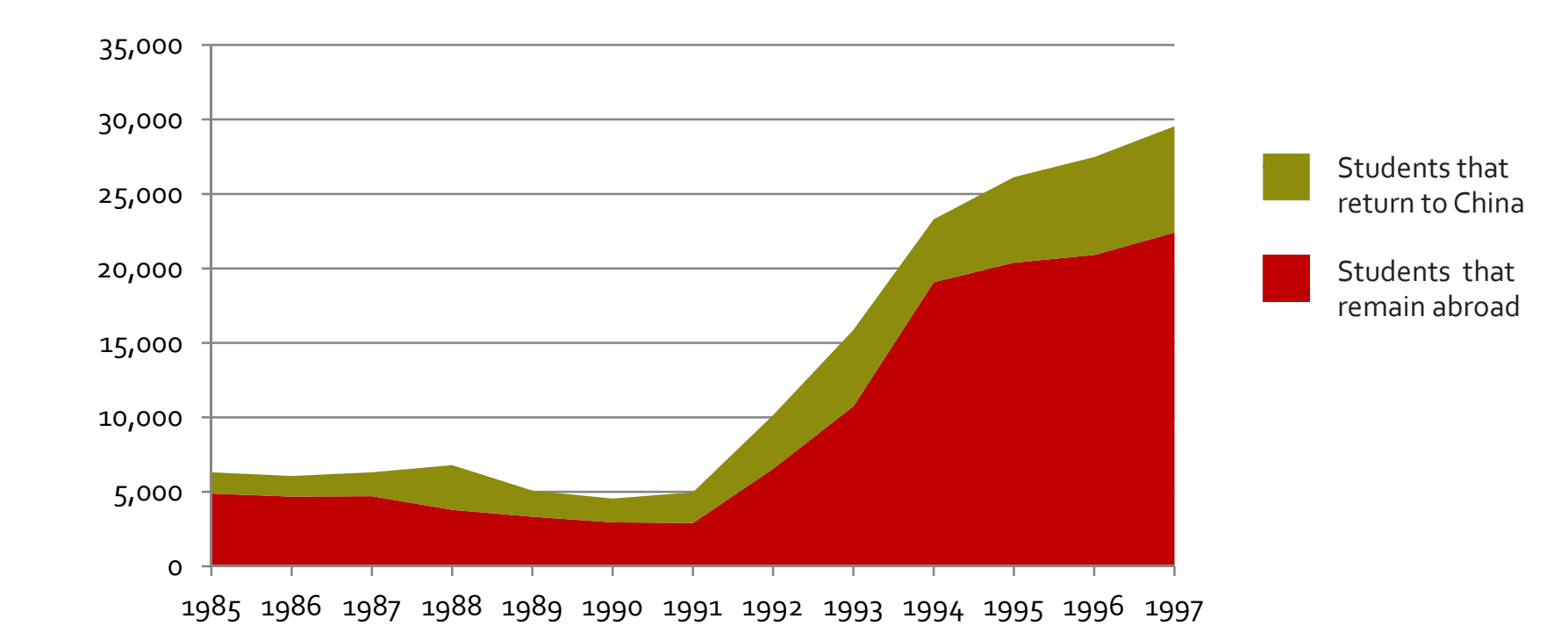
In some professions, countries with a very low number of workers tend to have higher rates of emigration – such as for nurses from African countries.



Information from Clemens, M.A. & Pettersson, G. (2006).

Return migration by students

Among Chinese students studying abroad, the number that return each year varies from about one-fifth to almost half. According to one observer (Zhang, 2003) even with so many remaining abroad, the overall impact on the Chinese economy is positive due to students bringing back human and financial capital, as well as their international connections.



Information from Zhang, G. (2003).

Effects of international mobility of the highly skilled for sending countries

Advantages

- Receive remittances sent home
- Gain knowledge of innovative processes, international contacts
- With return migration, gain monetary, intellectual and social capital
- Fosters international trade and cultural relations needed for peace

Disadvantages

- Lose money invested in migrants – as for education
- Deprived of professional contribution – research, ideas, service
- International competitiveness decreases
- Companies miss out on intellectual property created

Reference List

BBC News (n.d.). *Afghanistan – Timeline*. Retrieved from <http://news.bbc.co.uk/2/hi/1162108.stm>

Beine, M., Docquier, F., & Rapoport, H. (2006a). *Measuring international skilled migration: New estimates controlling for age of entry* (World Bank Research Report). Retrieved from http://siteresources.worldbank.org/INTRES/Resources/469232-1107449512766/MeasuringInternationalMigration_paper.pdf

Beine, M., Docquier, F., Rapoport, H. (2006b). *Measuring international skilled migration: New estimates controlling for age of entry* [Data file]. Retrieved from <http://go.worldbank.org/T9ZNBYS1Vo>

Clemens, M.A. & Pettersson, G. (2006). *Physicians born in African countries appearing in censuses on nine receiving countries circa 2000* [Data file]. Retrieved from <http://www.cgdev.org/content/publications/detail/9267/>

Organisation for Economic Co-Operation and Development. (2008). *International migration outlook: Annual report, 2008 edition*. Retrieved from <http://oiberon.sourceoecd.org/vl=3381836/cl=24/nw=1/rpsv/home.htm>

Organisation for Economic Co-Operation and Development. (2010). *International migration outlook: SOPEMI 2010*. Retrieved from <http://oiberon.sourceoecd.org/vl=3381836/cl=24/nw=1/rpsv/home.htm>

Schiff, M. & Sjoblom, M.C. (2000). *Panel data on international migration, 1975-2000* [Data file]. Retrieved from <http://go.worldbank.org/4JSEHH7Po>

The World Bank. (2011). *GDP per capita (current US\$)* [Data file]. Retrieved from <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

Zhang, G. (2003). Migration of highly skilled Chinese to Europe: Trends and perspectives. *International Migration*, 41(3), 73-97.

