

Does corruption promote emigration?

Corruption is a driving force of emigration, especially for high-skilled workers, but also for other workers

Keywords: corruption, emigration, educational attainment, inequality

ELEVATOR PITCH

Knowing whether corruption leads to higher emigration rates—and among which groups—is important because most labor emigration is from developing to developed countries. If corruption leads highly-skilled and highly-educated workers to leave developing countries, it can result in a shortage of skilled labor and slower economic growth. In turn, this leads to higher unemployment, lowering the returns to human capital and encouraging further emigration. Corruption also shifts public spending from health and education to sectors with less transparency in spending, disadvantaging lower-skilled workers and encouraging them to emigrate.

KEY FINDINGS

Pros

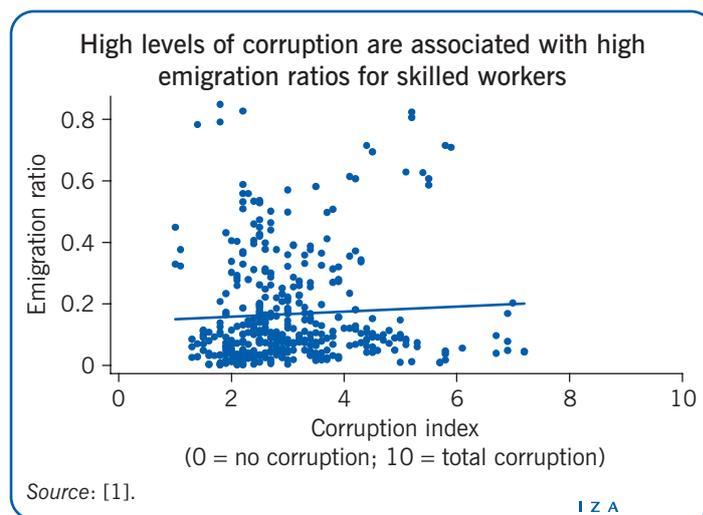
- + Since corruption lowers the returns to human capital, reducing corruption prevents brain drain by retaining an educated labor force, which can boost economic growth and welfare.
- + Control of corruption allows good governance to emerge, boosting the welfare of people across all education levels and encouraging them to stay in the country.
- + There is evidence that the exact relationship between corruption and emigration might vary for workers with different levels of skills and education.
- + Measures to reduce corruption should be accompanied by measures to reduce inequality.

Cons

- When corruption increases, there are larger outflows and smaller inflows of highly-educated workers, resulting in a net brain drain, which reduces welfare in the home country and slows economic growth.
- Emigration flows of people with low and medium skills and education rise at initial levels of corruption and then decline as corruption reaches a certain threshold.
- Corruption reduces the stock of human capital and the returns to education by slowing growth, generating unemployment and underemployment, increasing inequality, and reducing welfare.

AUTHOR'S MAIN MESSAGE

Corruption increases emigration among workers at all education levels by eroding living conditions. But different levels of corruption have different effects on workers of different skill levels. At low levels of corruption, medium- and low-skilled workers leave, but once corruption reaches a certain threshold, this emigration slows. Among highly-skilled and highly-educated workers, however, emigration rises with corruption. The emigration of highly-educated workers, in particular, reduces a country's growth prospects and can lead to a vicious cycle. Thus, reducing the level of corruption should be a major goal of governments.



MOTIVATION

Where corruption is rampant, jobs are granted not because of merit but because of political connections. This cronyism can lead to higher levels of unemployment and lower returns to human capital (for example, if vacancies are not filled and people with the right qualifications are not hired because they lack the relevant contacts). This in turn slows economic growth and acts as a push factor for emigration, especially for the skilled labor force [2]. This brain drain can trigger a vicious cycle for a country as the emigration of highly-educated individuals further slows economic growth and slower growth encourages more emigration.

Corruption also alters the size and composition of public expenditures, shifting them away from vital sectors such as health and education toward sectors that are cloaked in greater secrecy, with greater opportunities for corruption, such as defense [3]. This shift is a particular disadvantage for workers with lower educational attainment, who benefit most from these public services, creating a stronger incentive to emigrate.

While there are many other factors that also drive emigration, such as government spending on education and the quality of institutions, this paper focuses mainly on corruption and push factors. There are also push factors for migration at the individual level; these are also not discussed here due to space limitations.

DISCUSSION OF PROS AND CONS

How corruption reduces a country's attractiveness

Various push and pull factors related to demographic change, globalization, political conflict, institutions, and climate change have increased migration pressures both within and across borders. Pull factors for labor migration include the attraction of higher wages, better living conditions, and networks in destination countries. Among the push factors are poverty, unemployment, inequality, and corruption [1], [4].

Corruption is a result of poor public institutions. A study investigating the connection between political institutions and corruption during 1984–1999 for countries in Latin America and Eastern Europe finds that parliamentary systems, higher levels of democracy, political stability, and freedom of the press are all associated with lower levels of corruption [5]. Furthermore, one study exploring the relationships among institutional quality, the shadow economy, and corruption finds that for 98 developed and developing countries across the world during 1999–2002, an improvement in institutional quality reduces the size of the shadow economy directly and lowers corruption both directly and indirectly [6].

A study examining the effect of corruption on growth under different political regimes during 1960–2000 in African, Latin American, and Scandinavian countries finds that low levels of corruption can promote economic growth while high levels of corruption can slow economic growth [7]. Hence, there seems to be a (low) level of corruption that maximizes growth—“a growth-maximizing level of corruption.” However, the type of political regime is found to be important for the relationship between corruption and growth. There is a nonlinear relationship between corruption and growth in countries that are politically free (this means that—at least at low levels of corruption—an increase in corruption does not necessarily result in a decrease in growth), as

opposed to those that are not politically free (here corruption might have no effect at all). A growth-maximizing (low) level of corruption is observed for countries that are politically free. But in African and Latin American countries with well-developed institutions, corruption has a clear and significant negative impact on growth, while in countries with poor institutions corruption has no effect on growth [8]. In the latter case, corruption might substitute for missing institutions and hence have no effect on growth. Another study finds that for 54 developed and developing countries during 1994–1997 the adverse effects of corruption are lower in countries with less well developed institutions [9]. In these countries, corruption might not be the most important factor in determining attractiveness, as developing better institutions should be higher up on the policy agenda.

Measuring corruption

Corruption is a complex phenomenon, and definitions differ widely throughout the literature. These factors make it difficult to measure corruption on a single scale. Different indices of corruption include the following.

- *The Corruption Perceptions Index* provided by Transparency International measures the degree to which the public perceives corruption to exist among politicians and officials. Corruption estimates range from 0 (totally corrupt) to 10 (not corrupt).
- *The Worldwide Governance Indicators* provided by the World Bank consist of an aggregated indicator summarizing information on six dimensions of governance: voice and accountability, political stability/absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. This index ranges from –2.5 (totally corrupt) to 2.5 (not corrupt).
- Finally, the *International Country Risk Guide* provided by the Political Risk Services (PRS) Group, originally developed to project long-term risks for international business planning, includes expert-based ratings on corruption within a country's political system. The index measures the extent to which senior government officials are likely to demand payments, and the extent to which illegal payments are generally expected throughout lower levels of government in return for import and export licenses, exchange controls, tax assessment, policy protection, or loans. Each country is given a score from 0 to 6, where 6 indicates no corruption and 0 indicates the highest level of corruption.

Source: Ariu, A., and P. Squicciarini. "The balance of brains: Corruption and high skilled migration." *EMBO Reports* 14:6 (2013): 502–504.

Besides growth, corruption also affects other variables that determine a country's attractiveness. Corruption can increase emigration by directly harming workers. It also has indirect effects on emigration that operate through multiple channels. For example, corruption means that jobs are distributed as a result of political connections rather than merit. This favoritism reduces the returns to human capital investment and increases the rate of unemployment, lowering the returns to human capital, making it less attractive for workers to stay in a country. By lowering the returns to education, corruption can slow growth and become a push factor for emigration [2].

Corruption has also been found to change the size and composition of public expenditures, shifting them away from vital sectors such as health and education [10], toward sectors that involve greater secrecy and less transparency, such as defense. Corruption can also negatively affect the provision of health and education services, by increasing the cost and lowering the quality of these services [11].

Thus, corruption can lower the stock of human capital and reduce the returns to education by slowing growth, generating unemployment and underemployment, increasing inequality, and reducing welfare [2]. In general, it can be said that corrupt countries provide their citizens with poorer working and living conditions, creating incentives for people, especially well-educated workers, to migrate to less corrupt countries [1].

Corruption and the emigration of highly-skilled workers

The literature investigating the direct influence of corruption on emigration is sparse. One study for 111 countries during 1985–2000 examines the influence of corruption on emigration by dividing migrants into two groups, skilled migrants and average migrants. It finds that corruption acts as a push factor for emigration, particularly for skilled migrants, by eroding the quality of people's working and living conditions and lowering the returns to education [2]. Because highly-educated workers demand higher pay for higher skills (skill premiums), corruption has three to four times the effect on skilled migrants as on average migrants.

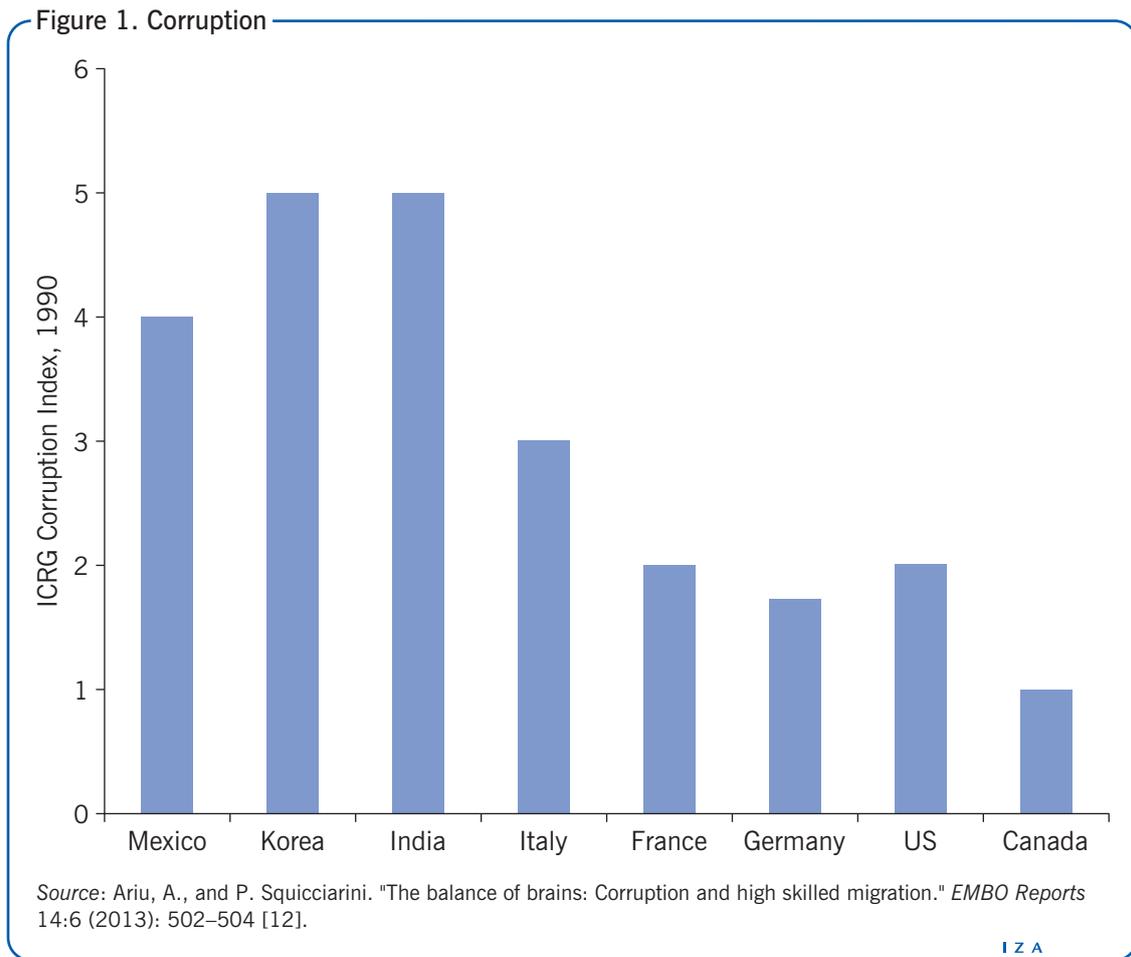
Additionally, if the inequality generated by corruption leads to an increase in progressive tax rates, this could act as a disincentive for those with higher educational qualifications [2]. Also, if jobs are granted on the basis of political connections rather than merit, those with higher levels of educational attainment will lose motivation for work and may decide to emigrate to countries that are less corrupt [1].

Another study that investigates how corruption affects the inflows and outflows of migrants for a group of eight highly developed countries during 1990–2000 shows that corruption is detrimental for both migrant inflows and outflows [12]. The relationship between corruption and net migration is illustrated in Figures 1 and 2 which compare corruption (as measured by the International Country Risk Guide index) with net migration flows for a selection of major economies. The figures show that corruption leads to the emigration of highly-skilled nationals and reduces the immigration of high-skilled foreign workers, thus leading to a net shortage of high-skilled workers. Moreover, the findings indicate that the negative net migration flow in corrupt countries is driven mainly by the negative effect of corruption on immigration and not by the increase in the emigration rate of high-skilled workers.

This consequence of corruption has adverse effects in the long term, as it leads to a continuous decline in a country's human capital stock, which in turn leads to lower productivity and economic growth and a general deterioration in economic conditions.

Corruption and the emigration of low- and medium-skilled workers

Some of the latest studies build on the earlier literature by arguing that corruption affects not only the migration decisions of highly-skilled and highly-educated workers but also the decisions of those with low and medium skills and education. Higher levels of unemployment and inequality generated by corruption can induce those with low and medium skills and education to emigrate. In addition, low-skilled, low-income workers may end up paying a larger share of their income as bribes, a discouragement to remaining in a country where corruption is high.



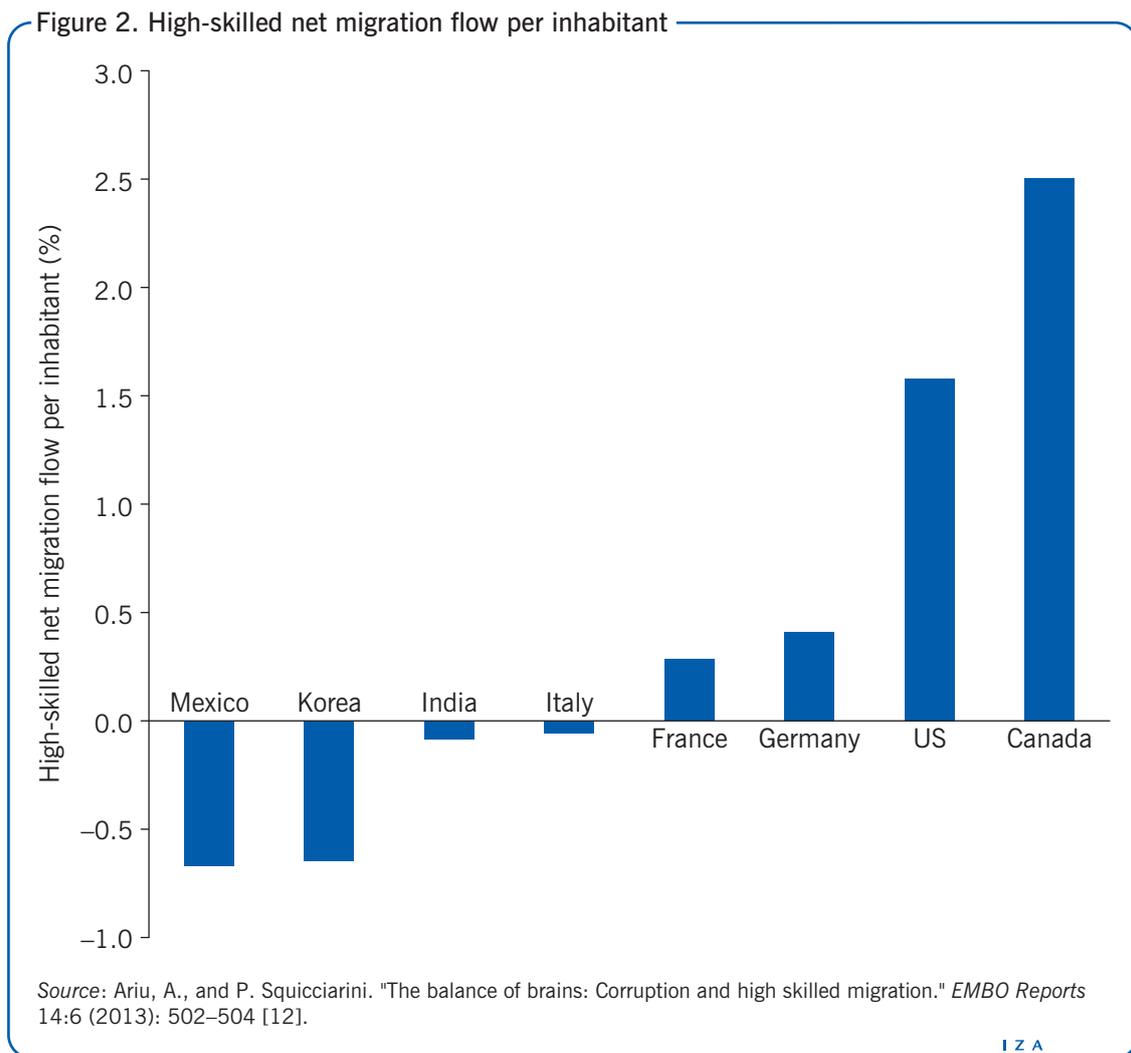
Similarly, corrupt governments tend to spend less on the provision of essential services such as education and health that benefit low-income groups most. Therefore, deteriorating living conditions could also increase emigration rates among workers with medium and low levels of skills and education [3].

Empirical evidence for a relationship between corruption and migration by low- and medium-skilled workers is mixed, however. Whereas most studies find a strong positive effect of corruption on migration by high-skilled workers, the effect on average migration is much weaker and not robust, i.e. it depends on the specification, the methods, and/or the data used, for instance [2]. There is some recent evidence,

however, that corruption also influences the decision to emigrate of workers with lower skills and education [1].

Accordingly, higher levels of corruption in a country raise the emigration rates of the low- and medium-skilled labor force, at least until a certain level of corruption is reached, after which the effect is reversed (discussed in more detail in the following section). However, this initially positive relationship between corruption and low- and medium-skilled migration vanishes or becomes negative if inequality in a country is high. This suggests that corruption in more unequal countries may prevent less-skilled and lower-paid workers from emigrating to richer and less corrupt countries with better employment perspectives and living conditions [1].

This causes additional disadvantages to the home country as low- and medium-skilled migrants contribute positively to GDP growth in the home country, helping reduce poverty and income inequality by sending back (remitting) part of their income to family members in the home country. The better educated a migrant is, the lower are the remittances, and thus the home country would benefit more from low- and medium-skilled migrants than from highly-educated migrants [4].



Nonlinear relationship between corruption and emigration

Effects on medium- and low-skilled workers

As mentioned above, evidence suggests that the relationship between corruption and economic growth can be nonlinear. It is therefore not unreasonable to expect corruption to have nonlinear effects on emigration decisions, with emigration rates rising at low levels of corruption and then declining as corruption increases.

If living conditions continue to deteriorate as corruption increases, the increased inequality generated by corruption can worsen liquidity constraints, particularly among workers with medium and low levels of skills and education, reducing their ability to emigrate.

In addition, corruption can increase tax evasion by weakening the tax system. Rising levels of tax evasion in corrupt countries reduce the resources available for social welfare spending, which benefits, primarily, lower income groups, thus making it more difficult for low-income workers to emigrate [11]. Therefore, as corruption continues to rise, emigration rates among low- and medium-skilled and educated workers could decline even further.

Effects on highly-skilled and educated workers

The pattern differs for highly-skilled and highly-educated workers. A recent study suggests that as corruption increases, the emigration rate of high-skilled and high-educated workers also increases [1]. Using Transparency International's Corruption Perceptions Index as the measure of corruption, the study finds that a one-unit increase in the corruption index boosts the emigration rate of high-skilled and high-educated workers by 0.32%. The study finds no evidence of a nonlinear relationship between corruption and the emigration rate of the highly-skilled workforce. For low- and medium-skilled and educated workers, however, the emigration rate increases at low levels of corruption and then begins to decline beyond a certain point as corruption rises. A one-unit increase in the corruption index initially boosts the emigration rate by 0.22% and by 0.13% for low-skilled and low-educated workers. The corruption threshold points for these two groups are below the corruption level for the sample mean of the corruption index used, hence the positive effect/initial boost on emigration rates will never become affective for low- and medium-skilled workers in this sample.

Another study finds somewhat different results. It presents evidence that in very corrupt countries, reductions in corruption lead to lower emigration rates rather than higher ones because the reduced incentives to migrate (e.g. due to better living conditions and employment perspectives) dominate the rise in incentives due to lower barriers to emigration (e.g. fewer liquidity constraints) [13]. The study also finds that until a certain corruption threshold is reached, emigration rates are lower at low levels of corruption than at levels of corruption above the threshold. While the study does not distinguish among different education levels when investigating the relationship between corruption and emigration, it does find higher emigration rates for more educated individuals in general. Thus, it can be concluded that there is evidence for a nonlinear relationship between corruption and emigration and that the

exact relationship might vary for different groups of migrants with different levels of educational attainment.

Other factors determining emigration

Besides corruption, many other factors influence emigration decisions and are briefly mentioned here. A country's level of development as measured by per capita income has a significant effect on the emigration rates of all three skill and education groups. A higher per capita income reduces the incentive to emigrate of workers with high levels of education, while it increases the incentive of those with low and medium levels of education by increasing their ability to finance their emigration [1].

A study that did not differentiate workers by educational attainment finds that the relationship between per capita income and emigration is nonlinear, with rising emigration as income rises from low levels and falling emigration after a certain level of income is reached [13]. Also, when the government devotes a larger share of GDP to education, emigration rates fall for people with low and medium levels of education, likely because these groups stand to gain the most from the government provision of these services. Finally, higher quality institutions act as a deterrent to the emigration of high- and medium-skilled workers [1].

LIMITATIONS AND GAPS

Studies that look at the relationship between corruption and emigration decisions of workers with different skill and education levels have several limitations. One concerns the robustness of the findings, especially the finding that corruption is a major driving force of emigration. It is not clear that findings are robust, for example, with respect to the time period investigated and the number of countries in the sample.

A second limitation concerns the generalizability of the findings that corruption is a driving force of emigration and that there is a nonlinear relationship between the two. It seems likely that these findings apply largely to the specific countries and time periods examined and cannot be generalized to other contexts.

A third limitation is related to causality. Is emigration causal to corruption, or does corruption cause emigration, or does causality run in both directions? Most studies do not answer these questions.

SUMMARY AND POLICY ADVICE

This paper examines the relationship between corruption and emigration. When studies do not distinguish among workers by education and skill level, they find a nonlinear relationship in which emigration declines as corruption rises from low levels but then rises once corruption has reached a certain threshold level, exhibiting an inverted U-shaped pattern. The most recent empirical studies find a reversal of this nonlinear relationship between corruption and emigration for low- and medium-skilled workers: their emigration rate rises at initial levels of corruption and then declines after corruption has reached a certain threshold, exhibiting an inverted U-shaped pattern.

When emigrants with medium and low levels of educational attainment are split by income distribution, evidence of a decline in emigration for both groups emerges due to an increase in income inequality under corrupt regimes. It seems likely that the increased inequality generated by corruption leads to more stringent liquidity constraints facing low- and medium-skilled migrants, thus reducing their ability to emigrate.

For highly-skilled and highly-educated workers, however, recent studies find a linear relationship between corruption and emigration: as corruption increases, so does the emigration rate for these workers.

Because corruption has many undesirable consequences, governments should work to reduce it. But how can that be done?

- One example would be to follow Switzerland, where corruption is extremely low, in large part because of its strong institutions of direct democracy and fiscal federalism. Both of these institutions provide participatory budgeting and allow citizens a much greater say in how municipal and cantonal budgets are developed, which in turn leads to greater transparency and lower corruption.
- A second policy conclusion is that measures to reduce corruption should be accompanied by redistribution measures to reduce inequality. Host country policies that favor high-skilled migration (e.g. by increasing tax rates) may harm less-skilled workers in the country and thus worsen inequality.
- A third policy conclusion is that reducing corruption is important for preventing brain drain by keeping highly-skilled and highly-educated workers at home, where they can contribute to economic growth, and encouraging highly-skilled workers from other countries to emigrate to the country.
- A fourth policy conclusion is that more funds should be allocated to education, to boost the skill levels of the low- and medium-skilled workers, improving the human capital stock of the country. Lower corruption combined with better education will lead to better labor market outcomes, with jobs determined on the basis of merit rather than personal and political connections. As a consequence, this will accelerate economic growth, improving the well-being of everybody and further reducing incentives to emigrate.

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Competing interests

The IZA World of Labor project is committed to the *IZA Guiding Principles of Research Integrity*. The author declares to have observed these principles.

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Further reading

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