# IS GLOBAL EQUALITY THE ENEMY OF NATIONAL EQUALITY?*

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ABSTRACT

The bulk of global inequality is accounted for by income differences across countries rather than within countries. Expanding trade with China has aggravated inequality in some advanced economies, while ameliorating global inequality. But the "China shock" is receding and other low-income countries are unlikely to replicate China's export-oriented industrialization experience. Relaxing restrictions on cross-border labor mobility might have an even stronger positive effect on global inequality. However it also raises a similar tension. While there would likely be adverse effects on low-skill workers in the advanced economies, international labor mobility has some advantages compared to further liberalizing international trade in goods. I argue that none of the contending perspectives -- national-egalitarian, cosmopolitan, utilitarian -- provides on its own an adequate frame for evaluating the consequences.

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# Is Global Equality the Enemy of National Equality?

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Whether one thinks the last quarter century has been good or bad for equity depends critically on whether one takes a national or global perspective. Within nations, inequality has typically risen in rich and poor nations alike. (Latin American countries, where we observe the highest levels of inequality in the world, were the only ones that significantly bucked the trend.) When commentators talk about inequality, this is usually what they have in mind. But there is another way of looking at inequality, which is to disregard national borders and focus on the distribution of income across all households in the world. Analyzed in this way global inequality actually fell sharply over the same period, thanks in large part to the very rapid growth of China and India, the world's two largest developing economies. In fact, this transformation has been so momentous that the contours of the global distribution of income have changed drastically. The two humps in the distribution – reflecting the all-too recent reality of a world divided into two clear segments, one small and rich, the other large and poor – have disappeared, with an emergent global "middle class" filling out the valley between the two humps (Figure 1).

The bulk of global income equality today is accounted for by income gaps between countries, rather than within them. This explains why economic growth in countries like China and India has a significant positive effect on global equality, even when inequality rises domestically in those countries, as it has done substantially in China's case.

To drive home the importance of between-country gaps, I sometimes ask my audience the following question: would you rather be rich in a poor country, or poor in a rich country? I tell them to assume they care only about their own income and purchasing power. I define rich and poor as follows:

- Within a country:
    - rich person: has the same income level as people in the top 5% of a country's income distribution
    - poor person: has the same income level as people in the bottom 5% of a country's income distribution

- Across countries:
    - rich country: a country that is in the top 5% of all countries ranked by per-capita GDP
    - poor country: a country that is in the bottom 5% of all countries ranked by per-capita GDP

A surprising number of people, even those who are knowledgeable about developing nations, get the answer wrong. They think about the super-wealthy in some of the world's poorest nations and deduce that it must be better to be rich in a poor country. In fact, the correct answer is that it is better to be poor in a rich country – and by a very wide margin. Table 1 displays the relevant calculations. A poor person's income in the "average" rich country (on a PPP-adjusted basis) is nearly five times higher than a rich person's income in a poor country![1] The reason this is counterintuitive to many people is that they do not recognize that the top 5 percent of the population encompasses a lot more people than the few super-rich, the vast majority of whom are not well off by rich-country standards.[2]

Income gaps across countries did not always loom so large in accounting for global inequality. As late as the beginning of the 19th century, inequalities within countries were the dominant component of global inequality. Over time, differences in economic growth rates between countries that partook of the benefits of the Industrial Revolution and those that did not changed this picture. By 2008, income differentials between countries accounted for three-quarters of global inequality with income gaps within countries accounting for the remaining one-quarter (Figure 2). The situation has begun to reverse only recently, with the rapid economic convergence of China, India, and many other developing nations.

[1] These calculations are based on PPP-adjusted GDP per capita figures. The PPP adjustment assumes identical budget shares in rich and poor nations and may be a source of bias. Pritchett and Spivack (2013) show that taking the possible bias into account does not change the basic conclusion.

[2] The representative rich country in Table 1 is Norway, which raises the question whether the relatively equal distribution of income in this Scandinavian country biases these findings. The United States has a much more unequal distribution of income. But the U.S., with a 2014 per-capita GDP of $54,398, is not among the richest 5% of the world's countries. Nevertheless, if we use the U.S. in the place of Norway as the representative rich country, we still get the same answer. A poor individual in the U.S. has a higher income ($5,440) than the rich individual in our representative poor country, Niger. This even though the income share of the bottom ventile for the U.S. is an extremely low 0.005.

Trade and the China shock

Is there a link between the two trends noted at the outset: the decline in global inequality and the rise in within-country inequality? Possibly, as both outcomes took place against the background of intensifying economic globalization. The link is clearest in the case of China. This country grew rapidly off the back of an export-oriented industrialization model: it created tens of millions of better-paying, more productive jobs in urban factories, the output of which flooded the markets of advanced economies. The transition from socialism to a more market-oriented system enabled income gaps to rise within Chinese society.

At the same time, the sharp rise in Chinese imports of relatively labor-intensive goods hit production workers in the rich economies particularly hard, just as standard trade theory would predict. Imports of labor-intensive goods predictably exerted a negative impact on wages at the low end of the earnings distribution. But in addition, labor markets and macro balances were often not as flexible as trade theory presumes, and the China shock also produced large trade deficits and sustained unemployment in local labor markets. Job creation in other, export-oriented industries appears to have been muted.

The effects were particularly notable in the U.S. Once China's entry into the World Trade Organization in 2001 removed the uncertainty associated with the annual renewal of most-favored nation status for the country, outsourcing to and imports from China exploded. This was all good news for China's workers; not so much for America's workers and the communities in which they live. Autor, Dorn and Hanson (2016), who have carried out the most comprehensive analysis of the China shock in the U.S., document the wage losses and long unemployment spells experienced in the most affected communities.

In America's China trade we have perhaps the clearest indication that there may be a serious tension between equality in advanced countries and equality in the world economy at large. But there

are attenuating considerations that deserve attention. First, India, which also grew very rapidly during this period – though not as rapidly as China – has followed a very different growth model, much less reliant on trade. Where it has excelled in exports, it has been in skilled services such as information technologies. Outsourcing to India may have held down somewhat the wages of software engineers and radiologists in the U.S., but that would be hardly a concern from an egalitarian standpoint.

Second, while China no doubt benefited from globalization and access to the U.S. market, its rapid growth predates accession to the World Trade Organization. It was domestic reforms starting in 1978 that unleashed the Chinese dragon. By the time China joined the WTO in late 2001, it had already moved around 400 million of its people above extreme poverty (defined by the World Bank's $1.30 poverty line). And even though the Chinese economy grew even more rapidly after that date, growth before 2002 was extremely rapid and only marginally lower than subsequently (8.2 versus 9.1 percent per annum, respectively). Perhaps China would not have sacrificed that much growth if it had relied less on America's consumers.

In any case, China is a very large country, and its footprint on global trade was correspondingly outsized. Other, smaller countries that followed successfully the export-oriented industrialization path, such as South Korea, Taiwan, or Singapore, did not have notable effects on labor markets in advanced countries. And China itself is now moving away from an export-led path, emphasizing consumption and domestic services. Its manufactured exports are increasingly sophisticated and skill-intensive. Even though China will no doubt remain an important player in global manufacturing, it is likely that the China shock is largely behind us.

Of course, if enough countries lower in the development ladder were to emulate China in the years ahead, they could collectively have a similar impact. Today's low-income countries have a combined population in excess of 600 million people, roughly half of China's. It may well be their turn to industrialize and export as China's economy turns inward. To the extent that manufacturing

employment has already declined in the advanced countries, such industrialization would not produce effects as large as the China shock. Manufacturers employ today less than 9 percent of the labor force in the U.S., down from 25 percent in 1970, and much of that is skilled workers.

But an even more serious countervailing force is that the standard, labor-intensive industrialization path appears to have run its course. Even low-income countries are now de-industrializing, a process that I have called premature de-industrialization (Figure 3; Rodrik 2016). This process appears to be driven by skill upgrading and new technologies that make low-cost labor redundant, even in products that traditionally have been highly labor-intensive. The fact that shoes, for example, are being produced using robots and 3D printing is very bad news for the industrialization prospects of poor countries abundant in low-skill labor. In effect, comparative advantage in standard manufacturing is now moving away from developing countries. This makes it very unlikely that the kind of growth experience China – and South Korea, Taiwan, Singapore, and a few others before China -- went through can be replicated in the future by others.

I conclude from these considerations that the tension China's trade generated between domestic and global inequality is unlikely to feature as prominently in the years ahead. Displacement of manufacturing workers in the advanced countries by imports from poor countries will play a much smaller role. Note that this conclusion does not so much remove the tension as question the possibilities of continued rapid convergence on the part of developing countries.

International labor mobility

But this focus on trade also obscures a much deeper tension. When we restrict the domain of globalization to trade in goods, workers in developing nations can compete with workers in rich nations only through the goods they produce at home. A much more direct form of competition is possible if

workers, like capital, could move from poor to rich nations. And the income gains that would accrue to workers from developing nations would be much greater.

Trade in goods entails trading the labor services embodied in those goods. So there is a sense in which goods trade accomplishes the same objective as labor mobility. Indeed, under certain conditions goods trade is enough to produce factor price equalization (FPE) among trade partners (Samuelson 1948). The failure of these conditions in the real world sheds light on why labor mobility would be a much more potent force for lifting wages in poor nations (and reducing them in the rich world, absent capital accumulation and technological improvements). For one thing, FPE requires incomplete specialization, or loosely speaking that importing and exporting countries continue to produce the same goods. If the U.S. is no longer producing, say, soccer balls, imports from Pakistan do not have a direct effect on U.S. wages.

But more fundamentally, FPE requires that rich and poor countries have identical production functions. This means not only having access to the same technologies (i.e., "blueprints") but also being supported by public institutions of equivalent quality. In reality, a key reason why poor countries are poor is precisely that they have poor institutions: they suffer from corruption, inadequate property-rights protection and contract enforcement, political instability, low levels of infrastructure and public goods provision, and so on. When a Pakistani worker moves to the U.S., he multiplies his income many times over because he benefits from the higher productivity that the U.S. social infrastructure enables. Trade in goods alone is not sufficient to arbitrage the large differences in earnings of workers with apparently similar skills in different countries.

Clemens, Pritchett, and Montenegro (2010) provide some specific estimates of what they call the "place premium," the income gains that would hypothetically accrue to a worker that moved to the U.S. (see also Rosenzweig 2010). Controlling for observable traits such as education, they find that a Pakistani worker would increase his income more than six-fold. The gains obviously depend on the

country of origin of the economic migrant, and range from a factor of 2 for Dominican workers to a factor of more than 15 for Yemeni workers, with a median (mean) value for the multiple of 4 (5). Clemens et al. show that these large estimated gaps are robust to all kinds of adjustments. For example, even if we assume that a university education in Pakistan is equivalent to only primary-school education in the U.S, our Pakistani worker would still increase his wages three-fold by moving to the U.S.

These large gaps are indicative of the restrictiveness of prevailing barriers on international labor mobility. Assuming transport costs and cultural disamenities aside, a wage multiple of six for Pakistani workers implies that the ad-valorem equivalent of labor visa restrictions is around 500 percent. In other words, it is as if Pakistani workers were free to move but had to pay a 500 percent tax on their earnings once in the U.S. Contrast this to average U.S. tariffs on manufactured goods, which is about 3 percent, or the prevailing import barriers on sugar, which is the archetypal highly-protected industry with domestic prices exceeding world prices by 80 percent on average (Riley 2014) – and the asymmetry between freedom to trade in goods and the restrictiveness of trade in labor services becomes strikingly clear. Financial and physical capital are of course for the most part perfectly free to move and typically do not face any taxes at all.

Public finance theory suggests that the efficiency costs of taxes rise with the square of the tax. A small tax creates a small distortion; a large tax creates a disproportionately larger distortion. So from the standpoint of the efficiency of the global allocation of resources, existing restrictions on the cross-border mobility of labor are an abomination. If trade deals were strictly about efficiency and growing the size of the overall economic pie, trade negotiators would drop everything else on their agenda and spend their whole time trying to strike a bargain whereby workers from poor countries could participate in the labor markets of the rich countries.

What might such a bargain look like? I have proposed elsewhere a temporary work visa scheme, administered bilaterally on the basis of specific home-country quotas (Rodrik 2007, Rodrik 2011, chap.

12). To maximize home country benefits and spread the gains around, the visas would be for a fixed period, say 3-5 years. They would not entail a path to citizenship, although guest workers would have the full protection of host country labor standard and regulations. A mix of sticks and carrots might be employed to ensure the bulk of workers do choose to return to their home countries when their visas run out. For example, a portion of guest workers' pay may be docked in forced saving accounts, to be returned only upon repatriation. The quotas of home countries could be adjusted in relation to their success in attracting their workers back home. This would give home countries an incentive to provide repatriation inducements, just as they do with foreign capital or skilled expatriates.[3]

Redistribution and efficiency

Such a bargain would obviously be good for workers from developing nations and, on the face of it, have a first-order positive effect on the global distribution of income – an impact much more powerful than what goods trade could possibly accomplish. But what about lower-skilled workers in the advanced countries? How do we evaluate the possible tension that arises here between global and domestic equality? I will address this question further below. But first let me make two points that enhance the case for international labor mobility not just from an efficiency but also a domestic equity standpoint.

Let us take as given that letting foreign workers in redistributes income from domestic labor to domestic capital. As with trade in goods, the size of the (domestic) pie increases, but there are winners and losers. Let's also assume that policy makers like the efficiency gains that are generated but dislike the redistribution – especially since the transfers here go from citizens who are poorer to citizens who are richer. A heuristic way in which we can capture the tradeoff is to compute what I have called

[3] The practical problems with administering temporary worker visa schemes are legion. Critics point to programs such as Germany's which became permanent over the long term, even though they were meant to be temporary. At the same time, advanced democracies have rarely put in place the kind of carrots and sticks that would produce the return incentives, both for the guest workers themselves and the home countries.

elsewhere the "political cost-benefit ratio" (PCBR) (Rodrik 1994). The PCBR is the ratio of the total value of redistribution in the economy caused by the policy change in question to the net efficiency gains generated. In a partial-equilibrium setting, the PCBR of opening up to trade (whether in goods or in labor services) can be expressed succinctly as $1/\mu\varepsilon t$, where $\mu$ is the share of the imported good or service in domestic consumption, $\varepsilon$ is the (absolute value) of the price elasticity of import demand, and $t$ is the size of the trade barrier (in percent terms) (for derivation, see Rodrik 1994).

Note how the PCBR is declining in the size of the barrier: the taller the barrier at the border, the less income we need to redistribute to generate a dollar of efficiency gain. This is the result of the fact that efficiency gains of reducing a barrier rise with the square of the barrier (as noted above), while the redistributive effects are linear. A 10 percent fall in prices has the same effect on the consumers and producers of the good, regardless of whether the initial tax was 10 percent or 500 percent. The relative magnitudes of efficiency and redistributive effects are shown graphically for cases of low and high barriers in Figure 4.

What this means is that the PCBR of opening up to labor services is very low – much lower than further trade liberalization in view of how liberal the trade regime for goods is already. Let us put some numbers on the comparison using the formula for the PCBR. Let's assume the import demand elasticity ($\varepsilon$) is -1.5 for both goods and labor services. Let the initial domestic consumption shares ($\mu$) be 0.20 and 0.05 for goods and labor services, respectively. Let the taxes be 10 percent for imported goods and 400 percent for imported labor services. This yields a PCBR of 33 for trade liberalization versus merely 3 for liberalizing labor restrictions. That is, a slight relaxation of restrictions on international labor mobility would produce 10 times less redistribution per dollar of (domestic) efficiency gains compared to standard trade liberalization. This is a huge difference, and makes liberalization of labor markets look highly appealing. However, as Figure 4 indicates, the big difference is not that there is less redistribution

in the case of labor; it is that the efficiency gains generated are so much bigger given the height of the barriers.

A second point has to do with the relative advantage of labor mobility as regards concerns about social dumping. One of the reasons trade with low-income countries tends to be contentious is that such trade may undermine domestic labor, environmental, or health and safety standards in the advanced countries. Consider a U.S. company that outsources some of its production to a firm in, say Bangladesh, where labor rights are poorly enforced and working conditions are hazardous because basic safety precautions (such as accessible fire exits) are overlooked. It is as if that company tells its workers: if you want to compete with Bangladeshi workers, you have to sacrifice your hard-earned rights to collective bargaining and safe working conditions.

Domestic regulations constrain market competition to prevent me from getting better off at your expense by hiring underage workers, making my employees work 12-hour shifts, or depriving them of their collective bargaining rights. But when I do these things through international outsourcing, I am undercutting these rules – and undermining the values of fairness and legitimacy on which markets rest. In effect there is an erosion of domestic labor standards through the back door of international trade. Of course, what makes Bangladeshi workers competitive vis-à-vis U.S. workers may well be other things than the violation of their basic labor rights. Wages in Bangladesh are low due to fundamental economic realities of low productivity and the abundance of low-skilled labor. Nevertheless, rights violations confound these realities and raise serious issues of fairness in trade.

Imagine instead that Bangladeshi workers were able to move temporarily to the U.S. and be employed there. U.S. laws would require that they be subject to the same labor regulations as native workers. It is possible that foreign workers would be exempt, either de jure or de facto, from domestic labor laws – as they are in the Gulf States. But I doubt that advanced democracies would choose to go in that direction. Insofar as the same laws applies to them, there would be no question about foreign

workers' rights being violated. Firms that decided to employ them would do so because of fundamental economic reasons rather than regulatory arbitrage. Native workers would still face wage competition, of course, but there would be no race to the bottom in labor standards. Social dumping would be avoided.

Do we need to be cosmopolitans?

None of these considerations obviates the fact that a significant opening up of borders to low-income workers from the developing nations is likely to have an adverse effect on the earnings of some of the poorest workers in the advanced economies. How large these effects are likely to be continues to be hotly debated in the context of discussions on the economic effects of immigration. My concern here is not about immigration per se, but the labor market consequences of labor mobility are analogous.

George Borjas has long argued that native workers with skill characteristics similar to immigrants (mainly high-school dropouts) incur significant income losses. In a recent paper, he and Monras look at the wage effects of four distinct "refugee supply shocks:" the Cuban influx in Miami from the Mariel Harbor in 1980; the repatriation of French and Algerian nationals in France after the Algerian Independence War in 1962; Jewish immigration to Israel after the collapse of the Soviet Union in the early 1990s; and the refugee exodus from the former Yugoslavia during the Balkan wars between 1991 and 2001. In each case, he finds "exogenous supply shocks adversely affect the labor market opportunities of competing natives in the receiving countries," while often having "a favorable impact on complementary workers" (Borjas and Monras 2016).

Other researchers have argued that adverse labor market effects may not be large, for a variety of reasons. Native workers tend to be more skilled than immigrants, and hence typically do not compete head-on with them. Immigrants may produce services that native workers consume. They may increase demand for the goods that are domestically produced. Moreover, in the longer run, greater immigration may spur innovation and higher rates of capital accumulation, raising wages across the board. Adding all

these factors, Giovanni Peri concludes: “More open immigration policies, which allow for balanced entry of immigrants of different education and skill levels, are likely to have no adverse effects on native workers’ wages and may pave the way for productivity growth” (Peri 2014). Notice that even under Peri’s more optimistic conclusions, the tension between global and domestic equality does not entirely disappear. Allowing a “balanced entry of immigrants of different education and skill levels” may minimize the impact on domestic distribution, but it also undercuts the goal of improving the global distribution of income, since the bulk of the world’s labor force is of very low skill.

It is an open question whether we should be concerned at all about this tension when the potential migrant workers are so much poorer than workers -- even low-skill ones -- in the advanced economies. Many economists tend towards a cosmopolitan perspective, which minimizes the significance of national borders. And they would have the support of some moral philosophers as well. Here is Amartya Sen on the irrelevance of borders to considerations of justice (2009, 143):

> “there is something of a tyranny of ideas in seeing the political divisions of states (primarily, national states) as being, in some way, fundamental, and in seeing them not only as practical constraints to be addressed, but as divisions of basic significance in ethics and political philosophy.”

And here is Peter Singer (2002, 12) on how globalization calls for a global, rather than a national, perspective on ethics:

> “If the group to which we must justify ourselves is the tribe, or the nation, then our morality is likely to be tribal, or nationalistic. If, however, the revolution in communications has created a global audience, then we might need to justify our behavior to the whole world. This change creates the material basis for a new ethic that will serve the interests of all those who live on this planet in a way that, despite much rhetoric, no previous ethic has done.”

To the extent that one subscribes to a cosmopolitan ethic, international labor mobility poses no serious challenge.

On the other side, there are philosophically compelling arguments that considerations of justice are necessarily confined to pre-existing political structures (e.g., Nagel 2005). Citizens of one state do

not necessarily owe anything to citizens of other states, beyond basic humanitarian assistance. And as a practical matter, I am not sure that a presumption of cosmopolitanism on the part of the publics in advanced economies would take us far, especially in a world where national sovereignty has made a comeback and globalization seems in retreat.

One way to pose the issue differently is to change the frame from a normative one to a positive one, and ask: how strong a preference must we have for our fellow citizens relative to foreigners to justify the existing level of barriers on international labor mobility. More concretely, let $\phi$ stand for the weight in our social welfare function on the utility of domestic citizens relative to the utility of foreigners. When $\phi=1$, we are perfect cosmopolitans and we see no difference between a citizen and a foreigner. When $\phi \rightarrow \infty$, foreigners might starve to death and we wouldn't care.

To operationalize the question, consider hypothetically a policy that would allow the movement of an additional 60 million workers from poor to rich nations. This would increase the labor force in the rich economies roughly by 10 percent. I assume, in line with Clemens et al. (2010), four-fold wage gains to the migrating workers. Following, Borjas (2015), I take the elasticity of wages with respect to the labor supply to be -0.3. Initial wages in rich and poor nations are set at $3,000 and $500 (per month), respectively. Social welfare in rich countries is additive in the utilities of domestic and foreign workers, with weights of $\phi$ and 1, respectively. Finally, utility is logarithmic in income.

For the policy in question to reduce social welfare in the rich countries, it turns out that $\phi$ must be larger than 4.5.[4] In other words, we must place a weight on the utility of fellow citizens that is at least between four and five times greater than the weight we place on foreigners. Remember that for cosmopolitans $\phi = 1$.

[4] The aggregate loss to native workers in rich countries is 600x[ln(3,000)-ln(3,000x0.97)] = 18.3. The gain to migrant workers is 60x[(ln(4x500)-ln(500)]=83.2. The multiple that equates these two differentials is 4.5.

Is a welfare premium of 450 percent for fellow citizens excessive? Is it reasonable to think that a foreigner is worth less than 22 percent a citizen?[5] These are questions of ethics and values to which an economist does not have an answer. If we were to take revealed preference as a guide, we may find that the implicit weight most of us place on immediate family is many, many times greater than the weight on compatriots, let alone citizens of foreign countries.

In a rather similar analysis, Kopczuk, Slemrod, and Yitzhaki (2002) conclude that current levels of foreign assistance to poor countries suggest Americans implicitly value their own citizens 6 times more than foreign citizens. This multiple rises to as high as 2,000 in the case of foreign aid to a very poor country such as Ethipia. As Kopczuk et al. (2002) point out, however, these very large imputed discounts on people across the border may also reflect the belief that the bulk of foreign aid is wasted, or that it ends up in the pockets of corrupt government officials.

The main conclusion we should take from our exercise is not a normative, but a positive one. The increased global mobility of workers requires only the mildest form of cosmopolitanism in host countries. Viewing the choice between expanded and restricted labor mobility as one between national-egalitarianism, on the one hand, and cosmopolitanism, on the other, misses the point. Such are the income gaps between the global rich and the global poor and the potential gains at the margin that we can have a significant nativist bias in our preferences and still be in favor of relaxing border barriers to global labor mobility. The case would be even stronger (with an even higher upper bound on $\phi$) were we to take on board the gains to other natives (e.g., capital owners) and possible long-run benefits through innovation and induced capital accumulation.

How far do we go?

[5] It is worth adding that with some other forms of utility functions that allow more concavity than the logarithmic one, and greater inequality-aversion, the weight on compatriots needed to justify current restrictions would be even larger.

Let us accept for the time being, in line with the preceding analysis, that a certain degree of liberalization of restrictions on labor mobility would serve the goal of global equity without doing too much damage to domestic norms of equity. The much harder question, however, is what we mean by "a certain degree" and how far we would go in the direction of full freedom.

As long as we remain unwilling to hang the argument on full cosmopolitanism, the case for unhindered international labor mobility is a weak one. For one thing, as national wage gaps narrow, the gains from mobility become smaller at the margin. For another, full mobility would entail billions of people moving from low- to high-income countries. (Borjas [2015] estimates 2.6 billion workers, amounting to 95 percent of workers in the developing world, would have to migrate to equalize wages globally.) As Glen Weyl points out, countries that are very open to labor mobility, such as the Gulf States, are "staggeringly unequal" (Weyl 2014). There may be limits to how much domestic inequality societies are willing to countenance. More broadly, the efficacy of domestic institutions may require significant limits on cross-national mobility of workers. Open borders might undermine public-goods provision by the state and liberal democracy at the same time. The populist backlash at the present time and the rise of far-right, nativist political parties in Europe provide a taste of some of the possible negative consequences.

Might too many foreign workers undercut the quality of public institutions in the host countries by eroding trust and social cooperation? The empirical basis for the concern is that public-goods provision at the level of countries or communities seems to be negatively correlated with measures of ethnic, linguistic, or cultural heterogeneity (REF). While the precise reason for this continues to be debated, the presumption is that heterogeneity makes it more difficult to sustain the kind of cooperative behavior and trust that efficient public institutions require. Institutions are maintained either through solidarity (I care for you, so I am willing to share with you); social trust (I trust you, and know that you would do for me what I am doing for you), or enforcement (government coercion,

requiring in turn legitimacy). All of these things are likely to be undermined by greater heterogeneity and inequality within countries – especially if the numbers involved are large.

In an interesting paper Baldwin and Huber (2010) distinguish between cultural and linguistic heterogeneity, on the one hand, and between-group income inequality (BGI), on the other. The latter refers to the gap in average incomes between different ethnic or cultural groups. They find that once BGI is specifically controlled, ethnic or cultural heterogeneity does not have a statistically significant negative association with public-goods provision across countries (see Figures 5, 6). However BGI itself is robustly and negatively correlated with public goods (Figure 7). The presence of a large number of poor foreign workers would clearly increase BGI in the advanced economies.

Considerations of this kind lead Paul Collier (2013) to warn that without "effective controls," migration beyond a certain point would begin to have adverse effects. Borjas (2015, 968) worries that migrants would bring with them the "'bad' organizations, social models, and culture that led to poor economic conditions in the source countries in the first place." Clemens and Pritchett (2016), on the other hand, review the relevant empirical evidence and argue that any possible deleterious effects on home-country institutions would begin to be felt at much higher levels of in-migration than is presently observed. Both Borjas (2015) and Clemens and Pritchett (2016), though on different sides of the argument, emphasize that we know very little about the long-run institutional consequences of absorbing very large numbers of foreign workers in contemporary advanced economies.

The experience with mass migration from the Old World to the New before World War I could provide some clues. According to estimates by Jeffrey Williamson (1998) and his colleagues, migration between 1870 and 1910 led to an increase of the New World's labor force by 49 percent. This process eventually did eventually produce a backlash and immigration laws were significantly tightened in the years leading to World War I. But it would be difficult to argue that this experience harmed the long-term institutional development of the United States, Canada, or Australia. But there are at least two

reasons why this comparison may not be helpful. First, the New World was still relatively abundant in land, and this may have made the absorption of immigrants easier. Second, and more relevant to the issue under discussion, this experience with mass migration took place at a time when the role of the state as a provider of public goods was quite limited. Taxes were low and not progressive, the welfare state had not come into being, and there was limited public funding of infrastructure. The share of government spending GDP averaged less than 10 percent, compared to almost 50 percent today (Figure 8). The expansion of the public sphere took place subsequent to the mass migration, in response to the negative shocks of the 20th century (the Great Depression and the Second World War in particular). The pre-World War I experience with mass immigration was clearly not inimical to this development. What it does not tell us is what would happen to countries that have already erected extensive public institutions.

Given data constraints, the empirical literature typically does not distinguish between immigrants and foreign workers. When the latter are explicitly temporary residents and do not benefit from citizenship rights, their effects on the demand and provision of public goods could be different. For example, if foreign workers do not benefit from pension and schooling benefits (while they pay into the system during the duration of their stay), they may increase political support for public education and social insurance and provide some of the resources for funding such programs. On the other hand, to the extent domestic citizens dislike having to share public infrastructure such as parks or roads with people who come from a very different socio-economic status or do not look "like them," public goods would be adversely affected.

Such considerations are necessarily speculative. Most analysts would probably agree that there is an upper limit to how many foreign workers a society can absorb without its institutions beginning to transform fundamentally. Since we do not know where that ceiling is, it may be argued that a prudent approach would be to move gradually on the relaxation of labor-mobility restrictions. However, this is

not much of a solution if institutional erosion is a long-term process and irreversible. It may be too late when adverse effects become noticeable. In Europe, the backlash to immigrants and refugees has been relatively sudden and could produce dramatic consequences not just for the process of European integration but for European democracies as well. Many economists believe that the backlash is fueled by nativists who do not understand the benefits of free flows of labor and people. But that does little to ameliorate the consequences.

Does incomplete labor mobility really lead to convergence?

The preceding discussion does not provide much guidance on the extent of labor mobility that is politically desirable and sustainable. But the one key implication is that as long as the world remains divided into nation states, international labor mobility must remain necessarily incomplete. We can never eliminate completely the between-countries component of global income inequality.

Imagine a global program of expanded temporary work visas along the lines discussed at the beginning of the paper. How much global convergence would such a program achieve? The workers who can avail themselves of the program would certainly be better off, and substantially so. But what about those who are left behind in the sending countries, waiting for their turn?

In principle, wages in sending countries should rise as labor moves from the South to the North and labor becomes relatively less abundant in the poor countries. Something like this seems to have happened during the period of great migration in the decades before World War I. Here is Williamson (1998):

> "mass migration after 1870 augmented the 1910 New World labor force by 49 percent and reduced the 1910 labor force in the emigrant countries around the European periphery by 22 percent. These big labor supply effects can be converted easily into a real wage impact in both sending and receiving countries. My colleagues and I estimate that effect in a series of papers and conclude that mass migration alone can explain about 70 percent of the real wage convergence observed in the late 19th century Atlantic economy."

This account suggests that labor mobility could have wage benefits for those left behind as well. It would thereby contribute to the shrinking of income gaps between countries.

However, more recent evidence is not as encouraging. Remittances and direct consumption benefits aside, countries that have seen large numbers of their workers migrate to rich countries have not done particularly well. Figure 9 summarizes the experience of three such countries, Mexico, Nicaragua, and El Salvador. The emigration rates for the first two of these countries is around 10 percent, while it reaches 20 percent for El Salvador. As the figure shows, none of these three countries have experienced any income convergence with the United States. For comparison, the figure also includes China, which has pursued a different model of economic development based on domestic productive diversification and export-oriented industrialization. The failure of the emigration strategy jumps off the page.

It could be that countries such as El Salvador have experienced large numbers of emigration precisely because they have done poorly. And perhaps the kind of temporary visa scheme I sketched out at the outset, which incentivizes return and spreads the benefits among a larger share of sending country workers, would produce better outcomes in terms of economic development. Returning workers bring their saving, knowledge, and networks with them, and can help spawn new industries in their home economies.[6]

Nevertheless, the reality is that convergence has always been achieved country-by-country. The Old World may have experienced wage gains due to outmigration to the New World, but ultimately, its economic development was underpinned by solid national institutions and political systems. Where those institutions failed to develop, as in Eastern Europe, economic development lagged behind, spurring in turn greater emigration. Similarly, it is hard to see how significant convergence can be

[6] A bizarre example of this is provided in a story in The New Yorker (January 23, 2017), which relates how the forced, mass deportation of Salvadorans from the U.S. (typically for minor offences) stimulated the creation and expansion of a call center industry in El Salvador. The deported Salvadorans knew English, and with further training they could be turned into call-center operators at low wages.

achieved in today's world in the absence of appropriate growth-promoting policies in the developing world, with or without labor mobility.

## Concluding remarks

From an efficiency perspective, border barriers to worker mobility are the greatest impediment to the efficient allocation of resources in the world economy. From a national-egalitarian perspective, eliminating these barriers are costly, especially in the short term. From a cosmopolitan perspective, borders do not and should not matter. From a utilitarian perspective, migrant workers should be provided with employment opportunities even if the host country does not provide them with political and social rights. From an institutionalist perspective, enabling workers from poor countries to escape poor institutions at home would yield a pyrrhic gain if the result is to erode the solidarity, trust, and legitimacy needed to uphold public-good provision in host countries. Each one of these vantage points supplies a definite answer, but none is adequate on its own.

The word "enemy" in the title may be too strong, but the issues I have discussed here do point to a definite tension between national and global equality. The quickest way to sharply reduce global inequality would be to drop all restrictions on labor mobility in rich countries. Yet this would cause the bottom of the labor market in those countries to collapse, and possibly cause severe institutional and political damage that undermines productivity levels in the host countries.

A more limited program of temporary work visas, with real carrots and sticks that ensured high rates of return, would produce substantial benefits to participants. As I have shown, it does not require cosmopolitanism on the part of rich-country electorates to be adopted. Moreover, such a program has distinct advantages relative to the prevailing agenda of trade agreements. It generates much higher efficiency gains relative to redistributive costs in the host countries. It also evades the problem of social dumping which has made international trade and outsourcing so contentious. At the same time, it is

unclear that limited labor mobility would make much of a dent on income gaps between countries – the dominant source of global inequality.

The nation state is not the enemy of global equality insofar as effective growth strategies at the level of nation states remain crucial. Ultimately, global inequality will be reduced only by faster economic growth in the developing world. The good news is that the last quarter century has shown this is possible, through better policies in the poor nations. The bad news is that export-oriented industrialization, the model that has produced the most rapid and sustained development successes to date, seems to have run out of steam. Many of the low-income countries that have grown rapidly over the last couple of decades without industrialization are showing symptoms of slowing down (Diao, McMillan, and Rodrik 2017). And it is not clear if there are alternative models that can take industrialization's place.

I conclude that the tension cannot be wished away. At best, we can try to moderate it with policies that take the tension on board. In addition, we can try to identify policies that are good both for the global poor and the poor in the rich democracies. There is no shortage of such policies, for example: aggregate demand and employment raising policies (in both North and South); greater policy space to allow for industrial policies and other policies that raise overall productivity in developing countries; greater transparency in global banking to reduce tax evasion by the rich in both North and South, regulation of short-term cross-border financial flows to enhance efficacy of macroeconomic policies and reduce financial volatility; cooperation in support of true global public goods such as the fight against health pandemics and climate change. These remedies entail a different agenda than opening economic borders. But they may have greater long-run potential to reconcile global equality with equality within the advanced democracies.

REFERENCES

Autor, David, David Dorn, and Gordon Hanson, "The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade," Annual Review of Economics, forthcoming 2016.

Baldwin, Kate, and John D. Huber, "Economic versus Cultural Differences: Forms of Ethnic Diversity and Public Goods Provision," American Political Science Review, vol. 104, no. 4, November 2010.

Borjas, George J., "Immigration and Globalization: A Review Essay," Journal of Economic Literature, vol. 53, no. 4, December 2015, pp. 961-74

Borjas, George J., and Joan Monras, "The Labor Market Consequences of Refugee Supply Shocks," NBER Working Paper No. 22656, September 2016.

Bourguignon, François, and Christian Morrison, "Inequality among World Citizens: 1820-1992,"The American Economic Review, Vol. 92, No. 4, Sep., 2002, pp. 727-744

Clemens, Michael, Lant Pritchett, and Claudio E. Montenegro, "The Place Premium: Wage Differences for Identical Workers across the US Border," unpublished paper (https://ideas.repec.org/p/udc/wpaper/wp321.html), 2010.

Clemens, Michael, and Lant Pritchett, "The New Economic Case for Migration Restrictions: An Assessment," Center for Global Development Working Paper 423, February 23, 2016.

Collier, Paul, Exodus: How Migration is Changing Our World, Oxford and New York, Oxford University Press, 2013.

Diao, Xinshen, Margaret McMillan, and Dani Rodrik, "The Recent Growth Boom in Developing Countries: A Structural-Change Perspective," January 2017 (http://drodrik.scholar.harvard.edu/files/dani-rodrik/files/recent_growth_boom_in_ldcs.pdf).

Kopczuk, Wojciech, Joel Slemrod, and Shlomo Yitzhaki, "Why World Redistribution Fails," NBER Working Paper No. 9186, September 2002.

Milanovic, Branko, "Global Income Inequality in Numbers: in History and Now," Global Policy, Volume 4, Issue 2, May 2013, Pages 198–208.

Milanovic, Branko, "Global Inequality of Opportunity: How Much of Our Income Is Determined by Where We Live," Review of Economics and Statistics, Vol. 97, No. 2, May 2015, Pages 452-460.

Nagel, Thomas, "The Problem of Global Justice," Philosophy & Public Affairs, Volume 33, Issue 2 March 2005, pp. 113–147.

Peri, Giovanni, "Do Immigrant Workers Depress the Wages of Native Workers?" IZA World of Labor, 2014 (http://wol.iza.org/articles/do-immigrant-workers-depress-the-wages-of-native-workers-1.pdf).

Pritchett, Lant, and Marla Spivack, “Estimating Income / Expenditure Differences across Populations: New Fun with Old Engel’s Law,” Center for Global Development Working Paper 339, August 2013.

Riley, Brian, “U.S. Trade Policy Gouges American Sugar Consumers,” The Heritage Foundation, Backgrounder #2914 on Trade (http://www.heritage.org/research/reports/2014/06/us-trade-policy-gouges-american-sugar-consumers), June 5, 2014.

Rodrik, Dani, “Be Our Guests,” The New York Times, June 1, 2007.

Rodrik, Dani, "The Rush to Free Trade in the Developing World: Why So Late? Why Now? Will It Last?" in S. Haggard and S. Webb (eds.), Voting for Reform: Democracy, Political Liberalization, and Economic Adjustment, New York, Oxford University Press, 1994.

Rodrik, Dani, The Globalization Paradox: Democracy and the Future of the World Economy, W.W. Norton, New York, 2011.

Rodrik, Dani, “Premature Deindustrialization,” Journal of Economic Growth, 21(1), March 2016.

Rosenzweig, Mark R., “Global Wage Inequality and the International Flow of Migrants,” Yale University Economic Growth Center Discussion Paper No. 983, January 2010.

Samuelson, Paul A, “International Trade and the Equalisation of Factor Prices,” Economic Journal, June 1948, pp. 163-184.

Sen, Amartya, The Idea of Justice, Harvard University Press, Cambridge, MA 2009.

Singer, Peter, One World: The Ethics of Globalization, Yale University Press, New Haven and London, 2002.

Tanzi, Vito, and Ludger Schuknecht, Public Spending in the 20th Century: A Global Perspective, Cambridge and New York: Cambridge University Press, 2000.

Weyl, E. Glen, “The Openness-Equality Trade-Off in Global Redistribution,” The University of Chicago, unpublished paper, October 2014 (https://bfi.uchicago.edu/sites/default/files/research/Weyl.pdf).

Williamson, Jeffrey G., “Research Summary: The Economics of Mass Migrations,” Summer 1998 (http://www.nber.org/reporter/summer98/williamson_summer98.html).

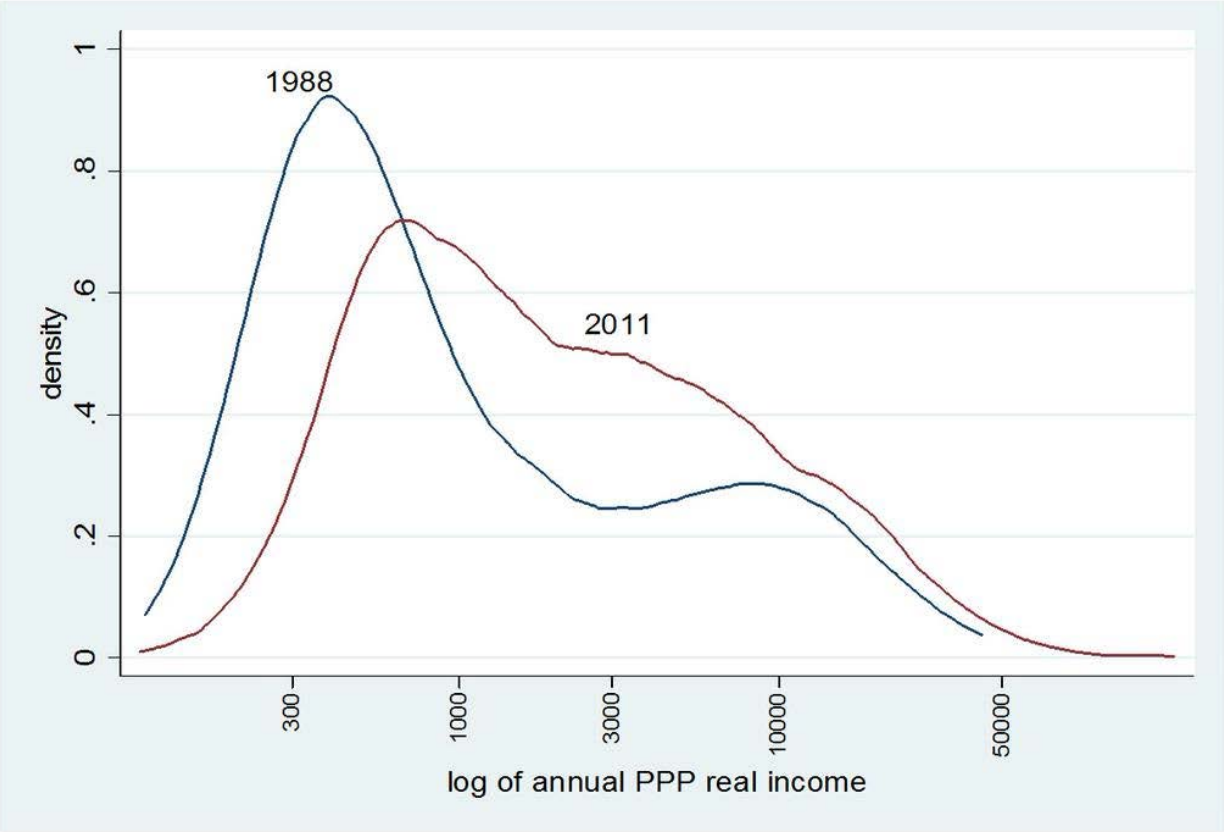
Table 1: Is it better to be rich in a poor country, or poor in a rich country?

| | $y_j$ | $\phi_{dj}$ | Representative income of … |
|---|---|---|---|
| Poor country<br>(Niger) | $949 | income share of top 5% in poor country = 0.214 | rich individual in poor country<br>= ***$4,062*** |
| Rich country<br>(Norway) | *$65,702* | income share of bottom 5% in rich country<br>= 0.015 | poor individual in rich country = ***$19,711*** |

Notes: We let $y_j$ = per-capita income (GDP) in country *j*; $\phi_{dj}$ = income share of ventile *d* in country *j;* and $y_{dj}$ = average income level in ventile *d* (=1,2,..,20) in country *j.* Then $y_{dj} = 20 \times \phi_{dj} \times y_j$.

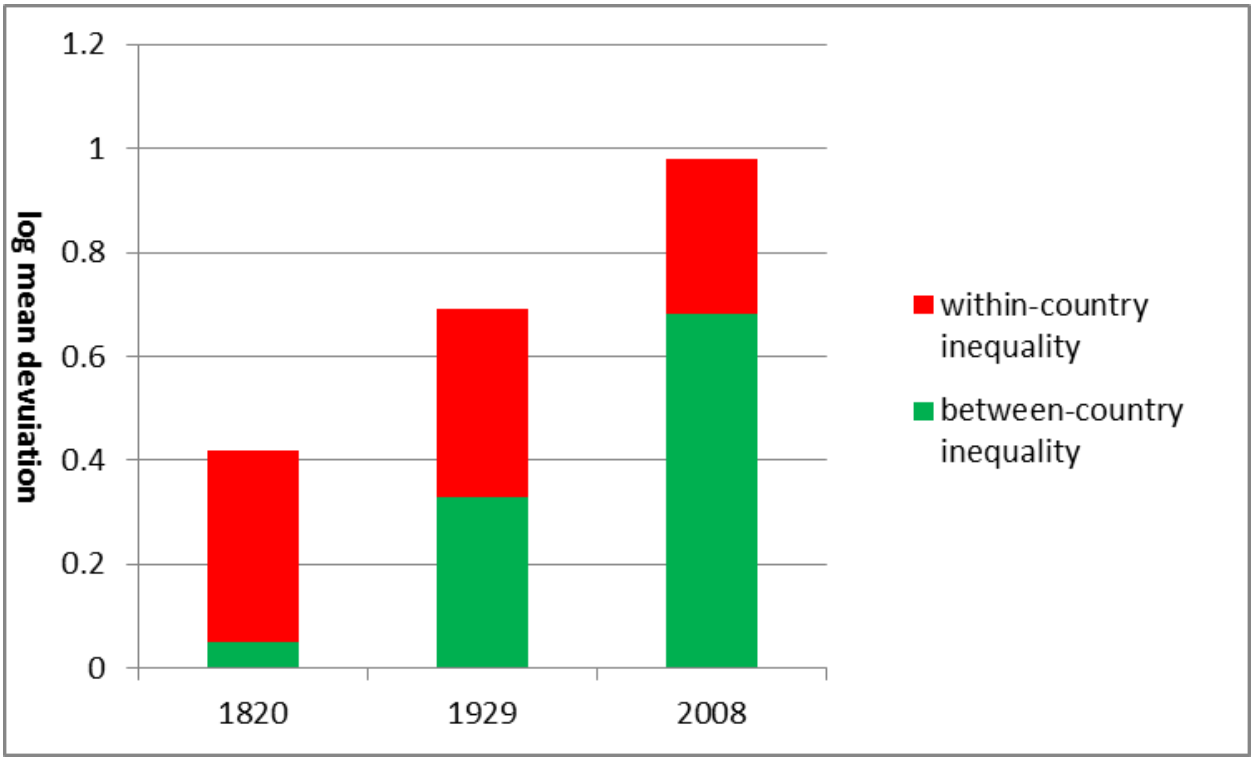
Source: Author's calculations, using data from World Bank World Development Indicators and the global inequality database.

Figure 1: Global distribution of income



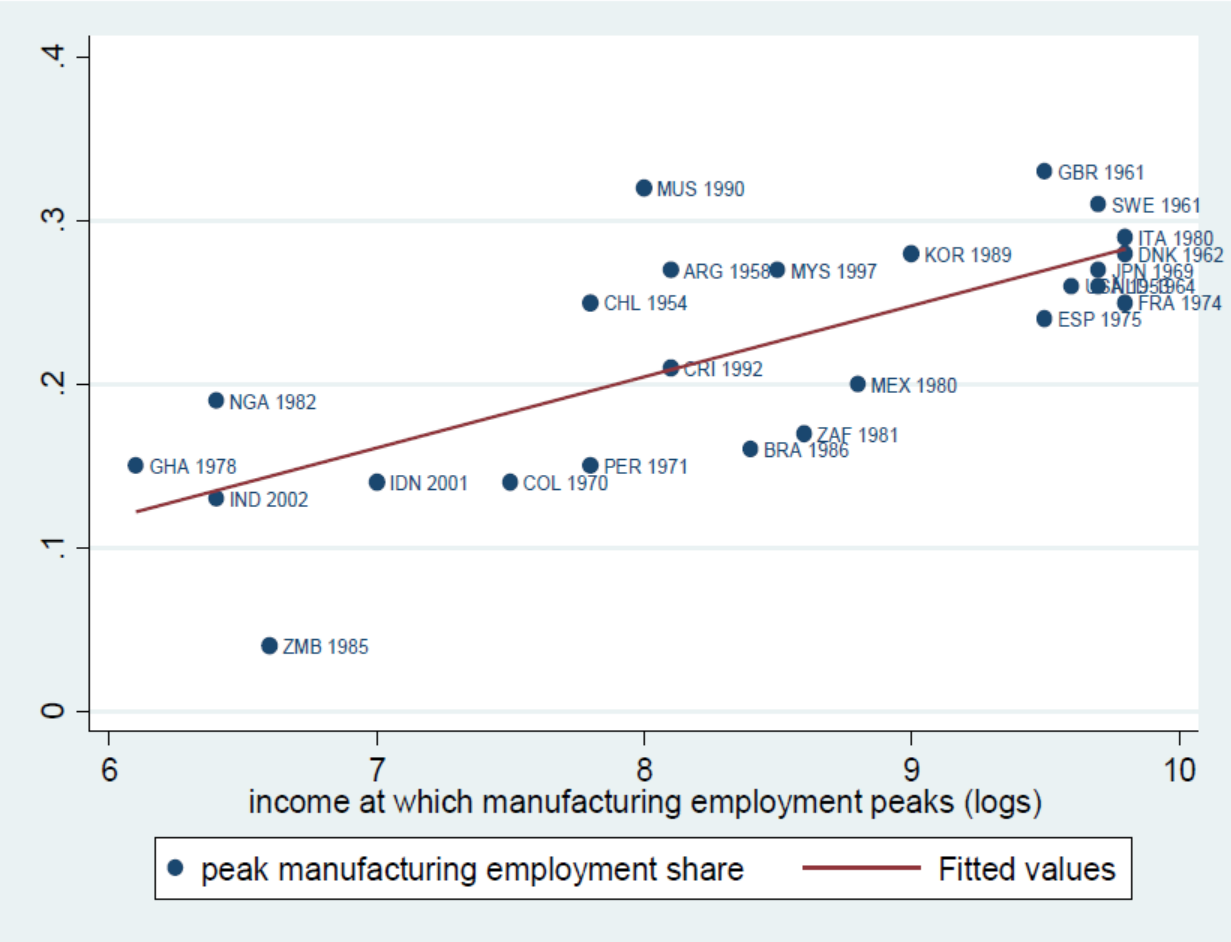

Source: Milanovic (2015)

Figure 2: Accounting for the rise in global inequality




Source: Bourguignon and Morrison (2002) updated using data from Milanovic (2013)

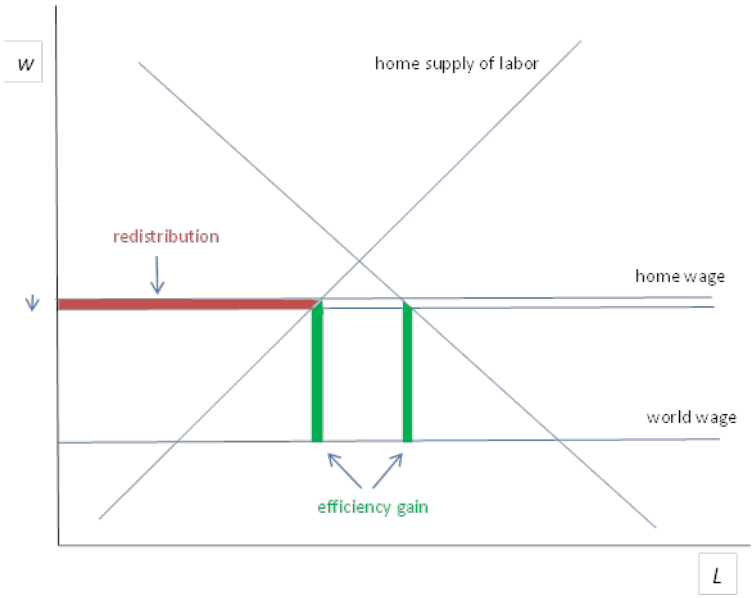
Figure 3: Premature de-industrialization




Source: Rodrik (2016)

Figure 4: Redistribution and efficiency gains with high and low trade barriers

(a) High trade barriers: labor services




(b) Low trade barriers: goods

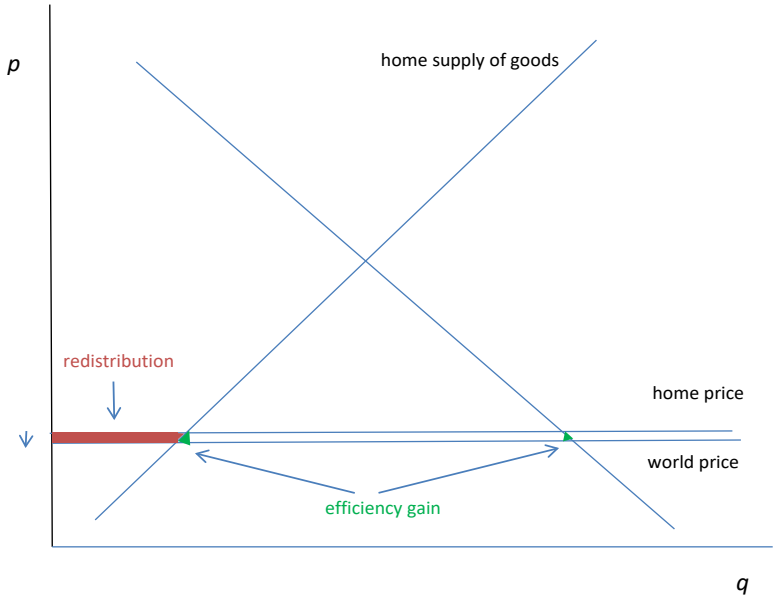
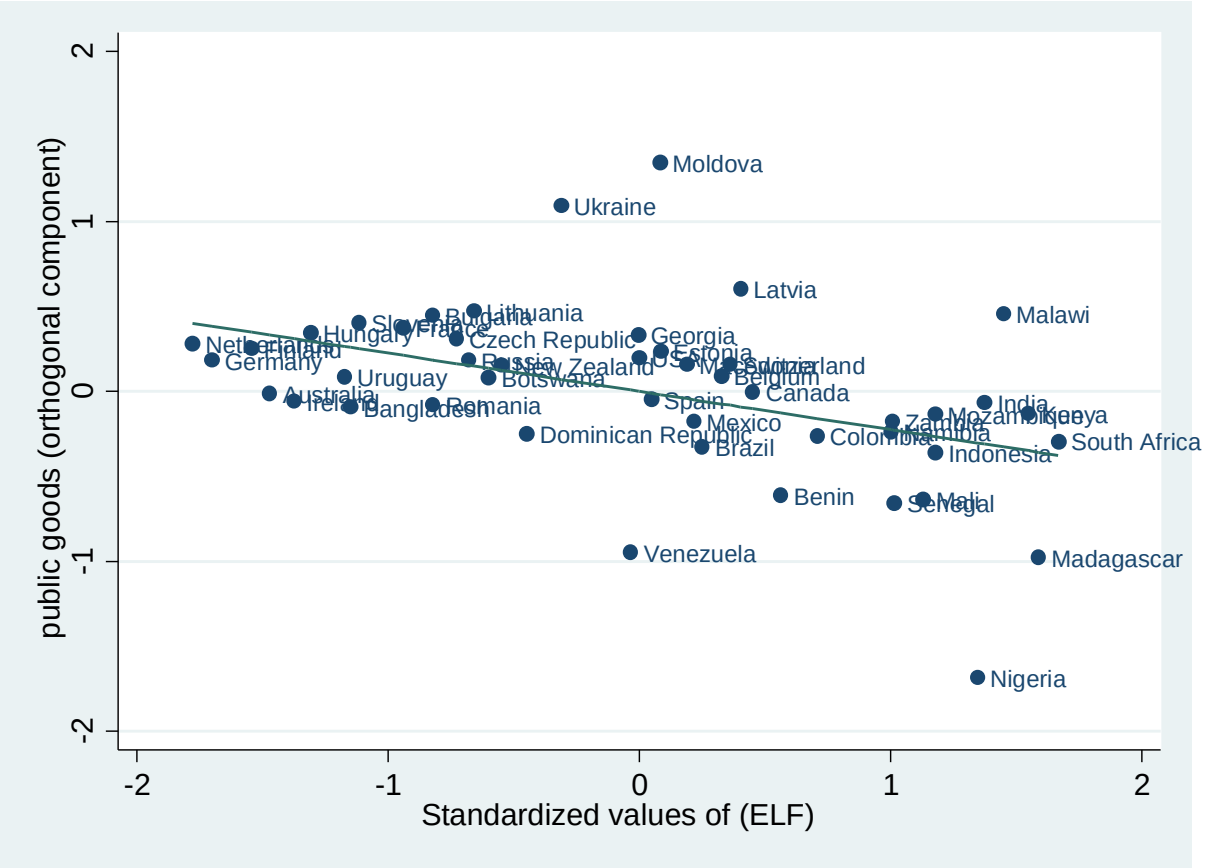


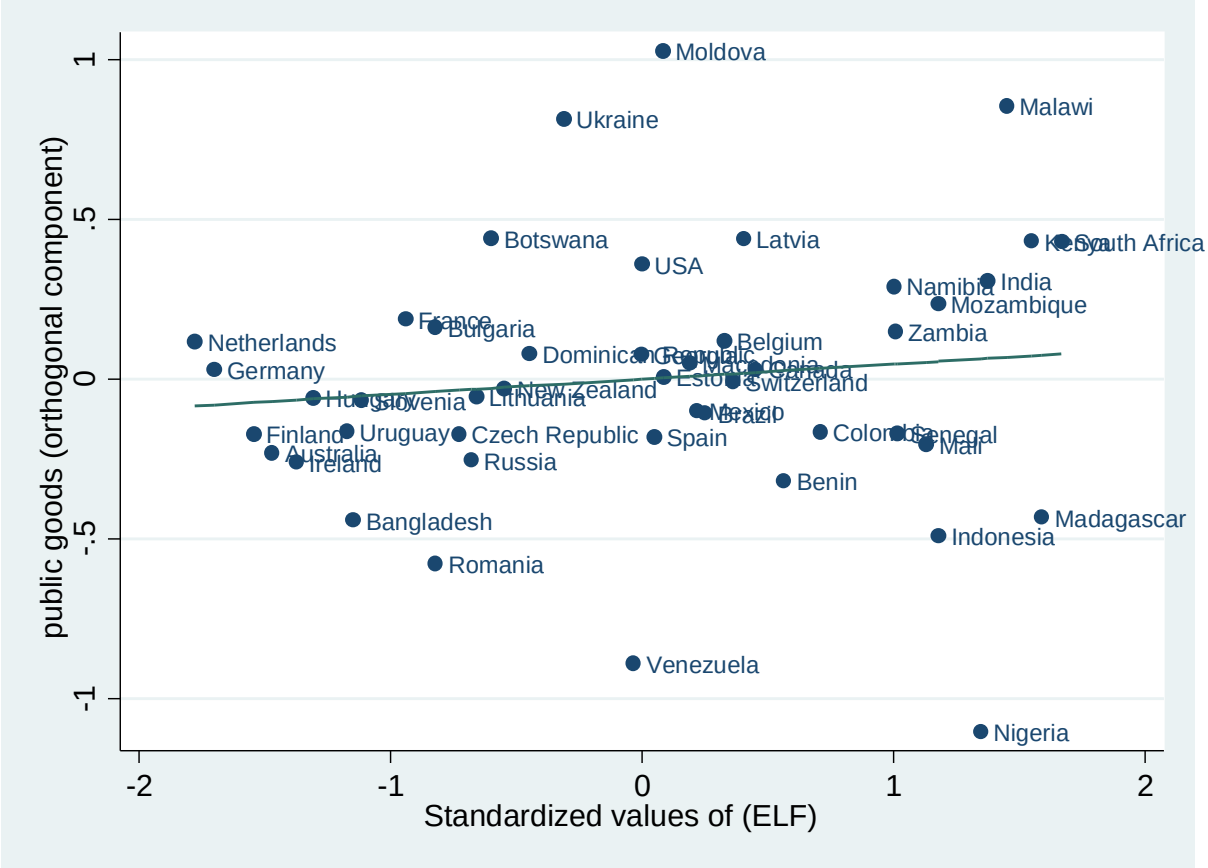
Figure 5: Public goods provision is negatively correlated with ELF




Notes: Partial correlation coefficient is -0.23, with a t-stat of -3.02 Controls: ln pop, ln GDP. Robust s.e.

Source: Author, based on data from Baldwin and Huber (2010)

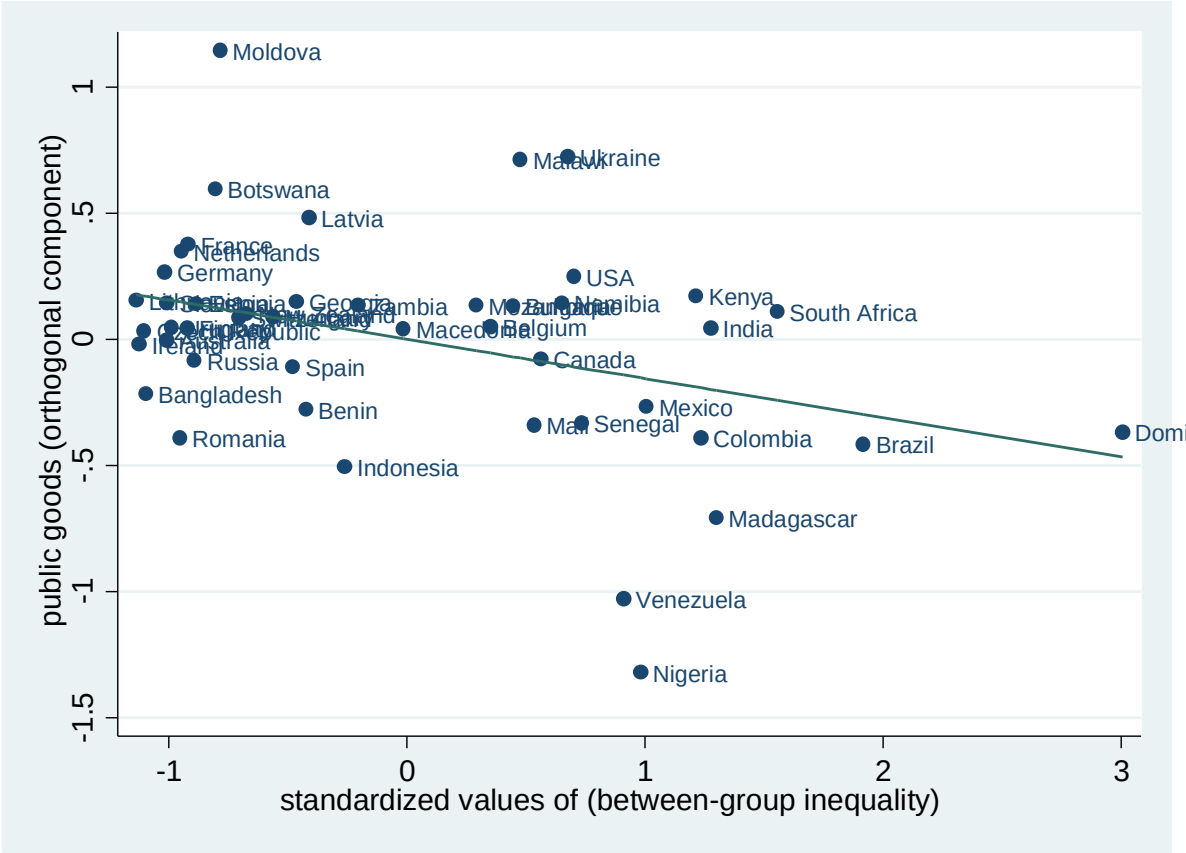
Figure 6: Public goods and ELF, controlling for BGI




Notes: Partial correlation coefficient is 0.05, with a t-stat of 0.52. Controls: ln pop, ln GDP, BGI, survey dummies. Robust s.e.

Source: Author, based on data from Baldwin and Huber (2010)

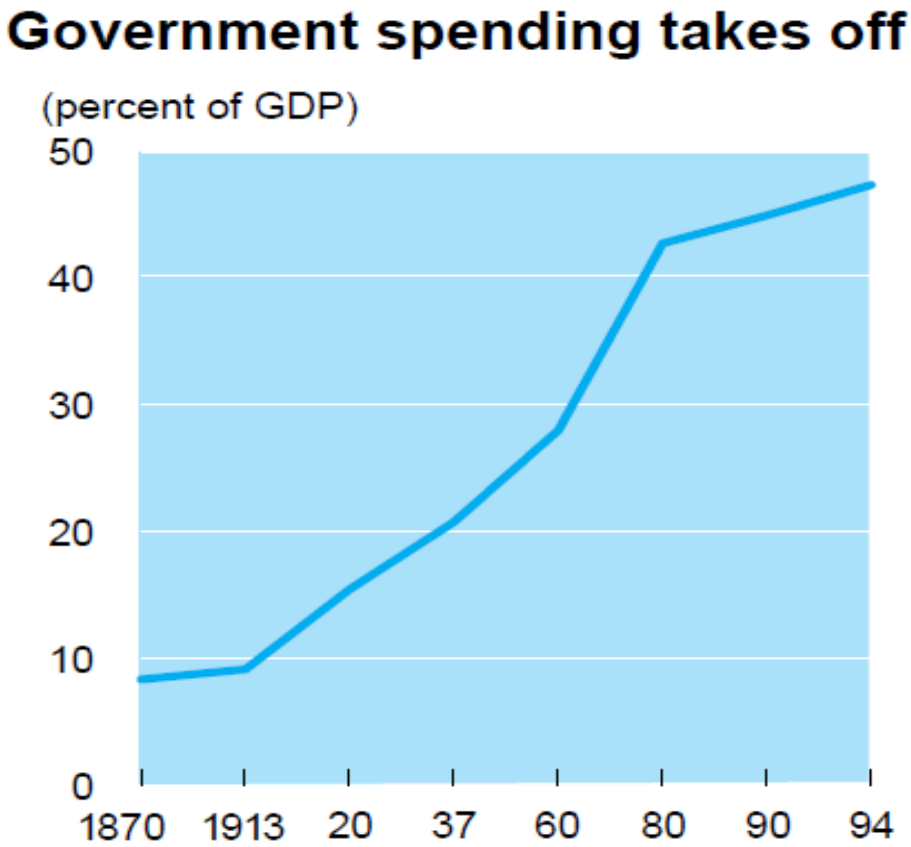
Figure 7: Public goods and BGI, controlling for ELF




Notes: Partial correlation coefficient is -0.16, with a t-stat of -2.13. Controls: ln pop, ln GDP, ELF, survey dummies. Robust s.e.

Source: Author, based on data from Baldwin and Huber (2010)

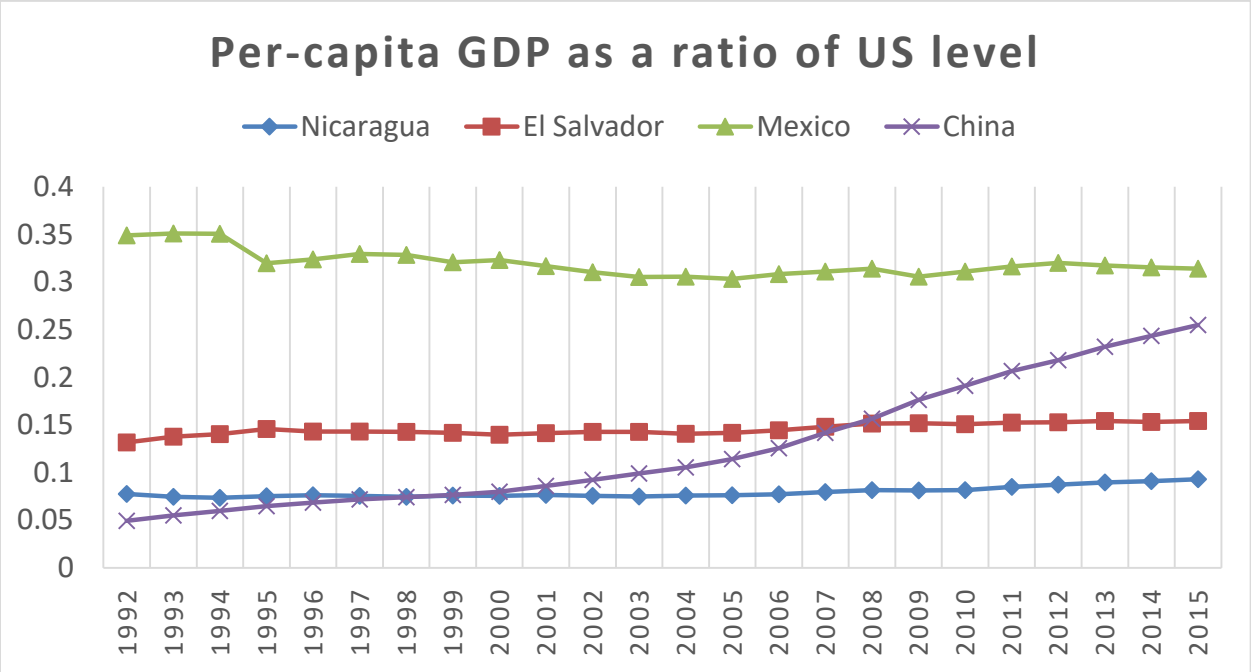
Figure 8: Growth of government




Note: The chart shows the average for 17 advanced economies

Source: Tanzi and Schuknecht (1996)

Figure 9: Central American versus Chinese models of development




Source: World Development Indicators