

Our level of income is unarguably dependent on where we live in the world. But evidencing this is tricky. This column presents a model that explains global income variability using one variable only – where you live. The results suggest that we might want to reassess how we think about both economic migration and global inequality of opportunity.

It is as obvious as it is well known that the world is unequal in terms of individuals' incomes (e.g. Mohammed 2015). But it is unequal in a very particular way – when split into 'inequality within countries' and 'inequality between countries', the latter accounts for by far the biggest gap.

Inequality within countries measures, for instance, gaps between poor and rich Americans or between poor and rich Chinese. For simplicity, let's call it 'class' inequality. But there is also another equally obvious inequality – that between rich and poor nations. More specifically, this inequality is measured as the gap between the 'representative' or 'average' individuals of any two countries, be they Morocco and Spain or Mexico and the US. For simplicity, let's call this 'locational' inequality.

Inequality, as it is commonly understood in today's world, is such that whatever measure we choose, the lion's share of global inequality is 'explained' by the differences in mean incomes between countries.

This was not always the case. Although our data for the past are far more tentative than our data for today's global income distribution, we can still state with little doubt that the dominant type of equality in the 19th century was that within countries (see Milanovic 2011).

## Citizenship premiums and penalties

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If income differences between countries are large then your income will significantly depend on where you live, or even on where you were born (97% of the world's population remain in the countries where they were born). This is what I call a 'citizenship premium' (or a 'citizenship penalty') – a 'rent' that a person receives if he or she happens to be born in a rich country, or, if we use the terminology introduced by John Roemer, an 'exogenous circumstance' which is independent from any one individual's effort and episodic luck (Roemer 2000).

How big is citizenship rent, how does it vary with one's position in the income distribution, and what does it imply for global inequality of opportunity and migration?

## Estimating citizenship rent

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I estimate citizenship rent by using data collected from household surveys conducted in 118 countries in and around the year 2008 (Milanovic 2015). For each country, I have micro-level (household) data ordered into 100 percentiles, with individuals ranked by their household per capita income. This gives 11,800 country/percentiles with 'representative' per capita incomes expressed in dollars of equal purchasing parity, making incomes across countries comparable.

I 'explain' these incomes using only one variable – the country where individuals live. Of course, people living in the US will tend to have higher incomes at any given percentile of the distribution than people living in poor countries in, for instance, Africa. But how will it look for the world as a whole? In a least-square dummy variable regression, I use Congo (the poorest country in the world) as the 'omitted country' so that I can express the citizenship premium in every other country in terms of the income gain compared to Congo. The premium for the US is 355%, it is 329% for Sweden and 164% for Brazil. But for Yemen, another very poor country, it's 32%.

According to this regression, we can explain more than two-thirds of the variability in incomes across country/percentiles by only one variable – the country where people live. This estimation shows that, as we thought, a lot of our income depends on where we live.

## Citizenship rent across the distribution

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But this is only an average premium that compares countries. Does citizenship rent vary along the entire income distribution? If I were to take into consideration only people belonging to the lowest part of the income distribution in each country, would the premium still be the same?

Intuition may help here. Suppose that I focus only on the incomes of the lowest decile (with rich countries more equal than poor countries). Then the gap between rich and poor countries should be greater for the very poor people than for the average individual. And this is indeed what we find – Sweden's citizenship premium compared to Congo is now 367% versus 329% on average. But Brazil's is 133% versus 164%. The situation at the top is exactly the opposite – Sweden's advantaged position at the 90th percentile of the income distribution is 'only' 286%, but Brazil's becomes 188%.

## Implications for migration

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The existence of the citizenship premium has obvious implications for migration: people from poor countries will have the opportunity to double or triple their real incomes by moving to a rich country.

But the fact that the premium varies as a function of one's position in the income distribution carries additional implications. If I consider moving to one of two countries that have the same average income, my decision on where to migrate – based on economic criteria alone – will also be influenced by my expectations regarding where I may end up in the recipient country's income distribution. My decision will thus be influenced by the extent to which the recipient country's income distribution is unequal.

Suppose that Sweden and the US have the same mean income. If I expect to end up in the bottom part of a recipient country's distribution, then I should migrate to Sweden. The poor people in Sweden are better off compared to the mean, and the citizenship premium, evaluated at lower parts of distribution, is greater. The opposite conclusion follows if I expect to end up in the upper part of the recipient country's distribution – I should migrate to the US.

This last result has unpleasant implications for rich countries with greater 'in-country' equality. More equal rich countries will tend to attract lower-skilled migrants who generally expect to be placed in the bottom part of the recipient country's distribution. Developing a national welfare state would have the perverse effect of attracting migrants who can contribute less.

Even in this rough sketch, we also have to consider the levels of social mobility in recipient countries because more unequal countries with strong social mobility will, everything else being the same, tend to appeal to more skilled migrants.

## Global inequality of opportunity

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The mere existence of a large citizenship premium implies that there is no such a thing as global equality of opportunity because a lot of our income depends on the accident of birth.

So should we strive for global equality of opportunity or not? It is a political philosophy question that philosophers have thought much more about than economists. Some, following John Rawls in *The Law of Peoples*, believe that this is not an issue and that every argument for global equality of opportunity would conflict with the right of national self-determination. But other political philosophers like Thomas Pogge believe that in an interdependent world, the dominant role of chance in people's life is not to be accepted lightly (Pogge 2008). I am not proposing a solution to this issue, yet, I believe that economists should not shy away from addressing it.<sup>1</sup>

As gaps between nations diminish, mostly thanks to the high growth rates of Asian countries, the citizenship rent will tend to reduce. But there is such a huge gap today that even a century of much higher growth in poor countries (in comparison to rich countries) will not eradicate citizenship rent.

However, it will reduce. As it does, it will also reduce overall global inequality. This might then lead us to a world not dissimilar to the mid-19th century, in which class is again more important for one's global income position than location.

Do I hear the distant sound of Marx?

## References

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## Footnote

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1 Legal scientists such as Ayalet Shachar have written about addressing global inequality from a legal standpoint, proposing a much more flexible and open definition of citizenship (see Shachar 2009).