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Policy cocktails:
Attacking the roots of persistent inequality

By Matthew Jackson

KEY TAKEAWAYS

- Inequality is about more than financial capital. Barriers in social networks not only contribute to inequality but also perpetuate it across generations.

- Economic safety nets, tax policies, and low-skilled jobs treat the symptoms of inequality but don't address many of its root causes.

- Economic mobility has a weakest link structure: opportunities for education and employment, information about how to take advantage of those opportunities, and supporting norms are all needed for advancement.

- Policy cocktails — blends of policies that work together to address these multiple needs — have synergies and can help millions of people reach their potential, both reducing inequality and enhancing productivity.

As inequality in the U.S. has risen to levels that characterized the Great Depression and the Gilded Age, discussion has grown around a variety of policies that tax and redistribute wealth and income. However, overcoming recurring waves of economic inequality requires more than safety nets and spreading money around.

Patterns of inequality are a manifestation of major barriers faced by millions in finding paths from poverty to middle- or upper-class lives. They often lack not only financial capital but also a vital form of social capital: information about and access to the educational and employment opportunities necessary to break the cross-generation perpetuation of economic immobility.

No single policy will help them. Rather, lawmakers and government officials need to focus on what I call "policy cocktails" that simultaneously overcome the many barriers to economic mobility. This policy brief explains the multifaceted approach. But first, it is important to understand the context of today's economic inequality.

Inequality, immobility, and network quality

Although humanity's social structure has enabled it to specialize and advance far beyond what any individual can produce alone, people end up dependent on friends, relatives, and peers for information, opportunities, and norms of behavior. The way we knit ourselves together leads inequality to manifest itself both within and across generations.

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The relationship between inequality and economic immobility is crystalized in Alan Krueger's "Great Gatsby Curve,"[1] shown in Figure 1: Countries with higher inequality also tend to have higher economic immobility.

Prominent economic forces that can lead to inequality include the excess profits that go to large monopolies, the increasing returns that are earned by larger amounts of wealth, difficulties in borrowing for education, and various forms of discrimination and group competition.

But focusing only on these forces overlooks a major factor that must be understood in order to design policies that not only address the current symptoms of inequality but break its perpetuation across generations. That factor is the sharply divided social networks in which we live.

"Homophily" is a relatively modern term, coined by Paul Lazersfeld and Robert K. Merton in 1954, for the age-old phenomenon of people associating with others who are similar to themselves. It affects all societies and networks, as people end up segregated by ethnicity,

income, gender, age, profession, religion, and caste, among other divides.

Given that people depend on their networks for information and opportunities and norms of behavior, homophily leads prosperity to stay concentrated within parts of a society and not reach other parts.

Moreover, inequality and immobility are not only problems when it comes to fairness but are also costly in terms of the lost production when people's talents and abilities are underdeveloped or unrealized.

Some of the most eye-opening evidence of the importance of the communities into which we are born is from the "Moving to Opportunity" project, in which randomly selected poor families were subsidized to move to wealthier neighborhoods.

There were sizable effects on health, education, and long-term income of the children involved. For instance, an 8-year-old child who moved from an impoverished

Figure 1. The Great Gatsby Curve
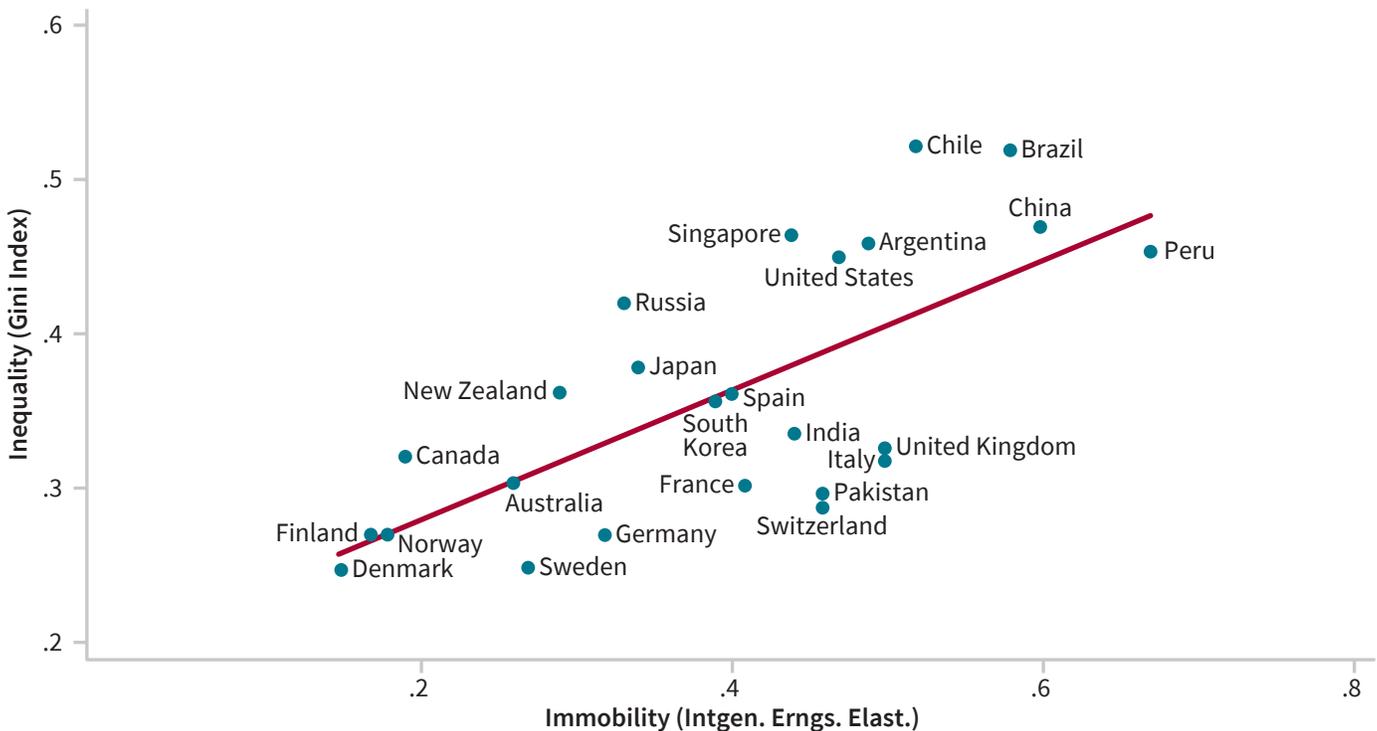
neighborhood to a wealthier one saw an average lifetime earnings increase of $302,000 (Chetty, Hendren, Katz, 2016). More evidence of the impact of the social network in which people are embedded comes from the analysis of the mobility of immigrants (Abramitzky, Boustan, Jacome, and Perez, 2019).

Most importantly, such evidence shows that parental education and income are not the only major determinants of a child's outcome. Moving a family to a new community can completely change a child's trajectory.

The payoffs of an educational investment

The child's education is a major determinant of that trajectory. For example, the ratio of the wages of those having a college degree compared with just a high school degree or less has more than doubled in the last half-century.

Technological advances are making high-skilled labor more productive, while those same advances are replacing low-skilled labor. That is, technology in the form of improved computing power, communication, and automation has been complementary to high-skilled labor while replacing the jobs requiring fewer skills.

The textbook adjustment of this wage gap should be that more people invest in education that makes them better suited for the new productive opportunities. This would increase the supply of people with high levels of education and drive down the supply of relatively uneducated labor, bringing wages back into balance (adjusting for costs of education).

However, people born into poor circumstances are disadvantaged not only in terms of the financial and human capital of their families but also of their networks, or social capital, which open doors and provide vital knowledge of how best to succeed.

That leads them to under-invest in education, which results in lower income and quality of life. And that leads to a multi-generational cycle of low prospects and economic outcomes.

Those losses among individuals, families, and entire communities translate to losses and lower growth for the nation's economy, compounding over time.

Policy cocktails: Getting the ingredients right

Although economic safety nets, tax policies, and short-term creation of low-skilled jobs address current inequality, they do not eliminate the root causes of economic immobility. They treat the symptoms but do not cure the disease.

Social factors and unequal distribution of social capital require policies that overcome the divisions in social networks. Those policies can take advantage of feedback effects and social multipliers inherent in networks. In other words, enhancing a network with internships, affirmative action policies, mentorships, and subsidized education can move lower-income individuals into better economic situations. Each individual's success provides information and access to their friends, and this multiplies outwards.

Inequality and immobility are perfect customers for "policy cocktails." To be clear, I'm not simply suggesting that there are hosts of issues that need to be addressed with individual policies.

Instead, we need to look at these concoctions as a blend of policies that can work together and complement one another to create a fix that's greater than the sum of their parts. It's the difference between serving a shot of gin and a shot of vermouth, or mixing them into a martini.

In particular, the synergies are extreme when it comes to economic mobility, as it has a weakest-link structure. At a most basic level, the information, opportunities, and norms that social networks provide to people all interact. Improving opportunities for education without information about how to take advantage of those opportunities and their benefits, and without supporting norms, is less effective than providing the three together.

Similarly, providing loans for college education has less of an impact if a student's high school education is badly lacking. Students struggle in high school if they lack a strong base of both cognitive and non-cognitive skills, which can be traced back to early childhood education.

And, realizing people's potential requires not only an education but also access to opportunities in the labor market. A college education is less valuable without the connections and referrals to jobs that can make the best use of the education and talent of the graduate.

Very generally, policies that are designed to attack poverty traps by making investments possible can be made more effective by coupling them with policies that overcome the informational, opportunity, and behavioral barriers imposed by the social networks — and vice versa.

Solving one problem without solving the others severely diminishes the impact.

Measuring success and finding the best recipe

Although multi-faceted policies have been used before to address poverty, the measurement and understanding of the optimal design of policy cocktails is still embryonic.

In a *recent study*, my colleagues and I developed some new statistical techniques for evaluating combinations of policies (Banerjee et al., 2021).

We then used those techniques to analyze 75 different policy combinations designed to increase participation in pre-COVID vaccination in India. We found that the best combination of policies increased participation by over 40 percent, after adjusting for statistical selection biases.

The combination involved monetary incentives, information from a trusted source, and reminders to get shots. Again, this had a weakest-link structure: The policies were effective when used together, but none worked by itself.

There are other reasons that policies need to be designed in concert. In another *recent field project* we found that introducing a loan program into poor neighborhoods in India had an unexpected side effect of significantly diminishing the networks through which people share things like money, food, advice, and medical help (Banerjee et al., 2020). Importantly, the networks of people who were not involved in the loan program, but were in the same community, also decreased substantially and the variance in their consumption increased.

This means that a properly designed program that injects credit and financial capital into an area should also account for its social impact and help those who are hit by its side effects.

These examples show the need for policy cocktails in other arenas but nonetheless provide insights into the importance of combined policies.

Applying positive peer pressure

And there are still more aspects to policy design that exhibit synergies.

As an example, consider the decisions of high school students whether to continue their education. Students are heavily influenced by their peers and often follow the behaviors of their friends.

So, consider a high school where most students end their education by the end of the 12th grade. If we award a limited number of scholarships (or other types of aid) to encourage students to continue their educations, it makes a big difference as to how we place them within the high school's social networks.

If the scholarships are randomly strewn around the network, it can be that we see only the direct effect. Those students go on to secondary education, but none of the other students have a majority of their friends continuing their education.

But if we carefully seed the scholarships within cliques and subgroups — so that they are concentrated and near each other — then this can lead friends of the scholarship recipients to experience enough peer pressure to get them to seek a college education as well.

Indeed, as we have shown in other research, the benefits to carefully concentrating such seeds near each other in a social network in the presence of peer effects can lead to large advantages compared with random placement (Jackson, Storms, 2019).

Overcoming inequality and persistent economic immobility requires these types of carefully constructed policy cocktails. Policymakers have to do more than shift wealth and income from one group to another and create temporary jobs.

They must also address the social barriers to information and opportunities that hit at many points in a person's life, and all need to be overcome for long-term success.

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