

Social Capital and Economic Mobility

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Can socially connected communities provide pathways out of poverty?

In recent years, social scientists have identified many factors that facilitate upward income mobility, from early childhood health interventions to elementary school improvements to sectoral job training programs. In addition to these approaches, many have argued that social capital – the strength of an individual’s social network and community – may be an important factor in upward mobility. But social capital has proven to be challenging to measure, making it difficult to study whether it matters, and, if it does, how it can be increased.

To address this challenge, we use privacy-protected data on 21 billion friendships from Facebook to measure three types of social capital in communities across America:

ECONOMIC CONNECTEDNESS



The degree of interaction between low- and high-income people

COHESIVENESS



The degree to which social networks are fragmented into cliques

CIVIC ENGAGEMENT



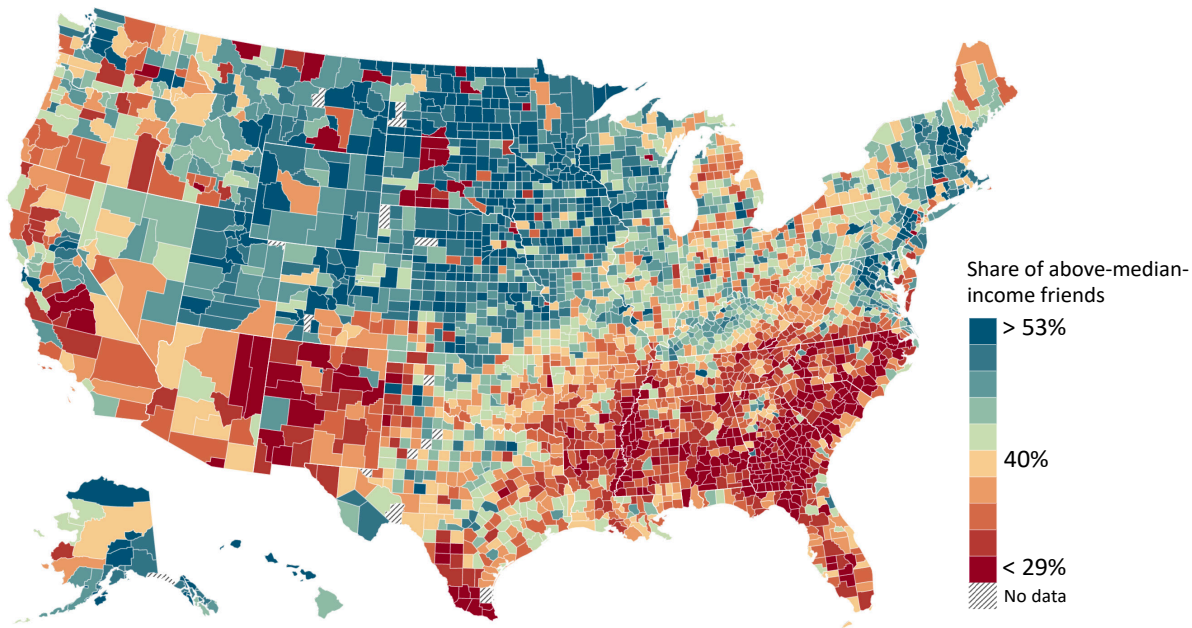
Rates of volunteering and participation in community organizations

KEY FINDINGS

- Social networks are highly stratified by socioeconomic class: people tend to befriend others with similar incomes
- Children who grow up in communities with more economic connectedness (cross-class interaction) are much more likely to rise up out of poverty
- Other forms of social capital – how tight-knit a community is or levels of civic engagement – are not strongly associated with economic mobility
- Differences in economic connectedness can explain the relationship between upward mobility and other factors, such as poverty rates and racial segregation
- The social disconnection by class is due in equal part to segregation by income across social settings and friending bias within settings, the tendency for people to befriend people similar to them.
- Both segregation and friending bias are shaped by the structure of institutions and can be reduced through targeted changes in local policies

Economic Connectedness of Low-Income People, by County

Share of Above-Median Friends Among Below-Median People



We publicly release these measures of social capital for each ZIP code, high school, and college in America in the Social Capital Atlas: www.socialcapital.org. Using these new data, we establish five key results on social capital and economic mobility in a pair of papers published in *Nature*.

have higher income friends. Fewer than 2% of the friends of people in the bottom 10% of the income distribution come from the top 10%; by contrast, 34% of the friends of people in the top 10% come from the top 10%.

FINDING 1

Social networks are highly segregated by income.

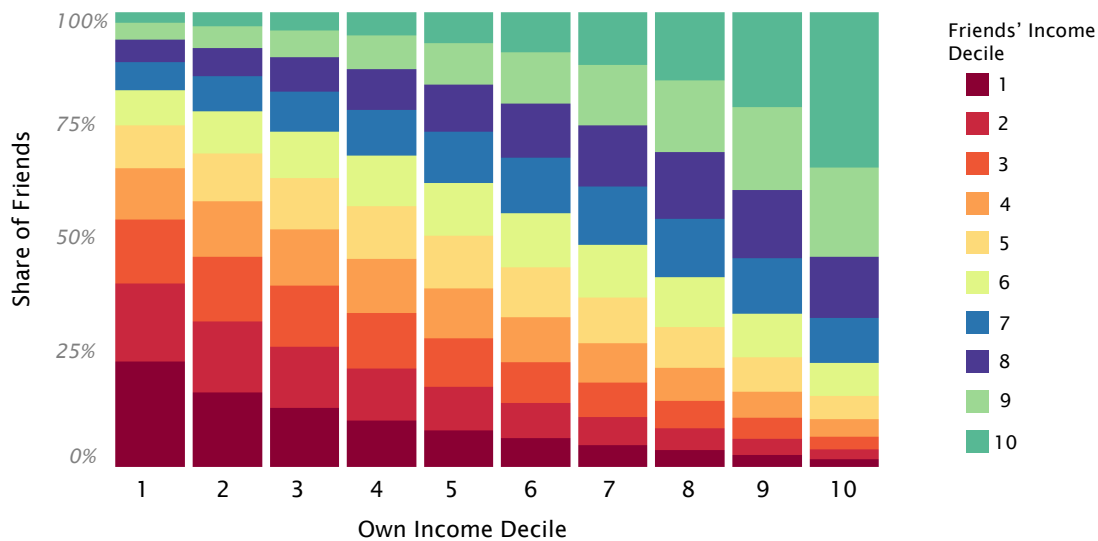
We measure people's socioeconomic status (which we refer to as "income" here for simplicity) by combining information on their ZIP codes, colleges, cell phone models, and other indicators of socioeconomic status. We find that higher income people tend to

FINDING 2

Children who grow up in communities with more cross-class interaction are much more likely to rise out of poverty.

We measure the degree of cross-class interaction in each community by its level of economic connectedness – the share of high-income

Friends' Income Decile by Own Income Decile



(above-median) friends among low-income (below-median) people. As the figure below illustrates, places with greater economic connectedness have much higher levels of upward income mobility – defined as the average incomes in adulthood of children who grow up in low-income (25th percentile) families, as measured in the [Opportunity Atlas](#).

Building on earlier work that analyzes the outcomes of children whose families move across areas, we find that growing up in a more economically connected county causes low-income children to have higher earnings as adults. If children with low-income parents were to grow up in counties with economic connectedness comparable to that of the average child with high income parents, their incomes in adulthood would increase by 20% on average. To put this impact in context, this gain in earnings is equivalent to the difference in average outcomes between a child who grows up in a family that makes \$47,000 a year instead of \$27,000 a year. Growing up in a more connected community may improve children’s chances of rising up through a variety of mechanisms, from shaping career aspirations and norms to providing valuable information about schools and colleges to providing connections to internship and job opportunities.

FINDING 3

Economic connectedness is strongly associated with upward mobility, but other measures of social capital are not.

Unlike economic connectedness, measures of network cohesiveness and civic engagement are not strongly associated with upward mobility. There are many communities that have tightly knit friendship networks (e.g., where one’s friends also tend to be friends with each other) or that have high levels of civic engagement (e.g., high rates of volunteering) yet have low levels of upward mobility. Although such forms of “bonding” social capital may be important

for other outcomes, the type of social capital that matters most for upward income mobility is cross-class interaction—a form of “bridging” social capital.

FINDING 4

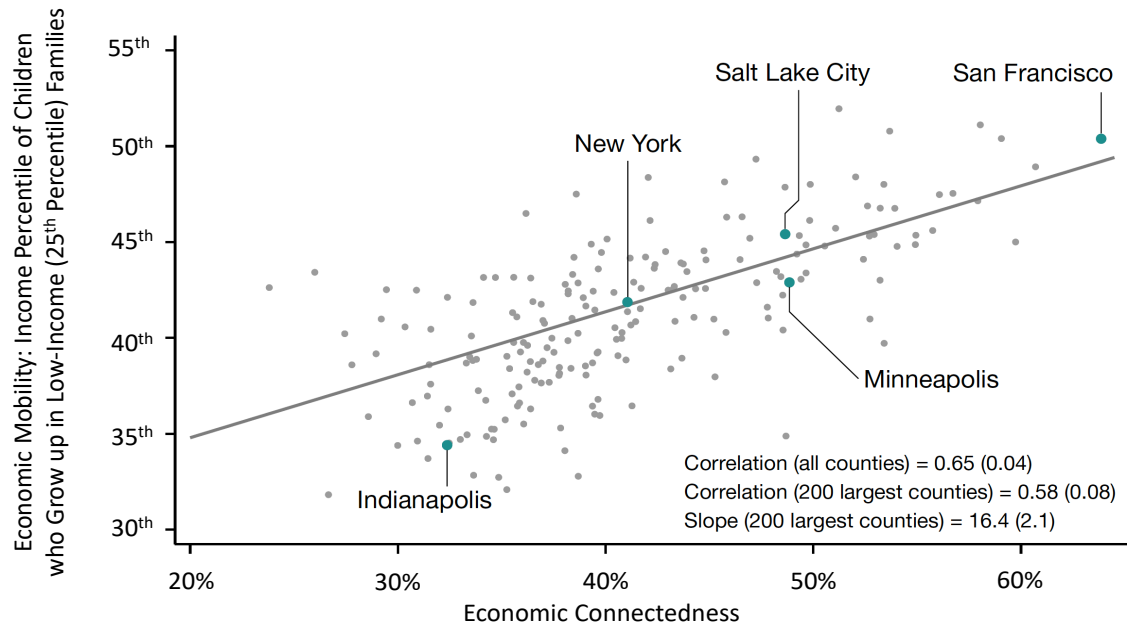
Differences in economic connectedness can explain why racially segregated communities and areas with high poverty rates have lower rates of upward mobility.

Prior work has shown that upward mobility tends to be lower in communities with higher poverty rates, more income inequality, and greater racial segregation. Economic connectedness remains a strong predictor of upward mobility even controlling for these and other factors that have been discussed in prior work; indeed, it is the single strongest predictor of upward mobility identified to date.

Furthermore, economic connectedness can explain many of these previously established relationships. The figure on the next page demonstrates this by showing that higher levels of cross-class interaction, holding fixed average incomes in ZIP code (moving up on the graph), are associated with higher levels of upward mobility. In contrast, higher levels of income, holding fixed the degree of cross-class interaction (moving to the right on the graph), are associated with little change in upward mobility. What matters for upward mobility is not just living in a higher-income neighborhood, but the degree of interaction with higher-income people.

Similarly, holding fixed economic connectedness, there is no longer a significant link between income inequality or racial segregation and upward mobility, suggesting that these factors may limit children’s chances of rising out of poverty only insofar as they impede interaction across class lines.

Upward Mobility vs. Economic Connectedness, 200 Largest Counties



Economic Connectedness vs. Median Household Income by ZIP Code, Colored by Upward Mobility



FINDING 5

The social disconnection by class is due in equal part to segregation by income across social settings and friending bias within settings.

Having established that economic connectedness is strongly related to upward mobility, we next investigate the determinants of economic connectedness and how one can increase it going forward. Why do higher income people tend to have more high-income friends than low-income people? We distinguish between differences in exposure, the share of high-income people in the groups in which people participate (e.g., their schools, religious organizations, neighborhoods, colleges) and differences in friending bias, the rate at which people befriends the high-income people they meet within those groups.

About half of the social disconnection between low- and high-income Americans is due to differences in exposure. For example, high-income people attend high schools that are disproportionately attended by other high-income people. The other half is explained by friending bias: within each group, high-income people are more likely than low-income people to form friendships with high-income peers.

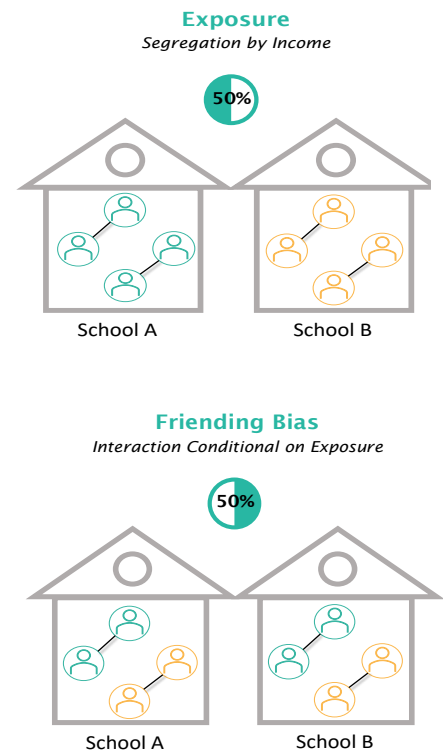
FINDING 6

Both exposure and friending bias are shaped by the structure of institutions and policies.

The degree to which low-income people are exposed to high-income people depends on institutional and policy choices such as college admissions policies and zoning laws. Similarly, friending bias varies systematically across settings and is also influenced by the structure of institutions. For example, friending bias is much lower in religious institutions than in other settings: the friendships low-income people make in their religious groups are more likely to cut across class conditional on exposure than the friendships they make in their schools or neighborhoods.

Friending bias is also higher in large groups (e.g., large schools) – where people may be able to split apart into separate cliques more easily. Friending bias may also be related to factors such as the degree of tracking in schools, the presence of Greek life on college campuses, and architectural decisions that influence how people interact with other types of people in their community.

Determinants of Economic Connectedness



Implications for Practitioners and Policy Makers

Our analysis reveals that children who grow up in communities that are rich in bridging social capital – where low-income families are more likely to interact with high-income families – have significantly better chances of rising out of poverty. The degree of cross-class interaction in our communities is shaped by two factors: income segregation (which limits the extent to which low-income people come into contact with high-income people) and friending bias (the tendency to interact with people from one’s own social class at higher rates even in integrated communities).

There have been extensive policy efforts on the segregation dimension, such as zoning and affordable housing policies aimed at integrating neighborhoods and college admissions reforms to boost diversity on campuses. Such interventions to increase integration can increase cross-class interaction substantially and are likely to be very valuable.

However, even if all schools, neighborhoods, and other groups were perfectly integrated by socioeconomic status, half of the social disconnection between low- and high-income people would persist because of friending bias within groups.

Importantly, friending bias can be influenced by policy changes as well. While more work needs to be done to identify what types of interventions reduce friending bias, there are a number of programs being piloted around the country that warrant further study: efforts to reduce the size of groups in which students interact and limit the divisions created by tracking in schools, changes in architecture and urban planning to foster greater interaction, and the creation of new domains for interaction via programs that seek to break down class barriers.

In some communities, it may be more fruitful to focus on increasing integration to increase cross-class interaction; in others, it may be more effective to focus on reducing friending bias. To help

communities decide where to focus their efforts, we release data on exposure and friending bias for each ZIP code, high school, and college in the [Social Capital Atlas](#). Using these data, we show that policy makers and community leaders can predict the likely effects of interventions to increase integration or reduce friending bias, and determine which dimension warrants the greatest attention in their communities.

More broadly, beyond direct efforts to increase cross-class interaction, our analysis suggests that providing relevant bridging social capital may make other programs that seek to increase economic mobility more effective as well. For example, recent programs that have had large impacts in helping families move to higher-opportunity neighborhoods or obtain higher-paying jobs provide bridging social capital and outperform traditional programs that focus solely on economic resources or skills. Paired with our findings here, these results suggest that prioritizing the provision of adequate social support so people can take advantage of available economic resources may greatly amplify the impacts of existing programs to reduce intergenerational poverty.

The Path Ahead

Using the Social Capital Atlas, researchers and policy makers can learn from areas that currently have high levels of social capital and target interventions to communities where it is lacking. Going beyond our focus on economic mobility, the new data can shed light on what types of social capital matter most for other outcomes – from education to health to pro-social behavior. Such work holds the promise of enriching our understanding of the determinants and consequences of social capital and developing new approaches to tackling longstanding social challenges.

Want to learn more?

Read the Papers:

- [Measurements and Associations with Upward Mobility](#)
- [Determinants of Economic Connectedness](#)

Explore the Data:

- [Social Capital Atlas](#)
- [Download](#)

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Based at Harvard University, Opportunity Insights identifies barriers to economic opportunity and develops scalable solutions that will empower families throughout the United States to rise out of poverty. opportunityinsights.org