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Have the poor always been less likely to migrate? Evidence from inheritance practices during the age of mass migration ☆

Ran Abramitzky [a,b,*], Leah Platt Boustan [b,c], Katherine Eriksson [c]

[a] Department of Economics, Stanford University, 579 Serra Mall, Stanford, CA 94305, United States
[b] NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138, United States
[c] Department of Economics, UCLA, 8283 Bunche Hall, Los Angeles, CA 90095, United States

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ABSTRACT

Using novel data on 50,000 Norwegian men, we study the effect of wealth on the probability of internal or international migration during the Age of Mass Migration (1850–1913), a time when the US maintained an open border to European immigrants. We do so by exploiting variation in parental wealth and in expected inheritance by birth order, gender composition of siblings, and region. We find that wealth discouraged migration in this era, suggesting that the poor could be more likely to move if migration restrictions were lifted today. We discuss the implications of these historical findings to developing countries.

1. Introduction

Rural-to-urban and international migration offers residents of developing economies a potential strategy for economic advancement. Hanson (2010) and Clemens (2011) forcefully argue that easing national migration restrictions would be one of the most effective policy solutions for addressing disparities in development across countries. Yet, even if explicit barriers to migration were lowered, high migration costs and credit constraints might prevent the world's poor from moving to rich countries.

In the context of today's highly restrictive migration policy, some studies find that Mexican migrants to the US are wealthier and more educated than the typical non-migrant (e.g. Chiquiar and Hanson, 2005; Mishra, 2007), although this conclusion has been challenged by Ibarraran and Lubotsky (2007) and Moraga (2011). McKenzie and Rapoport (2007, 2010) reconcile these contrasting results by showing that the direction of migrant selection depends on access to financing. In particular, wealth has a positive effect on migration in communities with a small migration network, but it becomes a less important determinant of migration in communities with larger networks. This pattern suggests that borrowing through migration networks reduces a liquidity constraint that otherwise prevents the poor from migrating. Nevertheless, whether the poor would migrate in large numbers in the absence of migration restrictions remains an open question.

In this paper, we study the effect of parental wealth on the decision to migrate, either internally or internationally, during the Age of Mass Migration (1850–1913), a period characterized by the absence of government migration restrictions. Parental wealth can affect migration directly by financing the cost of migration or indirectly by providing access to land or to a family business in the source country. We find no evidence that a lack of household wealth posed a barrier to migration when US borders were open to all European migrants, an era when migration costs were relatively low. On the contrary, we show that men growing up in households with assets were significantly *less* likely to leave their municipality of birth. We are also able to match a subset of our individuals to property tax rolls and

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* Corresponding author at: Department of Economics, Stanford University, 579 Serra Mall, Stanford, CA 94305, United States.
E-mail addresses: ranabr@stanford.edu (R. Abramitzky), lboustan@econ.ucla.edu (L.P. Boustan), kath722@ucla.edu (K. Eriksson).

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show that men from households with a higher tax bill (and, therefore, more taxable assets) are less likely to migrate. Furthermore, siblings who could expect, by virtue of their birth order or sibling composition, to inherit their family's land were even less likely to migrate. These findings suggest that the poor today might indeed be more likely to migrate if migration restrictions were lifted. Our findings suggest that, during in this era, wealth influenced the migration process through its effect on opportunities in the source country, rather than through the use of family resources to finance migration costs.

Assembling our unique panel dataset of migrants is made possible by the availability of historical public Census files containing the first and last names of individuals. In particular, we link men from the 1865 Norwegian Census to either the 1900 Norwegian Census or the 1900 US Census by first name, last name, age, and place of birth. We note that an inherent limitation of such a linking procedure is that match rates are low at around 26%, mainly because men with common names cannot be linked. A low match rate could result in a sample that is not representative of the general population (although we do show later that the sample we generated is fairly representative of the population on observables). We are nevertheless able to match 50,000 internal migrants, international migrants and non-migrants to their childhood household, from which we can measure variables including the asset holdings of their parents, the number and gender of their siblings, and their rank in the birth order. We know of no large-scale contemporary data that can link migrants to their childhood household.

Our data are particularly well-suited for studying the effect of wealth on migration. Typically, wealth is endogenous to the migration process; individuals may accumulate savings in anticipation of migrating or send money back to their family through remittances after migration. In our setting, we observe whether an individual's parents owned assets when he was still a child (and for a subsample the value of the property tax bill that his parents paid). These assets are pre-determined from the perspective of the individual making the migration decision. Moreover, these assets were accumulated by the parents of the potential migrants before mass migration in Norway began, and therefore are unlikely to have been influenced by the subsequent migration decisions of the children.

To further investigate the effect of wealth on migration, we study the relationship between migration and an individual's expected inheritance. Inheritance varied by birth order and gender composition of siblings and by region. On Norway's western coast and in the far North, two areas where primogeniture was particularly strong, we find that the oldest brothers who stood to inherit family land were less likely to migrate than their younger brothers. In contrast, oldest brothers were actually more likely to migrate in families that did not own land. In the rest of the country, birth order had an insignificant effect on migration, and instead the gender composition of siblings was what mattered. We find that, conditional on family size, men with more brothers (as opposed to sisters) were more likely to migrate in families that owned land. The number of brothers had no effect on migration in landless families. These patterns are consistent with brothers competing for scarce family resources, so that the less a brother expected to inherit, the more likely he was to migrate.

We note that inevitable differences across countries and over time limit the ability to extrapolate from our results to contemporary developing countries. For example, the primogeniture inheritance system used in historical Norway is not shared by all developing countries today. Furthermore, the cost of migration has varied over time with advances in transportation and major changes in US immigration policy. Nevertheless, nineteenth-century Norway is a good setting from which to draw lessons about what the migration process in developing countries could look like in a world of open migration. In 1870, Norway had a poor and primarily agricultural population. GDP per capita in Norway was only $2290 in 2010 dollars, around the level of the contemporary Philippines or Honduras. By moving abroad, Norwegians could expect an average return of 70% (Abramitzky et al., 2012).[1] Furthermore, like many developing countries today, Norway was undergoing processes of rural-to-urban and international migration. Urbanization in Norway doubled from 15% in 1865 to 30% in 1900, principally through internal migration; both the level of urbanization and its rate of change are similar to recent trends in many developing countries, including China, Indonesia and Nigeria.

Because the US maintained an open border at the time, the Norwegian emigration rate was substantially higher than comparable rates today. In the late nineteenth century, an average of 6.3% of Norwegians moved abroad in each decade (Hatton and Williamson, 1998, p. 33). For comparison, the decadal out-migration rate from Mexico was only 1.5% in the 2000s. Our historical setting also sheds light on migrant selection between countries that have relatively open borders today — for example, between poorer and richer countries within the European Union.

Our findings contribute to the literature highlighting the role of household (as opposed to individual) factors in the migration decision. Our paper is among the first to demonstrate that migration can be affected by conditions in one's childhood household (an important exception is Rosenzweig and Stark (1989), which explains the migration of daughters to distant villages at the time of marriage as a household-level risk mitigation strategy). In doing so, this paper complements the previous work that documents that families send migrants to different areas to diversify risks (Stark and Bloom, 1985), that risk-sharing networks within a village restrict migration (Munshi and Rosenzweig, 2009), and that migrants send remittances to family, which can aid development in the source country (Durand et al., 1996; Edwards, 2003; Osili, 2007; Rapoport and Docquier, 2006; Woodruff and Zenteno, 2007; Yang, 2008, 2011).

Other research in development economics documents the relationship between aspects of one's childhood household – including birth order, family size, and gender composition of siblings – and the human capital acquisition and labor force participation of children (Edmonds, 2006; Erjnaes and Portner, 2004; Garg and Morduch, 1998; Psacharopoulos and Patrinos, 1997).[2] We add to this literature by studying the effect of household composition on another outcome, namely migration.

The remainder of the paper proceeds as follows. Section 2 considers the conceptual relationship between household assets and migration in this historical context. Section 3 then describes the data and method we use to match adults to their childhood households in Norway. We present our empirical estimation framework in Section 4. Section 5 contains results relating household assets and expected inheritance to both internal and international migration. Section 6 concludes.

2. Conceptual considerations and historical context

Conceptually, it is unclear how wealth affects migration. Ultimately, the relationship between wealth and migration depends on the relative costs and benefits of migration for men with and without access to wealth (Sjaastad, 1962). On the one hand, wealth facilitates migration because migration requires large up-front costs, including the monetary cost of passage and the foregone earnings during the trip; in the presence of borrowing constraints, access to personal or household assets may lower the cost of the journey. Moreover, to the extent that parental wealth is correlated with individual skills, we could expect a positive

[1] The historical return to migration, although high, is lower than the contemporary return to international migration, most likely because of immigration restrictions in place today that keep migration flows artificially low (Hanson, 2006).

[2] There is also an extensive literature on sibling composition and birth order in developed countries (see, for example, Black et al., 2005; Booth and Kee, 2009; Butcher and Case, 1994).