

Elin Molin

THROUGH THE RANKS

ESSAYS ON INEQUALITY, STATUS AND SCHOOL CHOICE



THROUGH THE RANKS: ESSAYS ON INEQUALITY, STATUS AND SCHOOL CHOICE

This doctoral thesis in Economics consists of four self-contained chapters. The first two chapters examine the impact of a Swedish reform that changed the admission criteria at public upper-secondary schools. The author investigates how this reform affected student sorting and long-term human capital and labor market outcomes. The last two chapters build on the empirical observation that income inequality and household debt-to-income levels have increased simultaneously in many countries over the last decades. The third chapter investigates if there is a causal relationship between income inequality at the local level, and nonrich households' consumption levels. The last chapter explores if utility functions that incorporate positional concerns in consumption can generate a positive relationship between income inequality and nonrich households' debt-to-income levels, under standard economic model assumptions.



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Through the Ranks

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Elin Molin

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To Jacob

Foreword

This volume is the result of a research project carried out at the Department of Economics at the Stockholm School of Economics (SSE).

This volume is submitted as a doctoral thesis at SSE. In keeping with the policies of SSE, the author has been entirely free to conduct and present her research in the manner of her choosing as an expression of her own ideas.

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Stockholm, April 15, 2019

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Introduction

This doctoral thesis consists of four self-contained chapters. The first two chapters examine the impact of a Swedish reform that changed the admission criteria at public upper-secondary schools. In the first chapter, I study the effect on student sorting, and in the second chapter, on student long-term human capital and labor market outcomes. The last two chapters are co-authored by Paula Roth and build on the empirical observation that income inequality and household debt-to-income levels have increased simultaneously in many countries over the last decades. In the third chapter, we investigate if there is a causal relationship between income inequality at the local level, and nonrich households' consumption levels. In the last chapter, we explore if utility functions that incorporate positional concerns in consumption can generate a positive relationship between income inequality and nonrich households' debt-to-income levels, under standard economic model assumptions.

School Choice and Student Sorting - Evaluating an Admission Criteria Reform

In this chapter, I investigate the impact of changing admission criteria in a public school choice system on student sorting. I study a Swedish reform that changed the admission criteria from proximity to grades. The results suggest that the admission criteria *de facto* affected student assignment in the three largest municipalities in Sweden. I restrict the analysis to two of these that had the same type of reform, and where the criteria only changed at one time. The results show that the reform efficiently broke the link between student residence and school assignment. On average, residential sorting in schools decreased by 57 percent (3.1 ppt). At the same time, the reform increased sorting by predicted grades by 40 percent (4 ppt). This implies that students who were predicted to perform well in school to a larger extent were assigned to the same school. The results should be interpreted as general equilibrium effects, since sorting likely is affected both by the assignment rule, and by reactions of students and schools. I document that school supply and specialization increased after the reform in one of the treated

municipalities. In the other municipality I conduct a mobility analysis and find that sorting is mainly driven by top-ranked inner-city schools.

School Choice and Student Long-Term Outcomes - Evaluating an Admission Criteria Reform

In this chapter, I study the long-term consequences of changing admission criteria in a public school choice system by exploring a Swedish admission reform. Before the reform, students with the shortest commuting distance had priority, after the reform priority was given to students with the highest GPA. Applying a difference-in-differences framework, I estimate the impact of the reform on student long-term human capital and labor market outcomes in two of the largest municipalities in Sweden. I use detailed individual register data and study educational attainment and labor income at age 27. Moreover, I compute the expected income of students at middle age, given their choice of educational level and field at age 27. The results show that the reform had a positive impact on annual expected income and educational attainment. I investigate if the reform had heterogeneous effects across subgroups of students and find that students with high parental education benefitted the most, with positive and significant effects on expected income, educational attainment and labor income. Moreover, only students with high parental education, native background and males had a positive effect on expected income that was persistent across post-reform cohorts. This suggest that the reform led to a decline in intergenerational mobility and widened the gender pay gap.

Top Incomes and Consumption of the Nonrich - Is There a Swedish Trickle-Down Effect? (with Paula Roth)

A recent empirical study by Bertrand and Morse (2016) suggests that the surge in US income inequality has led to higher consumption among nonrich households. Their evidence suggests that this is driven by a preference for maintaining status. Sweden is the country within the OECD where inequality has increased the most during the last decades. We use detailed Swedish micro data and replicate the study by Bertrand and Morse (2016). Moreover, we extend the analysis by exploring local inequality within age groups, to capture that households are more likely to interact with households in a similar phase of life. In both analyzes we find a positive relationship between rising top incomes and nonrich consumption. An increase of 10 percent of the 90th or 95th percentile of the income distribution is associated with an increase in the nonrich households' consumption-to-income ratio of 0.09-1.65 percent. However, in the replication we cannot rule out that the effect is driven by a rational expectation of future income growth or lower income volatility. In

our extension, we find no evidence for the non-causal channels; permanent income, precautionary savings and wealth effects. We provide suggestive evidence that this relationship can be explained by a status-maintaining motive.

First Impressions Last

- Does Inequality Increase Status Consumption and Household Debt?

(with Paula Roth)

Recent decades have seen a simultaneous increase in income inequality and household debt-to-GDP for low and middle-income households in many countries. Several empirical papers have suggested that income inequality spurs borrowing among nonrich households through their preference to "Keep up with the Joneses". In this paper, we make several contributions. First, we show that standard Keeping up with the Joneses utility functions cannot generate this relationship unless one imposes the assumption that the rich are more impatient than the nonrich. Second, we present an extended version of the Keeping up with the Joneses utility function that generates outcomes that are consistent with data, under standard economic model assumptions. The main mechanism in our model is that status is built up over the life-cycle.

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