

Peer effects in financial decision-making[☆]Ethan M.J. Lieber^{a,*}, William Skimmyhorn^b^a University of Notre Dame, Department of Economics, 3049 Jenkins Nanovic Halls, Notre Dame, IN 46556, United States^b United States Military Academy, Department of Social Sciences, 607 Cullum Road, West Point, NY 10996, United States

ARTICLE INFO

Article history:

Received 22 August 2017

Received in revised form 27 April 2018

Accepted 2 May 2018

Available online xxxx

JEL codes:

D14 (household saving; personal finance)

D64 (altruism philanthropy)

C31 (social interaction models)

G02 (behavioral finance)

Keywords:

Social effects

Financial decision-making

Retirement savings

Charitable giving

ABSTRACT

Peer effects might play an important role in complex financial decisions because many consumers lack experience with them and the costs of thinking through such decisions can be very high. We study peer effects in retirement savings, life insurance purchase, and two charitable giving programs in a military setting with plausibly exogenous assignment of individuals to social groups. Peers, defined broadly as social groups which may include members of different ranks, appear to play an important role in the charitable giving programs, but not in the other outcomes. We assess a number of potential reasons for the disparate findings and provide suggestive evidence that the observability of individuals' choices is key.

© 2017 Elsevier B.V. All rights reserved.

1. Introduction

Individuals' financial decisions have been the focus of recent U.S. policy efforts from the establishment of the Consumer Financial Protection Bureau to widespread financial education programs (U.S. Government Accountability Office, 2012). This seems natural since many financial decisions are complicated – uncertainty about future earnings, social norms, and the complexity of financial instruments are only a few factors that complicate these decisions. Given research linking cognitive ability and experience to financial mistakes (Agarwal et al., 2009; Bertrand and Morse, 2011; Agarwal and Mazumder, 2013) and the high costs of thinking through many financial decisions (Madrian and Shea, 2001), individuals

may turn to their peers for help with these choices. Among workers with employer-provided retirement funds, 25% report discussing how to use the funds with peers (Employee Benefit Research Institute, 2008). Fourteen percent of federal employees enrolled in the Thrift Savings Plan (the federal government's version of a 401(k)) indicate that peers are a top factor in their investment decisions (Thrift Savings Plan, 2013). A striking 78% of millennials state that they base their financial habits on those of their social group (American Institute of CPAs, 2013). Although survey and anecdotal evidence suggest peers are important, well-identified studies have produced mixed results on peers' impacts in other settings (Sacerdote, 2001; Lyle, 2007; Mas and Moretti, 2009; Guryan et al., 2009).

We use the exogenous assignment of new U.S. Army soldiers to military units to study whether social groups matter for young, moderately educated individuals' financial decisions. Because the Army assigns soldiers based on strategic needs, newly trained soldiers have no say into which units they are transferred. Since these unit members work and live together, soldiers are effectively randomized to different social groups. Although military units are comprised of soldiers of different ranks, throughout the paper we use the term peer effects to refer to any effects of unit members on each other whether they are of equal or different ranks.

Despite this exogenous assignment, there are additional well-known challenges to estimating the causal effects of peers (Manski, 1993). First, it is difficult to quantify the extent to which the group

[☆] We thank John Beshears, Susan Carter, Bill Evans, Dan Hungerman, David Lyle, Bruce Sacerdote, Kelly Shue, and Abigail Wozniak as well as seminar participants at the Federal Reserve Banks of Chicago and Dallas, the Cherry Blossom Financial Literacy Institute, The College of William & Mary (Mason School of Business), North Carolina State University, the University of Texas at Austin, Texas A&M University, the University of Texas at Dallas, the University of Houston, the University of Texas at Arlington, Trinity University, and Vassar College for helpful comments and suggestions. Johan Gorr and Luke Gallagher provided valuable research assistance. The views expressed herein are those of the authors and do not represent the U.S. Military Academy, the Department of the Army, or the Department of Defense.

* Corresponding author.

E-mail addresses: Ethan.Lieber.2@nd.edu, (E.M.J. Lieber), william.skimmyhorn@usma.edu (W. Skimmyhorn).

affects the individual because the individual's behavior can influence the group's choices. A common approach to deal with this “reflection problem” is to estimate the impact of a group's pre-determined characteristics on a person's outcome. For example, Sacerdote (2001) and Lyle (2007) study the effects of college roommates on each other's academic performance by regressing an individual's outcome on her own pre-determined ability (measured by her S.A.T. score) and her randomly assigned roommate's pre-determined ability. For financial decisions, this approach would require data on measures such as how pro-social, financially literate, or forward looking a person's social group is, but these characteristics are very difficult to quantify.

Building on the standard model of peer effects, we show that in the absence of data on such a characteristic, a social group's past choice can serve as an index for all measured and unmeasured social group characteristics that affect an individual's current choice. Using the unit members' past behavior as the treatment also prevents contemporaneous shocks from biasing the estimated impacts, a second major concern highlighted in Manski (1993). Our derivation suggests that past work that has used previous choices when estimating peer effects underestimates the impact of peers (e.g. Eisenberg et al., 2014). Intuitively, previous choices reflect not only the full set of characteristics, but also the common shock experienced in the past. Because common shocks are unobserved, the estimated coefficient on peers' past choices picks up their impacts as well.

Our initial specification regresses a soldier's financial decision twelve months after arrival at her new unit on the unit's mean financial decision from the month before the soldier arrived.¹ Although this specification overcomes the reflection problem and biases due to contemporaneous common shocks, it is affected by the bias described previously. We circumvent this concern by instrumenting for peers' behavior with peers' choices at their previous units, separate and apart from the current unit used in our main analyses. Given exogenous assignment to units, common shocks across peers' current and past unit are uncorrelated and so the instrument likely satisfies the exclusion restriction.

We study the impacts of peers on four financial decisions: charitable giving to the Army Emergency Relief (AER) and to the Combined Federal Campaign (CFC), retirement savings with the Thrift Savings Plan (TSP), and life insurance purchases via Servicemembers Group Life Insurance (SGLI). We estimate substantial impacts of peers in the AER, slightly smaller impacts in the CFC, and no effects for the TSP or SGLI.²

One potential reason for the disparate findings is that soldiers' AER and CFC decisions are observable to others while their SGLI and TSP choices are not. Both the AER and the CFC have annual promotional campaigns that create environments in which unit members are likely to have conversations about whether they have participated. Even without these conversations, individuals' giving may be easy to observe since donations are collected in public settings. Neither the retirement savings nor the life insurance programs have similar campaigns and soldiers make their decisions in private at their local military finance office. Economic theories of peer effects rely on this observability (e.g. Banerjee, 1992; Kandel and Lazear, 1992; Ellison and Fudenberg, 1993; Bernheim, 1994; Ellison and Fudenberg, 1995; Bénabou and Tirole, 2006) and recent empirical studies of other choices suggest it is an important prerequisite for

peer effects (Bandiera et al., 2005; Mas and Moretti, 2009; Bursztyn and Jensen, 2015).

To assess the importance of observability in our context, we exploit the timing of the AER campaign. Donations to the AER are far more observable during and after the campaign than they are in the months leading up to it. We find that peer effects operate exclusively during and after the annual campaign, when peers' choices are or have been observed.³ This finding seems especially relevant given that government and consumer groups advocate incorporating peer effects into financial wellness programs.⁴

Alternatively, there might simply be something different about charitable giving that makes peers' choices more important than they are for retirement savings and life insurance. We address three possibilities: that charitable giving is a pro-social or other-regarding choice while the other programs are not, differences in the institutional choice architecture surrounding these decisions, and that social effects are less likely to overcome preferences than information deficits. Although we present suggestive evidence against these possibilities, we cannot definitively rule them out.

Our research makes two primary contributions to the literature on peer effects. First, our results provide evidence on peer effects in financial decisions that comes from a manipulation of social groups rather than information.⁵ Field experiments have shown that providing information to some individuals affects their peers' savings decisions (Duflo and Saez, 2003; Beshears et al., 2015), purchases of financial assets (Bursztyn et al., 2014), purchases of insurance (Cai et al., 2015), and charitable donations (Frey and Meier, 2004; Shang and Croson, 2009). While these experiments are extremely informative about potential mechanisms, they do not directly estimate naturally occurring, or organic, peer effects at work since the researchers are directly manipulating the environment. Even if individuals act on the information as a result of the experiment, they may not do so in their daily lives because absent the researchers' intervention, information is often costly to obtain. Our estimates complement this line of literature by identifying social effects arising from a naturally occurring change in social groups rather than external information. And second, our simple model suggests that regressing an individual's decision on her peers' past choices will lead to a negatively biased estimate of peers' impacts.

An important caveat to our findings is that it is not clear how well they generalize to other populations. Although there is clearly selection into the armed services, our soldiers' charitable giving and retirement savings patterns closely mirror those of young workers. In addition, the campaigns we study are widespread in both the public sector and private market firms.

³ Unfortunately, we are not able to conduct the same analysis with the CFC since individuals are only able to donate during the annual campaign.

⁴ The Consumer Financial Protection Bureau identifies leveraging peer networks as a best practice for workplace financial wellness programs (Consumer Financial Protection Bureau, 2014). The President's National Research Symposium on Financial Literacy and Education made it a top priority to understand the impact of social factors (specifically highlighting peer effects) on financial attitudes and behaviors (Department of the Treasury, 2008). The President's 2013 Advisory Council on Financial Capability encourages social group discussions as complements to workplace financial education (Department of the Treasury, 2013). Internationally, UN programs designed to provide financial assistance and World Bank reports assert the importance of social group effects in these domains (Hopkins and Ata Cisse, 2015; World Bank, 2015).

⁵ Earlier empirical work estimates positive, and often large, correlations between individual and peers' decisions in stock market choices (Hong et al., 2004; Hong et al., 2005; Ivković and Weisbenner, 2007), charitable giving (Wu et al., 2004), and corporate governance decisions (Davis and Greve, 1997). Some studies have leveraged natural experiments to estimate plausibly causal impacts of peers on financial decisions for specific populations: retirement savings of individuals at a university (Duflo and Saez, 2002), charitable giving through an online platform in the U.K. (Smith et al., 2014), charitable giving to a university (Meer, 2011), and Harvard MBA graduates' business decisions (Shue, 2013).

¹ One of our outcomes is measured in the January after the soldier arrives in the new unit because that is the first month in which a soldier's participation in the program is reflected.

² In particular, we estimate that a one standard deviation increase in peers' participation rates in the AER, CFC, TSP, and SGLI lead to 9, 6, -0.5 , and -0.6 percentage point increases in a soldier's participation rate respectively.

Download English Version:

<https://daneshyari.com/en/article/7369350>

Download Persian Version:

<https://daneshyari.com/article/7369350>

[Daneshyari.com](https://daneshyari.com)