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GENDER NORMS AND DISCRIMINATION[‡]

Cross-Country Differences in Household Stock Market Participation: The Role of Gender Norms[†]

By Da Ke*

The household finance literature studies the ways in which households use financial instruments to achieve their objectives (Campbell 2006). Applying a global lens to these decisions, contemporary research on household finance reveals considerable variation across countries in household balance sheets (Campbell 2016; Badarinza, Campbell, and Ramadorai 2016).

This paper focuses on substantial cross-country differences in household stock market participation (Guiso, Haliassos, and Jappelli 2003). The observed differences are shaped by both institutional and cultural factors. Giannetti and Koskinen (2010) document that the household stock market participation rate is positively related to investor protection in the country. Guiso, Sapienza, and Zingales (2008) show that households in countries with low levels of trust are reluctant to invest in the stock market.

In this paper, I hypothesize that households in countries with more traditional gender norms are less likely to invest in the stock market. Campbell (2016) argues that in many cases, failure to participate in the stock market is likely to be a mistake. Consistent with this view, van Rooij, Lusardi, and Alessie (2011) document that households with low financial literacy are much less likely to invest in stocks. Ke (2018) shows that strong gender norms constrain women's influence over intra-household financial decision making, even if she is more financially sophisticated. As a result, everything else equal, a low household stock market participation rate may be observed in aggregate.

This gender-based explanation pulls insights from three strands of the economics literature. First, the family economics literature emphasizes the role of interactions between family members in household behaviors (Browning, Chiappori, and Weiss 2014). Doepke and Tertilt (2016) further argue that opening the family black box greatly helps understanding aggregate household behaviors. Second, the social economics literature underscores social influences on consumer behaviors (Becker and Murphy 2000). As a common type of social force, gender norms have been shown to shape family behaviors in various societies (Udry 1996; Bertrand, Kamenica, and Pan 2015). Third, the identity economics literature pioneered by Akerlof and Kranton 2000, 2010) stresses that identity is fundamental to consumer decisions. For instance, it can help explain differences in investment behavior between genders (D'Acunto 2015).

This paper contributes to the nascent literature of international comparative household finance. Specifically, I propose that gender norms, a cultural attribute evolved over generations, distort household decisions of whether to participate in the stock market. The evidence in this paper has important implications for household welfare, all the more so in light of ever-challenging financial systems and converging gender gap in education (Campbell 2016; Goldin, Katz, and Kuziemko 2006).

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* Department of Finance, Darla Moore School of Business, University of South Carolina, 1014 Greene Street, Columbia, SC 29208 (email: da.ke@moore.sc.edu). This is a companion paper to Ke (2018). I am grateful to Jawad M. Addoum, Katherine Baldiga Coffman (discussant), Henrik Cronqvist, and seminar participants at the University of Miami and the 2018 AEA Annual Meeting for helpful comments and suggestions. All errors are my own.

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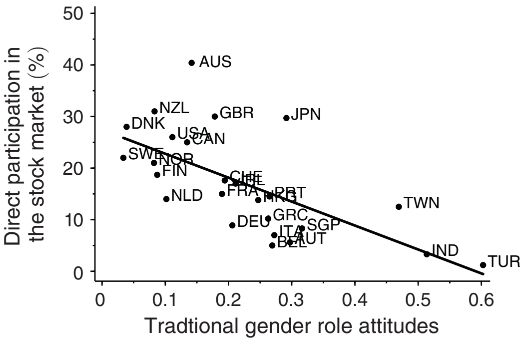

FIGURE 1. GENDER NORMS AND STOCK MARKET PARTICIPATION ACROSS COUNTRIES

Notes: This figure plots household direct participation in the stock market against country-level gender role attitudes. Data on stock market participation and market capitalization across countries are from Giannetti and Koskinen (2010). Country-level traditional gender role attitude is the percentage of the respondents aged 24–64 in that country from all waves of the World Values Survey and the European Values Study who agree to the statement that "when jobs are scarce, men should have more right to a job than women."

I. Data

I obtain data on stock market participation across countries (fraction of households that directly hold stocks) from Giannetti and Koskinen (2010). These data exhibit substantial cross-country variation. For instance, 40 percent of Australian households invest directly in stocks, whereas only about 1 percent of Turkish families buy equities.

Following the gender economics literature (Fortin 2005; Alesina, Giuliano, and Nunn 2013), I measure country-level gender role attitudes using the World Values Survey and the European Values Survey. Specifically, I aggregate responses from survey participants of the same country to the statement that "when jobs are scarce, men should have more right to a job than women." This measure varies greatly across countries: the proportion of Turkish respondents who agree with the preceding statement is 60 percent, compared with only about 3 percent for the Swedish participants.

I include a number of country-level controls assembled from various sources. Information on private enforcement of securities laws across countries is from La Porta, Lopez-de-Silanes, and Shleifer (2006). I construct country-level measure of trust following Guiso, Sapienza, and Zingales (2008). In addition, I get data on gross domestic product (GDP) from the International Monetary Fund, income inequality from Deininger and Squire (1996), market capitalization from Giannetti and Koskinen (2010), and educational attainment of the population from Barro and Lee (2013).

II. Results

Figure 1 plots the relation between household stock market participation and the prevailing gender role attitudes in this country. It shows a strong negative correlation. For example, Turkey and India are the two most traditional countries in attitudes about the appropriate role of women. Meanwhile, these countries have the lowest levels of household stock market participation: 1.2 percent and 3.3 percent, respectively. In contrast, Sweden and Denmark are the two least traditional countries in gender role attitudes and their stock market participation rates are 22 percent and 28 percent, respectively.

Table 1 confirms that traditional gender role attitude has a negative impact on household stock market participation. I control for the investment protection, measured by the index of private enforcement in La Porta, Lopez-de-Silanes, and Shleifer (2006), as well as the prevailing level of trust in the country. I find that countries with laws mandating disclosure and facilitating private enforcement have significantly higher levels of household stock market participation and that trust has a positive but insignificant incremental effect. In addition, I control for GDP per capita, income inequality, stock market size, and educational attainment of the population. The negative relation between gender norms and stock market participation preserves.

The effect of gender norms is not only statistically significant, but also economically significant. A back-of-the-envelope calculation suggests that if Turkey had the same level of gender norms as Germany (the median country), stock market participation would increase by 12.1 percent from 1.2 percent, which is a more than tenfold increase.

Furthermore, the gender norm hypothesis can explain limited stock market participation among wealthy individuals. Figure 2 plots the relation between the stock market participation rate of the wealthiest 5 percent obtained from

TABLE 1—GENDER NORMS AND STOCK MARKET PARTICIPATION ACROSS COUNTRIES

	(1)	(2)	(3)	(4)
Traditional gender norm	−0.464	−0.436	−0.420	−0.304
	(0.074)	(0.080)	(0.110)	(0.157)
Private enforcement		0.177	0.175	0.198
		(0.048)	(0.048)	(0.075)
Trust			0.020	0.099
			(0.078)	(0.114)
log GDP per capita				0.004
				(0.030)
Gini income				0.007
				(0.003)
Market capitalization to GDP				−0.050
				(0.026)
Schooling				0.010
				(0.015)
Observations	25	25	25	25
R^2	0.434	0.568	0.568	0.696

Notes: This table reports the effect of gender norms on stock market participation across countries. Traditional gender norm is the percentage of the respondents aged 24–64 in that country in all waves of the World Values Survey and the European Values Study who agree to the statement that "when jobs are scarce, men should have more right to a job than women." Data on stock market participation and market capitalization across countries are from Giannetti and Koskinen (2010). Private enforcement is an index from La Porta, Lopez-de-Silanes, and Shleifer (2006). Country-level trust is constructed following Guiso, Sapienza, and Zingales (2008). Data on GDP per capita are from IMF. Gini income is the Gini coefficient of income from Deininger and Squire (1996). Schooling is the average years of schooling of the total population over 25 in 2000 from Barro and Lee (2013). Robust standard errors are in parentheses. The constant is included in all regressions, but parameter estimates are omitted.

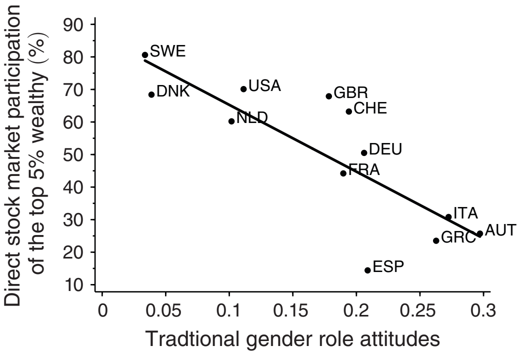

FIGURE 2. GENDER NORMS AND STOCK MARKET PARTICIPATION OF THE WEALTHY

Notes: This figure plots direct stock market participation for individuals in the top 5 percent of the wealth distribution against country-level gender role attitudes. Data on direct stock market participation of the wealthy across countries are from Guiso, Sapienza, and Zingales (2008). Country-level traditional gender role attitude is the percentage of the respondents aged 24–64 in that country in all waves of the World Values Survey and the European Values Study who agree to the statement that "when jobs are scarce, men should have more right to a job than women."

Guiso, Sapienza, and Zingales (2008) and gender norms. There is a strong negative relation, and gender norms alone can explain two-thirds of the cross-country variation.

III. Conclusion

This paper provides some suggestive evidence that gender norms play an important role in explaining cross-country differences in household financial decisions. Specifically, I show in a cross-country analysis that a one-standard-deviation increase in the level of traditional gender role attitudes is associated with a 4.3 percentage point decrease in household stock market participation, which is more than a quarter of the sample average participation rate.

One potential mechanism underlying this macro-level pattern is that gender norms constrain women's influence over intra-household financial decision making. Using data from US household surveys and a randomized online survey experiment, Ke (2018) provides micro-level support for this interpretation. In particular, he shows that gender norms hinder idea contribution by the wife and cause men to be less open to an opposing viewpoint.

While the paper focuses on stock market participation, it is likely that the impact of gender norms applies to other major household financial decisions. An important task for future research is to investigate what types of household financial decisions are more susceptible to gender norms and how large the total welfare cost is.

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