HEIGHT AND INCOME EFFECTS ON STOCK INVESTMENTS IN CHINA

A Thesis

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Master of Science in Applied Economics and Management

By

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ABSTRACT

This paper examines the relationship between physical attributes such as height (or weight) and household investment decisions in China. Using survey data from the China Family Panel Studies (CFPS), I find that households with taller family heads are more likely to invest in stocks and that weight (BMI) does not seem to have any effects on Chinese household stock market participation. The empirical methodology used in this paper are a series of fixed-effect regression models. After confirming the existence of a positive height effect on stock market participation in China, further analysis is done to look for channels that could explain such an effect. My findings suggest the two channels are income and cognitive abilities, and that the income channel plays a major role. Finally, ancillary regressions confirm the existence of a height premium on both income and education in China.

Keywords: physical attributes, household finance, China

BIOGRAPHICAL SKETCH

In 2017, Zihan Wang obtained a Bachelor of Science in business administration (BSBA) in finance from the University of Miami with a minor in accounting. Currently, he is in his last semester of the master's program in Applied Economics and Management at Cornell University with a concentration in finance and management.

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1 Introduction, Literature Review, and Motivation

The recent survey by Gomes, Haliassos, and Ramadorai (2020) identifies the connection between household financial decisions and social environment, including cultural and hereditary factors as well as cognition and educational interventions. However, in addition to the social environment, which cannot be directly observed, observable physical attributes also have impacts on household investment decisions, as shown by Addoum, Korniotis, and Kumar (2017). Two physical attributes examined in their paper are height and body mass index (BMI, an obesity measure, where a higher number means more obesity). Specifically, they demonstrate that taller individuals are more likely to invest in risky asset classes such as stocks, whereas individuals with higher BMI tend to invest less. Motivated by their findings, I examine whether such positive (negative) height (BMI) effects apply to households in China.

The decision to study the relationship between physical attributes and household finance in China is motivated by two considerations. First, China, as the second-largest economy behind the US, has received growing international attention for its relatively young stock market compared to the West. Yet, little has been done to analyze the association of height (and BMI) with stock investment. As a result, any insight generated from this paper will help others better understand what drives stock market participation among Chinese households. Second, the availability of a dataset in China that has rich information on physical attributes and households' investment decisions offers an ideal setting for conducting this study.

Consistent with my expectation, I find that taller family households are more likely to invest in stocks in China, which remains true after controlling for a broad set of demographic variables. However, a negative weight (BMI) effect on stock market participation, although initially expected, does not seem to exist in China. Focusing on the positive height effect, I further study potential channels that could explain such an effect and find that income and cognitive abilities serve as the two main channels, the former of which plays a much bigger role. Finally, to show the existence of these two channels, I analyze the association of height with income and education level and confirm that taller family heads tend to earn more and have higher education level in China.

Other relevant pieces of literature inspire me to include a set of control variables in addition to the main independent variables – height and BMI. First, the idea of adding variables indicating age and gender comes from Campbell's (2006) summarized determinants of stock market participation. Then, income is included because greater heights (weights) tend to lead to higher (lower) income according to Persico et al. (2004), Hamermesh and Biddle (1994), and Harper (2000). Furthermore, the inclusion of net worth learns from Campbell's (2006) use of its linear term. Then, Grinblatt et al. (2011) show that intelligence plays an important role in determining stock market participation, so, I also include cognitive ability controls captured by education, numerical and verbal ability, and memory. Additionally, self-reported health status is considered as not only taller people are shown to be healthier (Case and Paxson, 2008a) but also people with poor health tend to invest less in risky asset classes such as stocks (Rosen and Wu, 2004).

Lastly, I consider sociability because more sociable people tend to participate more in the stock market (Hong et al., 2004).

This study contributes to the literature in household finance by showing that physical attributes such as height or weight (BMI) not only affect people's portfolio choices in the West but also have significant impacts among households in China. Although extensive studies on determinants of stock market participation decisions have been previously done using datasets from Western countries, to my best knowledge this is the first study to study the effect of physical attributes on household stock investment choice in China. This study also contributes to the literature by showing the unique case in China where only height plays a significant role in stock market participation. Furthermore, my empirical results provide additional evidence on some of the channels studied by other literature focused on households in the West. For example, income and cognitive abilities channels do exist and play important roles in China, as in the West. However, other channels prevalent among Western households do not seem to explain the positive relationship between height and stock market participation. Overall, this paper helps motivate further studies to better understand the uniqueness of portfolio choices among Chinese households.

The rest of this paper is arranged as follows. In Section 2, I provide the data and summary statistics, listing the complete set of variables used as well as their definitions. Then, in Section 3, I describe the empirical methodologies. Section 4 discusses regression results where main results are shown in Section 4.1, and ancillary results are shown in Section 4.2. I conclude in Section 5 with a summary and a few suggestions for further research.

2 Data and Summary Statistics

2.1 Data Source

The data used in this article comes from the survey of China Family Panel Studies (CFPS), which has longitudinal data on contemporary Chinese communities, families, and individuals. Launched by the Institute of Social Science Survey (ISSS) of Peking University in 2010, the survey runs every two years from 2010 to 2018. Its sample covers about 16,000 households across 25 provinces and municipalities and has rich information on the physical characteristics, financial decision variables, and other demographic variables of the respondents. The CFPS is also designed in a similar way to Panel Study of Income Dynamics (PSID), National Longitudinal Surveys of Youth (NLSY), and Health and Retirement Study (HRS) but has more detailed information on household members and relationships among households.

Although the CFPS study generates such a rich dataset, there are still some limitations. For this study, the decision variable of my main interest is whether or not a particular household invests in stocks. However, the survey only has data on stock investments in 2010 and 2012, beyond which the survey questions start to ask about investment decisions in many different asset classes altogether. Given the impossibility of separating households' overall investments into the specific asset class of stock, my research only uses the data from 2010 and 2012. In addition, two different tests are given to measure numerical ability. For example, a self-designed math test by CFPS is given in 2010, whereas the same number series test used in HRS is given in 2012. To address this, I choose to use the latter to best represent the numerical ability of respondents considering that HRS data is often used in related studies, including Barsky et al. (1997), Rosen and Wu (2004), and Hong et al. (2004). Another limitation is that memory tests are not given in 2010, and word tests are not available in 2012 either. I address this limitation by assuming that memory test scores (only given in 2012) and word test scores (only given in 2010) remain unchanged for the same group of household heads between the two years because it is correct to assume the verbal ability and memory of adult respondents do not change much over a short time. The same assumption also applies to the different math tests mentioned earlier in this paragraph. By using the math test score in 2012 as the measure for numerical ability, I implicitly assume the same score for the same group of respondents in 2010, although a different version of the math test is given. Finally, the solution to the missing information on the time spent on social activities in 2012 is also this assumption that such data remains unchanged for the same group of respondents from 2010.

2.2 Merged and Cleaned Data

Each year CFPS releases five sets of data, and I only use two of them: adult and family economics. The adult dataset includes abundant information on physical characteristics and other demographics of adult respondents who are uniquely identified by the personal ID number (PID) in the survey. The family economics dataset includes information on stock investments, income, and net worth at the household level, and each of these households is uniquely identified with the family ID number (FID). Because FID is also available in the adult dataset to indicate the household, I merge these two datasets using FID as the key identifier. After identifying the family head (or the person who makes the financial decisions for the entire household), I drop the adults who are non-family heads or non-household financial decision-makers. After further eliminating unwanted and unavailable data, I create a single merged panel dataset that has all the variables needed for each household matching only its family head (or main financial decision-maker) for 2010 and 2012.

2.3 Summary Statistics

Table 1: Summary Statistics

	Mean	Std. dev.
Decision Variables		
Own Stocks	0.063	0.243
Prop in Stocks	0.028	0.136
Physical Characteristics		
Height (cm)	166.645	7.288
Weight (catty = 0.5kg)	128.733	22.238
BMI	23.117	3.323
Height and Weight, males		
Height (cm)	168.934	6.044
Weight (catty = 0.5kg)	132.680	21.624
BMI	23.204	3.294
Height and Weight, females		
Height (cm)	158.790	5.509
Weight (catty = 0.5kg)	115.189	18.715
BMI	22.819	3.405
Other Demographic Variables		
Age	48.135	12.665
Education	0.110	0.313
Ln(Income)	10.219	1.191
Ln(Net Worth)	12.043	1.375
Male	0.774	0.418
Single	0.103	0.304
Numerical Ability	7.822	3.837
Verbal Ability	21.230	7.967
Memory	4.094	1.750
Health	1.587	0.492
Daily Social Time (hrs)	2.648	1.877
Religious Participation	0.047	0.213

Table 1 shows the summary statistics for all of the variables used in this research. Similar to the study done by Addoum, Korniotis, and Kumar (2017), I put these variables into three categories. The first set is decision variables indicating whether or not a particular household invests in stocks (*Own Stocks* dummy) and the percentage of financial assets invested in stocks (*Prop in Stocks*). On average, only 6.3% of families invest in stock markets using just 2.8% of total financial assets. Because of the less developed stock market in China, both in terms of time and level of sophistication since origination in the late 1990s, less participation among Chinese households compared to their counterparts in the West is expected.

The second category is physical characteristics of family heads, including height, weight, and body mass index (BMI). The average height, weight, and BMI across the entire sample are about 167cm, 129catty (64.5kg), and 23. Overall, male family heads are taller (169cm vs 159cm) and have higher weights (133catty vs 115catty) than female family heads as expected.

The last set is other demographic variables needed to better study the relationship between physical characters and stock investments. Across the entire sample, the average age is 48 years old, and about 11% have achieved post-secondary education or higher (*Education* dummy). *Income* and *Net Worth* variables are at the household level and taking the log value of each prepares for the regression analysis in the following sections. *Male* is a dummy variable set to one if the respondent is male, and the data shows that on average most of the family heads (77%) are men. Meanwhile, almost 90% of family heads are married with spouses, leaving only 10.3% being single (*Single* dummy equals one if the marital status is single).

In addition to *Education* dummy, *Numerical Ability*, *Verbal Ability*, and *Memory* are another set of variables that capture the cognitive ability, and the numbers shown in Table 1 are scores of numerical, verbal, and memory tests obtained by the family heads.

Health index is set to be one if the family head's self-reported health status is in fair or poor health and to be two if in excellent, very good or good health, and on average the people's health status is somewhere in between these two categories (1.587).

The last two variables represent the sociability of family heads. They on average spend about 3 hours each day per week on social activities (*Daily Social Time (hrs*)), and less than 5% participate in religious activities (*Religious Participation* dummy taking the value of one if the respondent participates in religious organizations or services), which makes sense given China's communist political system where the majority of people is expected to be atheists.

3 Empirical Methodologies

The basic empirical methodology used in this study is the fixed-effects (FE) model as shown below:

$$Y_{i,t} = \alpha_i + \alpha_t + \beta X_{i,t} + \varepsilon_{i,t}.$$

$Y_{i,t}$ represents the financial decision dummy variable of family head i (*Own Stocks* dummy) in a specific year t, which is regressed on the physical characteristics $X_{i,t}$ (*Height* and *BMI*, respectively). To avoid any impact from unobserved heterogeneity, which in this case, could be that 2012 has a bull stock market compared to 2010 and thus increases the number of households invested in stock markets, I add α_t to capture time fixed effects. As Table 1 shows greater height and weight of males than that of females, α_i is included for gender fixed effects. Also, just in case the error terms $\varepsilon_{i,t}$ are heteroskedastic, I use robust standard errors for all of the regressions run in this paper.

In addition to the main dependable and independent variables described above, I add a set of control variables $C_{i,t}$, and the FE model becomes:

$$Y_{i,t} = \alpha_i + \alpha_t + \beta X_{i,t} + \Gamma C_{i,t} + \varepsilon_{i,t}.$$

Inspired by the determinants of stock market participation (Campbell, 2006), I first add two basic control variables, *Age* and *Single* Dummy. Next, I also include *Ln(Income)* because greater heights (weights) tend to lead to higher (lower) income according to Persico et al. (2004), Hamermesh and Biddle (1994), and Harper (2000). Meanwhile, the inclusion of *Ln(Net Worth)* learns from Campbell's (2006) use of the linear term of net worth. Then, according to Grinblatt et al. (2011), intelligence plays an important role in determining stock market participation, I thus choose to include *Education* dummy variable to control for intelligence. Finally, the last control variable I add is *Health*, and the rationale is that not only taller people are shown to be healthier (Case and Paxson, 2008a) but also people with poor health tend to invest less in risky asset classes such as stocks (Rosen and Wu, 2004).

4 Regression Results and Discussions

4.1 Main Regressions

I first run six regressions using the FE model described above to see if there is any height effect on stock market participation, and the results are shown in Table 2 below.

Table 2: Stock Market Participation Regression Estimates (Height Effect)

	(1)	(2)	(3) Male Head	(4) Female Head	(5) Married	(6) Single
Height	0.00310***	0.00125***	0.00150***	0.000377	0.00111**	0.00211*
	(8.36)	(3.36)	(3.78)	(0.38)	(2.78)	(2.02)
Age		0.000368*	0.000366	0.000448	0.000487*	-0.0000438
		(1.98)	(1.76)	(1.04)	(2.28)	(-0.12)
Single		0.0131	0.0223*	0.0000473		
		(1.64)	(2.37)	(0.00)		
Income		0.0118***	0.00874***	0.0215***	0.0120***	0.00614
		(6.21)	(4.17)	(5.05)	(5.83)	(1.23)
Net Worth		0.0339***	0.0332***	0.0359***	0.0375***	0.0200***
		(15.23)	(13.18)	(7.69)	(14.74)	(4.46)
Education		0.146***	0.148***	0.139***	0.144***	0.141***
		(10.80)	(9.75)	(4.84)	(9.94)	(3.97)
Health		-0.0136**	-0.0132*	-0.0148	-0.0131*	-0.0159
		(-2.67)	(-2.35)	(-1.26)	(-2.40)	(-1.11)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Gender FE	Yes	Yes	No	No	Yes	Yes
N	9462	8838	6858	1980	7939	899

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

As Table 2 shows, the height effect on stock market participation exists except in the case of female heads, which is not surprising as Addoum, Korniotis, and Kumar

(2017) demonstrate a stronger height effect for men. Columns (1) and (2) show significantly positive height coefficient estimates, and as expected, the magnitude of coefficients gets reduced from 0.00310 (without any controls) to 0.00125 when including all of the control variables. Height coefficient estimates in columns (3) and (4) confirm the existence of gender effect, and the ones in columns (5) and (6) demonstrate a more significant height effect on household stock investment decisions made by married family heads.

Table 3: Stock Market Participation Regression Estimates (BMI Effect)

	(1)	(2)	(3) Male Head	(4) Female Head	(5) Married	(6) Single
BMI	0.00381***	0.00123	0.00180*	0.0000588	0.00119	0.00209
	(5.58)	(1.80)	(2.34)	(0.04)	(1.65)	(0.98)
Age		0.000276	0.000273	0.000422	0.000417*	-0.000231
		(1.51)	(1.34)	(0.99)	(1.98)	(-0.63)
Single		0.0131	0.0228*	-0.0000498		
		(1.65)	(2.42)	(-0.00)		
Income		0.0120***	0.00900***	0.0216***	0.0121***	0.00723
		(6.33)	(4.30)	(5.05)	(5.89)	(1.45)
Net Worth		0.0339***	0.0331***	0.0359***	0.0376***	0.0196***
		(15.12)	(12.99)	(7.68)	(14.70)	(4.26)
Education		0.147***	0.150***	0.139***	0.145***	0.148***
		(10.90)	(9.80)	(4.88)	(9.98)	(4.18)
Health		-0.0130*	-0.0125*	-0.0146	-0.0126*	-0.0140
		(-2.54)	(-2.23)	(-1.24)	(-2.32)	(-0.98)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Gender FE	Yes	Yes	No	No	Yes	Yes
N	9462	8838	6858	1980	7939	899

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Then, switching *Height* variable with *BMI* variable and using the same six specifications of the FE model as above, I generate Table 3 as shown above. Table 3 indicates that BMI does not seem to have a significant negative effect on stock market participation, which is demonstrated by Addoum, Korniotis, and Kumar (2017). Given that there seems to be no BMI effect on household stock market participation in China, the remainder of my research only focuses on further analysis on the height effect.

Motivated by the study done by Addoum, Korniotis, and Kumar (2017), I want to find out what are the channels through which a positive relationship between height and stock investment decisions is established. The way to find out those various channels borrows the method used by Persico et al. (2004), where I incrementally add a different group of control variables to examine the degree to which each group reduces height coefficient estimates. Starting from the first regression with basic controls such as *Age* and *Single*, I run another five regressions with incremental specifications representing a specific group of controls on top of basic controls.

Table 4 shows the height coefficient estimates under these six specifications. Note that in column (3), there are another three control variables (*Numerical*, *Verbal Ability, and Memory*) added into the FE model in addition to *Educatio*n mentioned in the previous section, and together they form cognitive controls. Another thing I add to this set of regressions, as shown in column (5), is social controls that consist of *Daily Social Time* and *Religious Participation*. Because more sociable people would more likely participate in the stock market (Hong et al., 2004), I include these two measures as well. Columns (2) and (4) have the same controls as previously defined in Section 3. The last specification, in column (6), considers all controls, including every control variable from column (1) to (5).

Table 4: Stock Market Participation Regression Estimates (Height Effect – Additional Analysis)

	(1) Basic Controls	(2) Basic and Income Controls	(3) Basic and Cognitive Controls	(4) Basic and Health Controls	(5) Basic and Social Controls	(6) All Controls
Height	0.00311***	0.00174***	0.00259***	0.00313***	0.00322***	0.00157*
	(8.08)	(4.58)	(3.61)	(8.09)	(7.45)	(2.15)
Age	0.0000532	-0.0000499	0.00254***	0.0000285	0.0000120	0.00159***
	(0.28)	(-0.26)	(6.53)	(0.15)	(0.05)	(4.12)
Single	-0.00768	0.0271***	-0.00790	-0.00772	-0.00489	0.0215
	(-0.95)	(3.31)	(-0.47)	(-0.95)	(-0.53)	(1.30)
Income		0.0173***				0.0127***
		(8.81)				(3.40)
Net Worth		0.0388***				0.0496***
		(16.83)				(12.70)
Education			0.151***			0.100***
			(8.00)			(5.33)
Numerical Ability			0.00400**			0.00337*
			(3.03)			(2.55)
Verbal Ability			0.00342***			0.00205***
			(5.78)			(3.46)
Memory			0.00816**			0.00662*
			(2.69)			(2.21)
Health				-0.00336		-0.0135
				(-0.65)		(-1.48)
Daily Social Time					-0.00817***	-0.00692***
					(-6.83)	(-3.47)
Religious Participation					-0.00331	0.0220
					(-0.27)	(1.07)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Gender FE	Yes	Yes	Yes	Yes	Yes	Yes
N	9462	8838	4019	9462	8240	3778

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

According to Table 4, only income channel and cognitive channel seem to partially explain the positive relationship between height and stock investments in China. Between these two channels, the income channel plays a bigger role. For example, the height coefficient estimate drops by more than 44% from 0.00311 to 0.00174 when incrementally adding income and wealth controls, whereas the same coefficient estimate gets only reduced by less than 20% to 0.00259 when adding cognitive controls.

4.2 Ancillary Regressions

Up to this point, I have shown the existence of height effects in stock market participation in China and find out that the relationship between height and portfolio decisions can be partially attributed to the environment feedback channel captured by income and net worth controls, and to cognitive abilities measured by education level and numerical, verbal, and memory tests. Now, given these two channels observed, I would like to answer another two questions. Do taller individuals tend to earn more in China? Do taller individuals tend to have higher education and thus have higher cognitive abilities? Therefore, I run two ancillary regressions using *Ln(Income) and Education* respectively as the dependable variables, *Height* as the main independent variable, and relevant other demographic variables as controls. Tables 5 and 6 below show the regression results.

Table 5: Income Regression Estimates (Height Effect on Income)						
	(1)	(2)	(3) Male Head	(4) Female Head	(5) Married	(6) Single
Height	0.0204***	0.0132***	0.0132***	0.0122*	0.0108***	0.0251***
	(9.80)	(6.51)	(5.92)	(2.50)	(5.07)	(4.36)
Age		-0.000284	-0.00136	0.00212	0.00239*	-0.0123***
		(-0.27)	(-1.14)	(0.98)	(2.12)	(-4.43)
Single		-0.510***	-0.622***	-0.353***		
		(-11.00)	(-9.78)	(-5.39)		
Education		0.762***	0.790***	0.677***	0.759***	0.640***
		(23.34)	(22.27)	(8.95)	(22.20)	(6.11)
Health		0.0954***	0.0940**	0.0977	0.0829**	0.205*
		(3.75)	(3.27)	(1.81)	(3.16)	(2.23)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Gender FE	Yes	Yes	No	No	Yes	Yes
N	9162	9162	7093	2069	8223	939

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The same FE model described in Section 3 is used, and model specifications from column (1) to (6) follow the same order as it is in Table 2 and 3. Both in Table 5 and 6, height coefficient estimates are significant at all levels regardless of the gender or marital status of the family head as well as whether or not controlling other demographic variables. These results answer the aforementioned two questions. Thus, within my sample, taller Chinese tend to earn a higher income, which is consistent with findings documented by Persico et al. (2004). At the same time, the regression results shown in Table 6 are also consistent with the findings of Case and Paxson (2008b) that there exists a positive relationship between height and education level.

Table 6: Education Regression Estimates (Height Effect on Education)

	(1)	(2)	(3) Male Head	(4) Female Head	(5) Married	(6) Single
Height	0.00653***	0.00378***	0.00388***	0.00349**	0.00297***	0.00852***
	(12.35)	(7.25)	(6.70)	(2.90)	(5.38)	(4.95)
Age		-0.00356***	-0.00315***	-0.00496***	-0.00319***	-0.00483***
		(-12.69)	(-9.84)	(-8.53)	(-10.48)	(-6.78)
Single		0.0972***	0.101***	0.101***		
		(8.34)	(6.81)	(5.19)		
Income		0.0387***	0.0409***	0.0320***	0.0380***	0.0307***
		(14.13)	(14.13)	(4.98)	(12.83)	(4.37)
Net Worth		0.0360***	0.0362***	0.0365***	0.0397***	0.0234***
		(13.74)	(11.94)	(7.10)	(13.87)	(3.70)
Health		0.00216	-0.00362	0.0213	0.00126	0.0124
		(0.34)	(-0.50)	(1.58)	(0.19)	(0.58)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Gender FE	Yes	Yes	No	No	Yes	Yes
N	9462	8838	6858	1980	7939	899

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5 Summary and Conclusions

Inspired by Addoum, Korniotis, and Kumar (2017), this study examines whether the positive (negative) height (BMI) association with investment decisions in the stock market also exists in China. In terms of the height effect, my finding confirms its existence among Chinese households. However, I do not find the evidence in China supporting that more overweight people (having higher BMI) favor less risky investment choices and thus invest less in stock markets as Addoum, Korniotis, and Kumar (2017) have shown in their paper.

The CFPS dataset has rich information on both observed and unobserved characteristics of family heads in China, which provides me with the opportunity to further look into the main channels that could explain height premiums on stock market participation. I find the two channels are income and cognitive abilities, and the income channel plays a much bigger role in explaining the positive height effect on stock market participation. Additionally, my ancillary regression results demonstrate that taller individuals tend to earn more and have better education, which is consistent with findings in other literature.

The evidence of a strong relationship between height and portfolio decisions shown in this paper may motivate others to conduct more studies. For example, in the paper written by Addoum, Korniotis, and Kumar (2017), it is the height in teenager years that drive the relation between height and stock market participation, and experiences during teenager years serve as one of the two main channels through which height influences investment decisions. It would be interesting to see if this will be the same case in China if more data from the teenage years of individuals had been made available. It would not be surprising to see a difference in the result when comparing households in China to the ones in the US and Europe. For example, Gomes, Haliassos, and Ramadorai (2020) said in their paper, household financial decisions are complex and heterogeneous. China and the West each have their unique social environment where differences in peer effects, cultural and hereditary factors, as well as cognition and educational interventions, could potentially play important roles in explaining the relation between physical characters and household financial decisions.

Furthermore, the established relationship between physical attributes and household financial decisions could extend to study their impacts on professional managers' performance. Given that the risk-taking behavior of mutual fund, hedge fund, and corporate managers could be correlated with their height and BMI (Addoum, Korniotis, and Kumar, 2017), other studies could try to get the dataset that has information on those Chinese professional money managers to assess any potential relationship between managers' performance levels (or risk attitudes) to their height (or BMI). Of course, the reason why there is no weight (BMI) effect on stock market participation among Chinese households could be a quick start for further analysis.

Finally, chief executive officers (CEOs) who are taller tend to have growth-focused corporate policies, which could be attributed to more confidence and less risk aversion brought by greater heights (Graham et al., 2013). Similarly, Graham et al. (2017) also show that more competent-looking physical appearances lead to higher compensation among CEOs. As more extensive data on physical attributes from other economic settings become available in China, similar studies could be conducted to further explore the relationship between personal physical attributes and managerial decisions as well. In summary, after much literature in the area of household finance has extensively studied households in the West, a lot more remains to be done to better understand the investment choices of Chinese households. Hopefully, this paper has provided some insights for further research in the future.

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