Fiction or Fact: Systematic Gender Differences in Financial Investments?

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Very nice paper & wondeful dataset!

- Dataset:
  - Representative sample: 10% of total Danish adult population, period 1997-2004.
  - Large number of financial and socioeconomic background characteristics

Main Motivation

- A number of previous studies find that:
  - women have a lower propensity to invest in financial assets than men
  - once women do invest in financial assets, do they hold less risky portfolios
- Authors' claim that these findings:
  - "are artifacts of studies based on non-comprehensive and selective data"

Second Motivation

- Most previous studies analyze the effect of marriage and divorce on financial market behaviour using cross-section data
- The authors explore this issue exploiting the panel structure of their data. Another nice feature of their data is the possibility of observing cohabitation as well as marriage.

3. Descriptive Statistics

Table 1: Descriptive Statistics

	Mean/Proportion						
		Males			Females		
Variable	All	All	Single	Married	All	Single	Married
Bond Market Participation Rate	0.10	0.10	0.08	0.11	0.10	0.13	0.07
Stock Market Participation Rate	0.25	0.27	0.21	0.31	0.23	0.23	0.24
Married	0.63	0.63	0.00	1.00	0.63	0.00	1.00
Male	0.50	1.00	1.00	1.00	0.00	0.00	0.00
Children	0.23	0.21	0.02	0.32	0.24	0.11	0.32
Age	46.0	45.2	38.9	48.9	46.7	46.6	46.7
Length of Education	11.4	11.6	11.1	11.8	11.3	10.9	11.5
Noncapital Income	242,820	286,094	210,510	330,004	200,034	180,329	211,533
Cash Holdings	-18,274	-36,927	-14,759	-49,788	245	21,221	-11,757
Equity in Houses	398,606	535,230	255,611	697,672	263,523	221,953	287,784
Pension Contribution	15,814	19,091	11,095	23,736	12,574	8,573	14,909
Stock Value	30,024	32,945	21,147	39,798	27,136	48,332	14,766
Bond Value	39,728	45,506	28,436	55,422	34,015	56,578	20,848
Ratio Stock/Financial Assets Value	0.30	0.31	0.31	0.31	0.29	0.26	0.31
Ratio Bond/Financial Assets Value	0.31	0.30	0.31	0.30	0.32	0.33	0.31
Ratio Stock/Total Assets Value	0.15	0.13	0.20	0.10	0.18	0.18	0.19
Ratio Bond/Total Assets Value	0.21	0.18	0.23	0.16	0.24	0.25	0.23
Ratio Stock/Bond Value	39,737	46,086	44,735	46,626	32,602	42,612	26,436
Observations	3,023,110	1,502,977	552,291	950,686	1,520,133	560,205	959,928

4. Financial Market Participation

Table 2: Results from Bivariate Probit Models

	Simple Model				Extended Model			
Explanatory Variable	**Stocks**		**Bonds**		**Stocks**		**Bonds**	
Constant	-4.142	(0.020) *	-3.531	(0.024) *	-4.776	(0.105) *	-5.501	(0.114) *
Married	0.029	(0.003) *	-0.240	(0.004) *	-0.095	(0.013) *	-0.255	(0.014) *
Male	0.035	(0.004) *	-0.123	(0.005) *	-0.018	(0.015)	-0.202	(0.016) *
Married Male	0.045	(0.005) *	0.199	(0.006) *	0.075	(0.017) *	0.185	(0.019) *
Age	0.011	(0.000) *	0.018	(0.000) *	0.007	(0.000) *	0.016	(0.000) *
Children	-0.110	(0.002) *	-0.201	(0.004) *	-0.039	(0.007) *	-0.066	(0.009) *
Length of Education	0.025	(0.000) *	0.038	(0.000) *	0.010	(0.001) *	0.027	(0.001) *
Economist	0.368	(0.006) *	0.132	(0.008) *	0.283	(0.019) *	0.199	(0.020) *
Log Noncapital Income	0.140	(0.002) *	0.027	(0.002) *	0.097	(0.009) *	-0.009	(0.009)
Lagged Stock Participation	2.597	(0.002) *	0.394	(0.003) *	2.330	(0.007) *	0.208	(0.008) *
Lagged Bond Participation	0.076	(0.003) *	2.406	(0.003) *	-0.013	(0.010)	2.115	(0.009) *
Lagged Stock Return	-0.084	(0.004) *	0.157	(0.005) *	-0.428	(0.021) *	1.015	(0.024) *
Cash Holdings					0.122	(0.003) *	0.108	(0.003) *
Equity in Houses					0.055	(0.004) *	0.113	(0.004) *
Pension Contribution					0.013	(0.003) *	0.023	(0.003) *
St.Dev.(Growth Noncapital Income)					0.000	(0.000)	0.000	(0.000)
Correlation (Noncapital Income; Stock Return)					-0.007	(0.009)	0.009	(0.010)
Correlation (Noncapital Income; Bond Return)					-0.026	(0.010) *	-0.006	(0.012)
St.Dev. (Growth Equity in Houses)					0.000	(0.000)	0.000	(0.000)
Correlation (Equity in Houses; Stock Return)					0.045	(0.009) *	0.004	(0.010)
Correlation (Equity in Houses; Bond Return)					0.033	(0.009) *	-0.009	(0.010)
Correlation (Equity in Houses; Noncapital Income)					-0.002	(0.008)	0.019	(0.009) *
Correlation coefficient	0.425 (0.002)*				0.301 (0.005)*			
Observations	2,928,016				946,578			

5. Portfolio Riskiness

- Issues
  1. Selection issue: Lagged variables are used as instruments.
  2. Which is the relevant measure: financial wealth or total wealth
     - Results depend completely on this choice
  3. It is not clear that results suggest that male have a less risky portfolio
     - If we use financial wealth: single female have relatively less (more) stock (bonds) than single male (traditional result)
     - Total wealth: Single male have relatively less stock and also relatively less bonds.

6. Asset Allocation and Moving Together

- Differences in differences Analysis
  - The effect of “moving in”:
    - Once we take into account self-selection, no significant effect
  - The effect of “moving out”
    - Substantial effect

6. Asset Allocation and Moving Together

- In some sense this might be a different paper
- It would be interesting to observe how wealth varies with marriage and divorce in order to understand better the results
- Technical minor question: are you controlling for individual fixed effects? If not, why not?

Other minor issues

- Related paper:
  - Check Funk & Adams “Beyond the glass ceiling: Does gender matter?”

    Examine gender differences at the executive level using data on board members in Sweden. They find that female directors are slightly more risk-loving than male directors.
- Typos:
  - Page 10, next to last line, “married men hold a considerably lower…”. Or should it say “higher”?

Thank you!