

DO HOUSEHOLDS MATTER FOR ASSET PRICES?

DAVIS, KNÜPFER, KVAERNER, SEN-DOGAN, VOKATA

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Discussion

CEPR European Conference on Household Finance

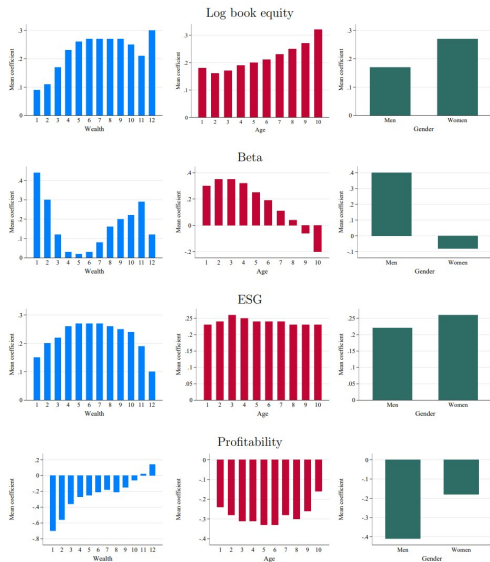
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- This paper: Koijen and Yogo (2019, JPE; henceforth KY) for Norway
 - ▶ Adds granular data on households' portfolios which KY couldn't do (nowadays Addepar?)

Steps:

- 1 Estimate granular demand systems for households (grouped by wealth $\times$ age $\times$ gender), institutions, governments, banks, foreign investors, listed firms, nonlisted firms
- 2 Use demand system to evaluate counterfactual questions
 - ★ What if we reallocate wealth from households to institutions?
 - ★ Which investor groups “create volatility” in markets?
 - ★ Does households' latent demand (the unexplained part of their demand) predict returns?
 - ★ Can a hypothetical hedge fund profit from that?

DEMAND COEFFICIENTS



- Wealthy, old, women overweight large cap
- Least wealthy and wealth, young, men overweight high β
- Most and least wealthy underweight ESG
- Least wealthy and men underweight profitability

COUNTERFACTUALS - ANOMALIES

Table 5. Spread Portfolio Returns and Counterfactual Effects on Expected Return

The first two columns report the historical mean monthly high-minus-low spread return (in %) and its t-statistic over the sample 2007–2020. Columns 3–4 report the mean counterfactual monthly price impact (in percentage points) and the implied change in expected return when transferring 50% of the wealth of the bottom 99% of households to institutions. Columns 5–6 report the same for a 50% wealth transfer from the top 1% of households to institutions. The $\Delta E[\text{Ret}]$ values are computed as $(1 - \rho\psi) \times \text{PI}$ (Price impact), with $1 - \rho\psi \approx 0.0307$ from the price process estimation.

Portfolio	Actual Spread Return		Bottom 99% → Inst.		Top 1% → Inst.	
	Mean (%)	t-stat	PI (%)	$\Delta E[\text{Ret}]$ (%)	PI (%)	$\Delta E[\text{Ret}]$ (%)
DIV	0.617	1.717	4.136	-0.12	1.012	-0.03
ROE	0.725	2.154	3.584	-0.11	7.098	-0.21
BAB	0.897	1.894	-1.093	0.03	-8.732	0.26
ESG	0.718	1.973	-2.661	0.08	0.887	-0.03

- Reallocating 50% of wealth from the bottom 99% to institutions increases the price of profitability by 3.5%
 - their portfolio allocations contribute toward the profitability premium

COUNTERFACTUALS - VARIANCE

Table 8. Variance Decomposition of Stock Returns

This table reports the cross-sectional variance of monthly stock returns due to supply- and demand-side effects. Supply effects are aggregated and consist of changes in shares outstanding, stock characteristics, and dividends. Demand-side effects are reported by investor type and consist of changes in assets under management, preference parameters, and latent demand. Each coefficient (“Est”) represents the share of variance due to a particular attribute listed in the first column. The coefficients are based on panel regressions with time-fixed effects from January 2007 to April 2020. Standard errors (“se”) are Newey-West adjusted with a lag length of 4 ($\approx 0.75 \times 171^{1/3}$). Columns labeled by WLS are based on WLS with free-float adjusted market capitalization as weights. OLS means equal weight. The sample period is from 2007 to 2020. Households are reported by stock wealth in million NOK.

	%Mkt	WLS			OLS		
		Est	se	Est %Mkt	Est	se	Est %Mkt
Household sector	0.18	0.25	0.01	1.4	0.47	0.01	2.6
Institutions	0.39	0.33	0.01	0.9	0.25	0.01	0.6
Listed firms	0.04	0.04	0.00	1.1	0.04	0.00	1.1
Non-listed firms	0.01	0.02	0.00	1.6	0.03	0.01	3.3
Banks	0.01	0.02	0.00	1.7	0.03	0.00	2.8
Foreign	0.16	0.19	0.01	1.2	0.16	0.01	1.0
Governments	0.22	0.14	0.02	0.6	0.01	0.00	0.1
Supply		0.01	0.02		0.00	0.01	

- All groups contribute $\approx$ according to their size
- households & banks somewhat more, governments somewhat less

INFORMATIVENESS OF LATENT DEMAND

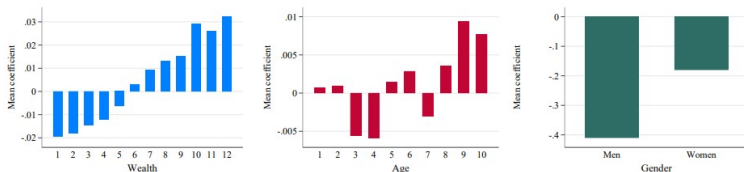


Figure 4. Informativeness of Household Latent Demand. This figure plots the average price informativeness coefficient for three categorizations of households. Informativeness is measured by the coefficient π_i in Eq. 29.

- The wealthy and women have more informative latent demand
- informative = predicting increases in future firm profitability (why not returns?)

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 - ▶ households underweight profitable stocks $\Rightarrow$ depresses price of profitable firms $\Rightarrow$ create profitability premium
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 - ▶ Is it that household *preferences* for profitability create the profitability premium? (the paper)
 - ▶ We learn that different investor groups have different portfolio tilts... but no identification of “preferences” or where tilts come from
 - ▶ My take: this exercise tells us **where to look** and whether theories centered on households or intermediaries are relevant... but does not answer questions by itself
 - $\Rightarrow$ Consider narrower research questions that get answered more in-depth

COMMENT 1B: WHAT DO WE LEARN?

- The paper argues: “contrary to common assertions” households matter for asset prices
 - ▶ Strawman. All neoclassical consumption-based asset pricing says consumers are marginal (can be wealthy consumers, e.g., Malloy, Moskowitz, Vissing-Jorgensen, 2009)
 - ▶ Intermediary asset pricing is the exception $\Rightarrow$ intermediaries are marginal
 - ▶ In asset demand systems, everyone is marginal (unless they invest passively...)

$\Rightarrow$ I don't think this should be the punchline of the paper

COMMENT 2A: COUNTERFACTUALS - ANOMALIES

- 1 Taking portfolios of an investor type as given, the impact of an investor group is

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- What are reasonable portfolio flows $\Delta \log AUM$? Are they the same for each investor group?

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- 4 Linearization (is ok) + grand counterfactuals (reallocating 50% of wealth) = imprecise
 - ▶ Evaluate the effect of smaller reallocations... linearity makes the effect proportional anyways

COMMENT 2B: COUNTERFACTUALS - VARIANCE DECOMPOSITION

- For each period, trace out how much each investor's demand shocks moved prices.
 - ▶ Following KY, this gives rise of a variance decomposition based on investors' shocks
 - ▶ Missing the role of demand elasticities $\Rightarrow$ an elastic investor ensures that price impact of others' demand shocks
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- How well do the counterfactuals compare to actual out-of-sample shocks?
 - ▶ Imagine the mandate of the NBIM (Norwegian sovereign wealth fund) changes, e.g., divestment from Israel. How well does the demand system predict demand and price changes?
 - ▶ Exercises like this can lend credibility to the counterfactuals

COMMENT 2C: COUNTERFACTUALS - ADDING A HEDGE FUND

- The last exercise adds a hedge fund trading on latent demand of households to the demand system
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- Haddad, Huebner, and Loualiche (2025, AER): $\approx 2/3$ of direct effect compensated by other investors changing strategies (for elasticity)

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- With a richer factor structure, elasticities at the factor or meso level are not micro (Haddad, He, Huebner, Kondor, Loualiche, 2025)
- This matters for the anomaly counterfactual exercises, where lower portfolio-level elasticities would translate into more impact on asset prices and expected returns

CONCLUSION

- Great data!
- Interesting facts about households' portfolios and that they affect asset prices...
- Beyond pointing at who matters, need better understanding of forces that drive portfolio choice...