

Financial Distress and Macroeconomic Risks

(Mustre-del-Río, Sánchez, Mather, and Athreya, 2022)

Discussion by Fiona Greig Global Head of Investor Research and Policy, Vanguard

November 17, 2022

The research question is superb.

Research question: How does financial distress matter for understanding the aggregate and cross-sectional consumption responses to macroeconomic shocks?

Why this matters.

- 1. Recessionary shocks are often **regressive** and increase inequality. We need to think about recession response as a tool for mitigating both economic contraction and inequality.
- 2. The most impacted workers are also those who experience the most **financial distress** in general. Welfare losses in the face of macroeconomic shocks could be large without policy interventions.
- 3. Each recession is unique and warrants a different **policy response.** *We need to learn how different fiscal and macroeconomic policies work and when to use which.*

The answer is...

Research question: How does financial distress matter for understanding the aggregate and cross-sectional consumption responses to macroeconomic shocks?

The answer is... complicated (2x3x3x2 = 36 possible answers)

Two definitions of financial distress...

- 1. 30 day delinquency on credit card
- 2. 80% of credit card borrowing limit exhausted

Three response outcomes tracked...

- 1. Aggregate consumption
- 2. Dispersion of the consumption response
- 3. Consumption-based poverty

Research question: How does financial distress

<u>matter</u> for understanding the <u>aggregate and</u> <u>cross-sectional consumption responses</u> to <u>macroeconomic shocks</u>?

Three possible channels explored...

- 1. Direct: People who are credit constrained can't smooth their consumption during a downturn.
- 2. Indirect: Some people are persistently credit constrained, and therefore will be impacted more by macroeconomic shocks.
- 3. Correlational: Places with the greatest financial distress may experience the largest macroeconomic shocks.

Vanguard

Two types of macroeconomic shocks...

- 1. House price shock (Great Recession)
- 2. Labor income shock (COVID-19)

- 1. The **indirect channel** is really important! Empirical evidence from COVID corroborates this. What is being captured here? Some people are persistently *liquidity constrained or* persistently more *impatient*?
- 2. Countercyclical policy is designed to influence spending. Can you use the model to interrogate not just macroeconomic shocks but the **policy interventions** to mitigate them (e.g. unemployment insurance, stimulus, debt forbearance)?
- 3. Housing price shocks and income shocks are qualitatively very different. That makes them interesting. MPCs out of housing price shocks feel like a **"mushier" target** than MPCs out of income shocks. Are we at risk of false precision?
- 4. The **current environment** is again different high inflation combined with big drop in stock prices. How might we use this model to understand distributional consequences of these (very different) price shocks?

UI benefits during COVID were so generous that they drove jobless workers out of a lowliquidity state. MPCs were still high.

Low liquidity state: MPC at start of UI benefits = 0.43.

High liquidity state: MPC when \$600 supplements end = 0.30

Some form of *permanent* heterogeneity unrelated to liquidity (e.g. impatience) must be driving the high MPC.

Unemployed

Employed

Source: Ganong, Greig, Noel, Sullivan and Vavra. July 2022. <u>Spending and</u> Job Finding Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data.

Vanguard

Percent difference from January 2020 (mean)



- 1. The **indirect channel** is really important! Empirical evidence from COVID corroborates this. What is being captured here? Some people are persistently *liquidity constrained or* persistently more *impatient*?
- 2. Countercyclical policy is designed to influence spending. Can you use the model to interrogate not just macroeconomic shocks but the **policy interventions** to mitigate them (e.g. unemployment insurance, stimulus, debt forbearance)?
- 3. Housing price shocks and income shocks are qualitatively very different. That makes them interesting. MPCs out of housing price shocks feel like a **"mushier" target** than MPCs out of income shocks. Are we at risk of false precision?
- 4. The **current environment** is again different high inflation combined with big drop in stock prices. How might we use this model to understand distributional consequences of these (very different) price shocks?

Large fiscal supports elevated cash balances (and spending) especially for lower income families. Can you model these?



Huge amounts of fiscal support

- 3 rounds of stimulus
- UI supplements
- Child tax credits
- Mortgage
 forbearance
- Student loan forbearance



Note: We assign households into income quartiles based on the relative rank of their annual incomes in 2019, 2020, and 2021.

- 1. The **indirect channel** is really important! Empirical evidence from COVID corroborates this. What is being captured here? Some people are persistently *liquidity constrained or* persistently more *impatient*?
- 2. Countercyclical policy is designed to influence spending. Can you use the model to interrogate not just macroeconomic shocks but the **policy interventions** to mitigate them (e.g. unemployment insurance, stimulus, debt forbearance)?
- 3. Income shocks and housing price shocks are qualitatively very different. That makes them interesting. MPCs out of housing price shocks feel like a **"mushier" target** than MPCs out of income shocks. Are we at risk of false precision?
- 4. The **current environment** is again different high inflation combined with big drop in stock prices. How might we use this model to understand distributional consequences of these (very different) price shocks?

MPC out of (even transitory) income shocks are (always) big.

Figure 2: Out-of-pocket healthcare spending spikes when a tax refund payment is received



MPCs out of housing wealth are small – maybe even zero.

Estimates of the marginal propensity to consume out of a \$1 increase in housing wealth



Kaplan et al. (2016) Mian, Rao, and Sufi (2013) Pistaferri (2016)

Vanguard

JPMCI, Homeowners with a mortgage (monthly)

JPMCI, Homeowners with a mortgage (annual)

Source: Farrell, Diana, Fiona Greig, and Chen Zhao. 2020. "The Housing Wealth Effect in the Post-Great Recession Period: Evidence from Big Data." JPMorgan Chase Institute.

Consumption response to income shocks and housing price shocks are qualitatively and quantitatively very different.

MPCs out of a **temporary income shock** are measured over a **1 year period.**

They are big and relatively heterogeneous.

MPCs out of a **permanent**

over a 3-year period.

housing shock are measured

They are small and relatively

 Table 7: MPC Out of Income Shocks

	(lowest FD)			(highest FD)			
	Aggregate	Q1	Q2	$\mathbf{Q3}$	$\mathbf{Q4}$	Q5	
MPC	.308	0.239	0.287	0.317	0.331	0.385	

 Table 6: MPC Out of House-price Shocks

	Aggregate	(lowest FD) Q1	$\mathbf{Q}2$	Q3	Q4	$\begin{array}{c} \text{(highest FD)} \\ \text{Q5} \end{array}$
All Households	0.070	0.071	0.071	0.069	0.071	0.072
Homeowners	0.087	0.081	0.081	0.088	0.091	0.095
Homeowners, Uncorrelated Shocks	0.089	0.083	0.085	0.092	0.095	0.099

Vanguard

homogenous.

Land your model somewhere here...

MPC out of income shock



MPC out of house price shock



- 1. The **indirect channel** is really important! Empirical evidence from COVID corroborates this. What is being captured here? Some people are persistently *liquidity constrained or* persistently more *impatient*?
- 2. Countercyclical policy is designed to influence spending. Can you use the model to interrogate not just macroeconomic shocks but the **policy interventions** to mitigate them (e.g. unemployment insurance, stimulus, debt forbearance)?
- 3. Housing price shocks and income shocks are qualitative very different. That makes them interesting. MPCs out of housing price shocks feel like a **"mushier" target** than MPCs out of income shocks. Are we at risk of false precision?
- 4. The **current environment** is again different high inflation combined with big drop in stock prices. How might we use this model to understand distributional consequences of these (very different) price shocks?

Credit card and auto loan delinquencies are ticking up



Retirement Plan loans and withdrawals are increasing in 2022



retirement plans. Thin lines reflect raw data. Thick lines seasonally adjust the data using a Hodrick-Prescott filter.

Thank you.