

Discussion

External Equity Financing Shocks, Financial Flows and Asset Prices

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This is a great paper!

Incorporate bits of corporate finance frictions into asset pricing

- Renewed interest in macroeconomics and finance for real role played by financial frictions
- Which firms' cost of capital is most affected?
- Which mechanism transmits these frictions at the firm level: where does heterogeneity come from

Already large literature looking at these effects. Few at the cross-section of expected returns – *Adrian, Etula and Muir*.

Plan

1 Summary

2 Questions and extensions

Empirical results

- Construct a time-series measuring the cost of external equity issuance
- Innovation (shocks?) in the cost of equity issuance is priced in the cross-section
 - ▶ Large positive price of risk for a wide range of test assets
 - ▶ Heterogeneous exposure to issuance shock accounts for value/investment/size spread...

Theoretical results

- Production based partial equilibrium AP model proposes a mechanism accounting for the empirical fact
 - ▶ qualitatively and quantitatively accurate
- Firms with better future investment opportunities have higher collateral value: less sensitive to the cost of equity issuance: lower returns with a positive price of risk

Plan

1 Summary

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What is the external issuance “innovation”?

	ICS	IMC	Entry	IPO	AE&M	E&M	Corp. Spread
ICS	1	0.02	0.40	0.17	0.05	-0.31	-0.42
IMC		1	0.17	0.14	-0.12	-0.36	-0.21
Entry			1	0.11	0.02	-0.56	-0.25
IPO				1	0.006	-0.69	-0.41
AE&M					1	-0.14	-0.07
E&M						1	0.69

What is the external issuance “innovation”?

- What is the issuance cost?
- Residuals from VAR with TFP and fraction of firms issuing equity
- Captures supply of credit from intermediary sectors:
orthogonalization of the shocks?
- Correlates with entry / corporate spread / Eisfeldt and Muir’s aggregate cost of external finance
- Theoretical underpinnings of the cost of equity (versus debt):
adverse selection and/or agency
- Why is adverse selection moving over the cycle?
- Do we understand the fundamental mechanism that distorts the cost of debt vs. equity over the cycle

Measurement

The measure

- Innovations from VAR: $\mathbf{y}_{t+1} = \mathbf{A}\mathbf{y}_t + \mathbf{u}_{t+1}$
- $\text{ICS}_t = \mathbf{u}_t \mathbf{e}_1$
- Identification assumption?

Not to worry about robustness!

- Price of risk does not move after orthogonalization and “SVAR identification”
- Add IPOs in \mathbf{y}_t : price of risk in same ball park.

If the ICS measure is noisy, what about looking at the mimicking portfolio?

- Comovement of aggregate quantities?
- Again, how does it comove with other “cost of finance” measures

The substitution hypothesis

- Mechanism highlighted relies on substitution between debt and equity
- Firms with better investment opportunities: easier to take on debt
 - ▶ Hedge negative ICS shocks when they cannot use equity

Looking directly at substitution across firms

- Firms with high covariation with ICS factor:
 - ▶ Higher level and cyclicity of debt issuance?
 - ▶ Frederico showed some results in that direction: needs more
- What about the price of debt? Could we learn something from debt directly in the cross-section?

Looking for real effects

- Firms with higher exposure to ICS
- What are the effects on investment in bad times? Cyclicity of their investment policy?

Alternatives and extensions

Ruling out alternative hypothesis

- No cash management in the model
- Chen/Bolton/Wang: market timing hypothesis
 - ▶ some firms are able to hoard cash when they face uncertain aggregate conditions
- link between firms' earnings or profitability and their exposure:
 - ▶ **Who** is able to time the market?

Why would the risk be priced in general equilibrium?

- If the friction is severe: where are firms hedging demand?
- Such large increase in the cost of capital would call for different capital budgeting policy in equilibrium
 - ▶ Wouldn't debt prices and quantities adjust to accommodate the friction across all firms?
 - ▶ back to the fundamental theoretical underpinning friction driving the cost of equity
- Probably beyond the scope of this paper but perhaps a potential direction going forward
- Sharper prediction about the price of risk

Conclusion

Very rich paper

- Lots of quantitative results: “close” match of the data
 - ▶ aggregate moments
 - ▶ aggregate moments in the financial sector
 - ▶ cross-sectional moments
- “Simple” mechanism that captures most cross-sectional heterogeneity

Going forward...

- Some more direct test of ...
 - ▶ the substitution mechanism
 - ▶ the collateral debt value channel
- more precise economic rationale for the source of risk: which friction matters!
- measurement might seem *ad-hoc* at times, but is particularly robust...
- ... indicates this must definitely be a direction worth pursuing