Discussion of

Cross-Market Timing in Security Issuance
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Summary

- Two views of corporate finance in the face of dysfunctional markets.

  ◦ Corporations may act as arbitrageurs.

  ◦ Non-fundamental price shocks may loosen financial constraints.

- This paper argues that both are true, but for different firms.

  ◦ Financially unconstrained firms act as arbitrageurs.

  ◦ Financially constrained firms use positive shocks to asset prices as an opportunity to raise capital and finance investment.

- Implications for leverage when equity is overvalued.

  ◦ Decreases for unconstrained firms, which just issue equity.

  ◦ Constant for constrained firms, which issue debt and equity.

Summary

- Paper documents a very specific version of the broader view.

- Flow Induced Price Pressure (FIPP)
  - When mutual funds receive outflows, they liquidate positions.
  - When they receive inflows, they expand pre-existing positions.
  - If flows are correlated among funds holding a particular stock, they may all be liquidating/expanding their positions at the same time → Price Pressure.

- Use FIPP as a measure of mispricing.
  - It forecasts both equity and debt returns.

- Use KZ as a measure of financial constraints.

General Comments

- Nice paper on an interesting subject.
  - Pulls together lots of interesting data sources.

- Nice empirical idea for isolating equity overvaluation.

- Main suggestions:
  - Flesh out the story a bit more.
  - Start with simpler empirics.
  - More discussion of magnitudes.
  - More discussion of main conditioning variables, FIPP and KZ.

Fleshing Out the Hypothesis

- Most intuitive version thinks about equity mispricing with a constant leverage constraint (but no explicit debt mispricing).
  - This is the case consider by Baker, Stein, and Wurgler (2003).

- When equity is overvalued:
  - Unconstrained firms issue equity and hold as cash (investment is already first best).
  - Constrained firms issue both debt and equity (because leverage constraint is loosened) and invest the proceeds.

Fleshing Out the Hypothesis

- When equity is undervalued:
  - Unconstrained firms should repurchase.
  - Seems unlikely that constrained firms would do the same but depends on magnitude of mispricing.

- What happens when debt is mispriced as well?
  - Debt mispricing positively correlated with equity mispricing.
  - So debt issuance becomes more attractive for unconstrained firms at the same time equity issuance does.
  - And becomes less attractive for unconstrained firms when equity repurchases are attractive.

Starting with the Raw Data

- Authors immediately jump to using FIPP as an explanatory variable.

- Would be nice to first see the pattern in the raw data.
  - Are debt and equity issuance more correlated for financially constrained firms than unconstrained ones?
  - Is leverage more sensitive to Q or M/B for unconstrained firms?
    - Could further examine sensitivities to aggregate versus firm-specific Q or M/B as in Lamont and Stein (2006).
  - Debt-Equity market segmentation: Time series correlation of credit spreads and Q or M/B.

- Longer time series and easier comparison to prior work.

Magnitudes: Prices

- Size of the predictability in stocks:
  - Standard asset pricing approach: form decile portfolios.
  - 10-1 FIPP portfolio generates -8.40% alpha over two years.
  - But from issuer perspective 10-5 returns might be more meaningful → something like -2.1% per year.
  - Doesn't seem huge but…

- What is the right comparison?
  - Net Share issuance anomaly?
  - Estimated costs of external finance?
    - Underwriting fees
    - Hennessy-Whited (2007)
  - Benefits of debt/capital structure optimization?
    - Graham (2000), Korteweg (2010)

Magnitudes: Prices

- Size of the predictability in bonds:
  - Panel approach: regress changes in credit spreads on FIPP.
  - 1 stdev higher FIPP = 22 bps rise in yields over 2 years = -0.6% return per year.
  - Can use this number to think about issuer incentives, but hard to compare to equity predictability
    - Guess 10 – 5 portfolio = median to 90th percentile = 1.5 stdevs?
  - Back of the envelope predictability twice as strong (2% per year) in equities as in bonds (1% per year).

- Suggestions
  - Treat debt and equity symmetrically so that effects can be compared

Magnitudes: Issuance/Capital Structure

- Size of the issuance effect in bonds:
  - 1 stdev higher FIPP = +26 bps net debt issuance for constrained firms.
  - 1 stdev higher FIPP = -14 bps net debt issuance for unconstrained.
  - Average net debt issuance is 3.2% and stdev is 17.6%.

- Size of the leverage effect is similarly small
  - 1 stdev higher FIPP = 6.9 bps lower leverage for unconstrained firms.
  - No effect for constrained.
  - Average leverage is 25%.

Magnitudes: Issuance/Capital Structure

- In contrast, 1 stdev of Baker-Wurgler (2002) market timing variable = 6-10% effect on leverage.

- What's the difference? A few possibilities:
  - FIPP may be better in terms of identification, but doesn't generate much variation in returns.
  - Lumpiness in issuance is somehow dampening the results.
  - Baker-Wurgler pick up the effects of repeated market timing.
    - But seems like you'd need a large number of episodes to aggregate up to their numbers.

FIPP

- Using anomaly variables to measure mispricing is a nice improvement on previous approaches.

- What about other anomalies?
  - Think of issuance as aggregating mispricing signals.
  - Identification tradeoff → is FIPP more plausibly exogenous than other anomalies?

- Continuation and reversal?
  - Effect of FIPP was positive, then negative in Lou (2011)
  - Seems to be just negative in this paper.

- Somewhat worrisome that forecasts debt returns?
  - Cleanest version: high returns for stock A → flows for fund F → high returns for stock B → B issues equity.

FIPP

- Strategy alpha reflects either mispricing or risk.
  - Paper is written largely with a mispricing perspective.

- Suppose FIPP captures some rational risk factor.
  - High FIPP indicates lower required returns.

- Could explain capital structure results.
  - Lower returns alter trade-off differently for constrained and unconstrained firms.

- Seems harder to generate investment results.
  - To a first order, lower required returns should induce more investment from all firms.
  - But there are more complicated rational explanations…

KZ

- Many measures of financial constraints.
  - KZ is a bit of a black-box.
  - Relatedly, spelling out exactly what is meant by financial constraints might be helpful.
    - External dependence
    - Cost wedge between internal and external funds

- Might try some others.
  - Rajan-Zingales (1998) external finance dependence → nice because it can be measured at the industry level.
  - Whited-Wu (2006).
  - Cash flow sensitivity of cash.

KZ

	Net CF from Financing	
FIPP	0.0393***	0.0122
	(0.0098)	(0.0133)
FIPP x Median Dependence		0.0176
		(0.0173)
FIPP x High Dependence		0.0553
		(0.0240)
Median Dependence		0.0236***
		(0.00313)
High Dependence		0.0671***
		(0.0048)

- More financially constrained firms are raising more total financing.

Additional Comments

- Split all analyses by KZ.

- Summary stats
  - Ensure that variation in FIPP is similar for constrained and unconstrained.

- Equity return forecasting regressions
  - Make sure there is the same in scope for market timing.

- Debt return and rating forecasting regressions
  - Same scope for timing.
  - Are these driven by changes in asset prices or changes in firm capital structure? → examine subsample w/o debt issues.
  - To the extent that unconstrained firms are arbitrageurs, should predictability be weaker for them? (No effect for IG debt)

Minor Additional Comments

- Clustering
  - Panel regressions cluster by firm.
  - May want to cluster by firm and time (Thompson (2010)).
  - Possibly even correct for persistence (Driscoll and Kraay (1998)).

- Sample sizes move around within some tables.

- Some numbers in the text don't seem to match the tables.

Conclusion

- Nice paper on an interesting subject.

- Encourage the authors to flesh out the hypothesis a bit more and think more about the magnitudes.

- Thanks!