



Flight to Liquidity and Global Equity Returns

by Goyenko and Sarkissian



Kristin Forbes – MIT

Conference on Risk Analysis and Management

World Bank

October 2, 2008



Comments

- Quick Paper Summary
- Understanding the results
- Liquidity measures
- Relevance to current crisis



Quick Paper Summary

- Uses several frameworks to test relationship between bond liquidity and various asset market variables
- Key Findings:
 - Bond illiquidity predicts stock market illiquidity (but not vice versa)
 - Global equity market volatility and US federal funds rate predict bond illiquidity (but not stock liquidity)
 - **Higher bond illiquidity correlated with lower stock returns**
 - Higher stock illiquidity correlated with lower future stock returns



Understanding the Results

- Hard to follow, but mechanism consistent with results seems to be:
 - Higher i or weaker economy \rightarrow flight to liquidity
 - Investors purchase bonds & sell equities & bond illiquidity \uparrow
 - \rightarrow Stock illiquidity $\uparrow \uparrow$ and Stock returns \downarrow
 - Equities more sensitive to flight-to-liquidity risk \rightarrow higher expected returns
- Key: Negative relationship between bond illiquidity & stock returns
- Questions:
 - Why focus on bond illiquidity as primary cause rather than the factors driving it—such as changes in interest rates or economic conditions?
 - Can increased purchases of bonds \rightarrow bond illiquidity \downarrow (not \uparrow)
 - Don't others find positive correlation between stock illiquidity & returns? (Amihud, 2002, Bekaert, Harvey & Lundblad, 2007)



Liquidity Measures

- **Stock liquidity**
 - Value-weighted proportion of daily zero returns in a given month
 - Need to consider a float adjustment (India)
 - Better measures available?
- **Bond liquidity**
 - Average percentage bid-ask spread of off-the-run US Treasury bonds with maturities up to 1 year
 - What about TED spread? (difference between interest rates on interbank loans & t-bills)
 - Sensitivity tests?



Relevance to Current Crisis

- Higher i or weaker economy \rightarrow flight to liquidity
 - Investors purchase bonds & sell equities & bond illiquidity \uparrow
 - \rightarrow Stock illiquidity $\uparrow \uparrow$
 - \rightarrow Stock returns \downarrow
 - Equities more sensitive to flight-to-liquidity risk \rightarrow higher expected returns
- Fits pretty well with current situation (except monetary policy)



Relevance to Current Crisis

- Role of foreign investors—only quick mention in paper
 - Greater impact of bond illiquidity on global stock returns in more recent period (1992-2006)
 - “Interpret results as consistent with increased role of foreign investors in US Treasury market”
- But what are other implications?



Relevance to Current Crisis

- Foreign investors hold growing share of US assets, especially US Treasuries

	Equity	U.S. Treasuries	Agencies	Corporate Debt	Total
Outstanding Total (bn)	\$27,768	\$3,454	\$6,105	\$11,391	\$48,718
% Foreign Owned	11.3%	56.9%	21.4%	24.0%	18.8%

Source: UST, June 2008.

Note: U.S. Treasuries are Marketable Treasuries and exclude Central bank holdings.



Relevance to Current Crisis

- Paper makes a logical assumption based on past—a negative shock causes a flight to liquidity/quality—and the ultimate liquid/quality asset is US Treasuries
 - But what if the shock and weakness originates in the US?
 - What will be the response of foreigners? Will they continue to invest over \$5bn/day in US and buy US Treasuries?



Foreign Purchases of US Securities (\$bn)

	Apr 08	May 08	Jun 08	Jul 08
Total	105.7	109.7	62.7	-25.6
Treasuries	77.0	5.7	28.3	34.3
Agencies	15.3	28.1	31.4	-50.0
Corporate bonds	25.0	59.9	4.7	-4.1
Equities	-11.6	15.9	-2.3	-6.8

Other possible measures of flight to liquidity/quality? Gold?

Source: USG, TIC report, Sept. 16, 2008. Not seasonally adjusted.



Final Thoughts

- Some interesting results on relationship between one measure of illiquidity in US to equity prices
- Need a much clearer explanation of what paper tests, what are alternate hypotheses, and what it finds
- This could help us find more gems in the analysis---and even links to help us understand current events