"Macro Risk Premium and Intermediary Balance Sheet Quantities"

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Comments by Simon Gilchrist

Overview

- Summarize theoretical work that emphasizes linkages between financial intermediary balance sheets and real economic activity.
- Impose temporal structure to measure the "macro risk premium" and the "risk appetite" of the financial sector.
- Key finding: risk appetite granger causes macro-risk premium and hence economic activity.

Balance sheets and real activity:

- Broad credit channel:
  - Borrower balances sheets determine credit spreads and hence real spending decisions.
  - Financial accelerator mechanism – shocks to the economy are amplified via their effect on borrower net worth.
- Narrow credit channel:
  - Bank balance sheets determine ability of banks to raise external funds.
  - As interest rates rise, bank assets become impaired, forcing a reduction in lending to bank-dependent borrowers.

The shadow-banking channel:

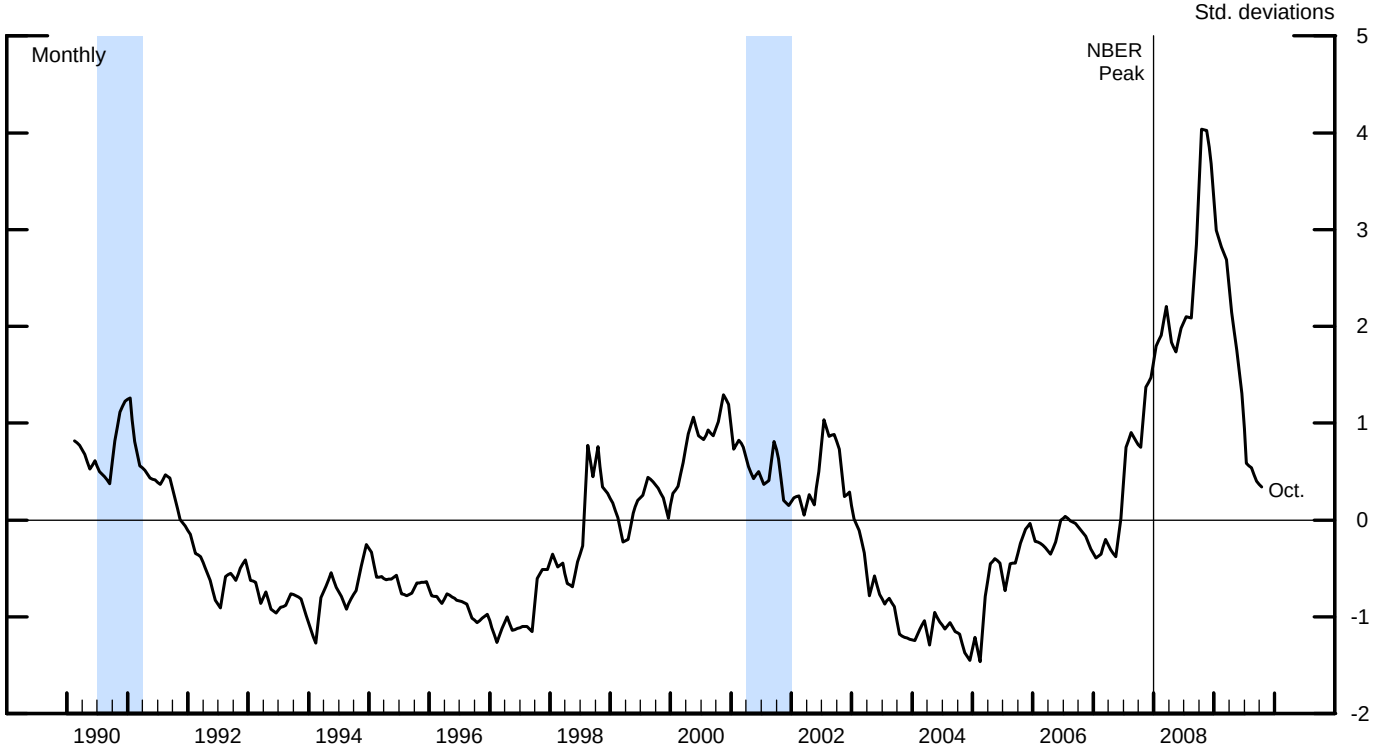
- Shocks to value of assets held by financial institutions influence leverage of the financial sector.
  - As risk appetites of financial institutions decline, premiums on corporate and household debt rise.
- Why is this important?
  - Leverage of shadow banking system is much greater than leverage in non-financial sector.
  - Leverage of shadow banks is more procyclical than commercial banks owing to systematic use of mark-to-market accounting (value at risk) in risk management.

Empirical approach:

- Macro risk premium summarizes contemporaneous relationship between credit spreads and current economic activity.
  - Reverse causation: current and future cash flows fall, leading to a rise in credit spreads owing to increased default risk.
- Risk appetite summarizes relationship between current risk premium and lagged balance sheets.
  - Mark to market accounting procedures also raise issues of reverse causation when measuring risk appetite.
- Temporal assumptions are somewhat arbitrary:
  - Time-to-build mechanisms imply that a rise in corporate credit spreads today influences investment spending tomorrow.

Alternative approach:

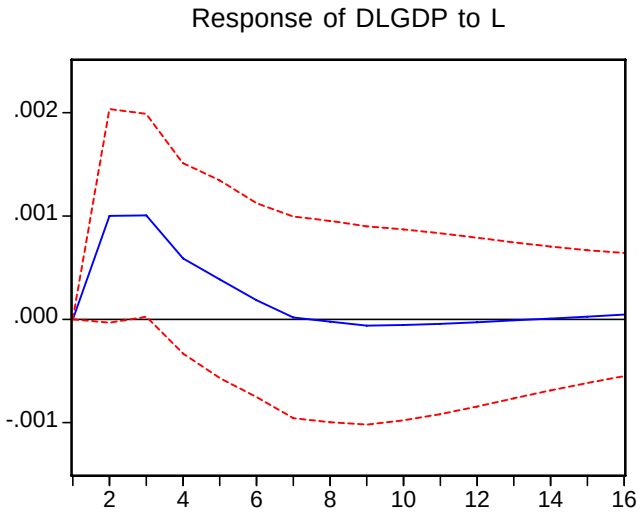
- Gilchrist and Zakrajsek estimate the "Excess Bond Premium" by decomposing credit spreads into a default risk component and a residual component that measures the risk appetite of corporate bond investors.
- Financial institutions (commercial banks, investment banks, insurance companies) are the primary purchasers of corporate bonds.
- If markets are segmented, risk appetite of financial institutions drives the EPB.

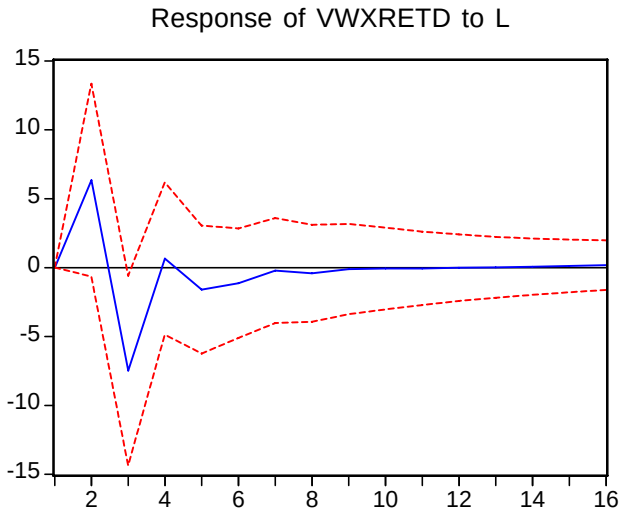

Std. deviations
Monthly
NBER
Peak
Oct.
5
4
3
2
1
0
-1
-2
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008

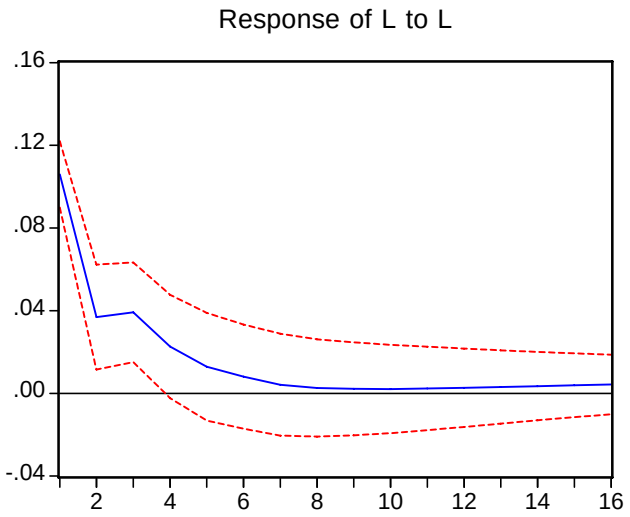
GDP Growth Forecast:								
	1 *Quarter Horizon*				4 *Quarter Horizon*			
r	-4.69	-	-	-1.81	-2.29	-	-	-1.79
	(-5.96)	-	-	(-2.14)	(-2.94)	-	-	(-0.31)
l	-	7.89	-	3.92	-	6.04	-	4.18
	-	(5.90)	-	(2.95)	-	(5.60)	-	(4.85)
ebp	-	-	-2.62	-1.76	-	-	-2.19	-2.10
	-	-	(-7.23)	(-4.19)	-	-	(-7.71)	(-7.70)
R^2	0.28	0.28	0.36	0.48	0.08	0.26	0.40	0.58

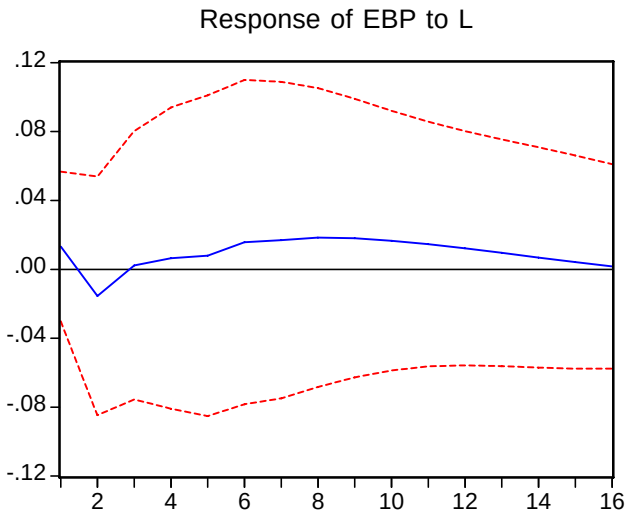
Excess Stock Return Forecast:								
	1 *Quarter Horizon*				4 *Quarter Horizon*			
r	-13.75	-	-	18.27	1.75	-	-	19.19
	(-0.94)	-	-	(1.14)	(0.20)	-	-	(2.60)
l	-	49.37	-	26.16	-	8.32	-	-5.51
	-	(2.06)	-	(1.03)	-	(0.62)	-	(0.51)
ebp	-	-	-24.53	-25.38	-	-	-23.78	-27.27
	-	-	(-3.74)	(-3.35)	-	-	(-6.98)	(-7.69)
R^2	0.00	0.036	0.13	0.13	0.00	0.00	0.36	0.40

Response to Cholesky One S.D. Innovations ± 2 S.E.









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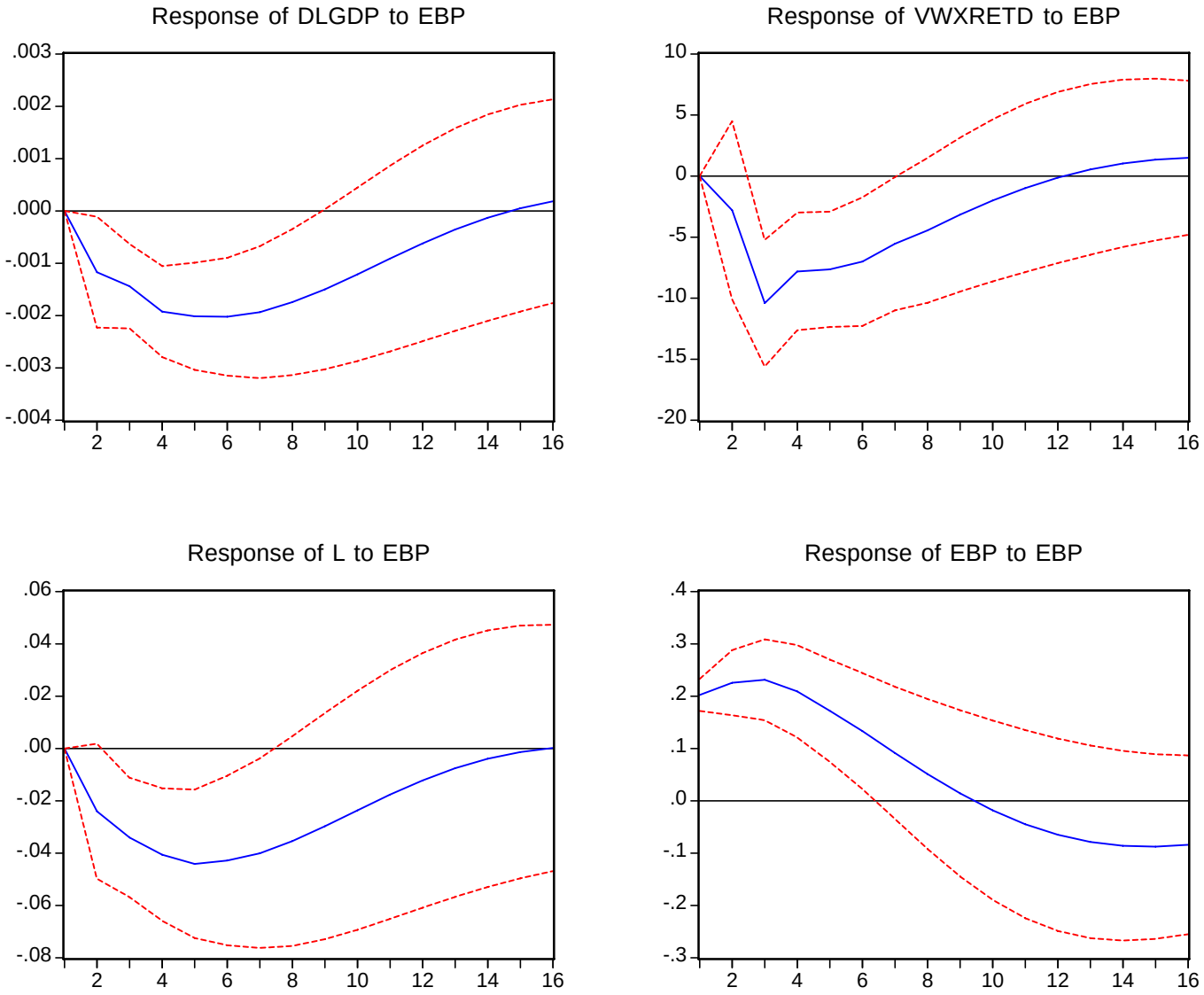

Summary:

- Very intuitive approach to studying the relationship between financial intermediary balance sheets and economic activity
- Risk appetite forecasts future GDP growth and shocks to risk appetite have impact on GDP in a VAR framework.
- Shocks to excess bond premium appear to drive risk appetite, (as well as GDP and stock market).
- Ultimately we need to impose more discipline on data to fully identify causal mechanisms linking financial intermediary balance sheets and real activity.