Market Participants Monitoring of Economic and Financial Conditions

Simon Gilchrist[1]

[1]New York University and NBER

February 22nd, 2019

Financial Conditions and Economic Activity:

- Financial indicators contain considerable information regarding the course of future economic activity.
- Asset prices reflect news regarding both future cash flows and current and future discount rates inclusive of risk premia.
- Financial indicators may also exert a causal influence on economic activity through changes in the implied cost of capital relevant for households and firms.

Constructing FCI: GS

- Construct a financial indicator that reflects the "cost of capital" shift variable relevant for the IS curve.
- Rely on simple cointegrating model to deduce relevant relationships. Example:

$$\begin{aligned} log(I/Y) &= log(I/K) + log(K/Y) \\ &= log(g+\delta) - log(r^b + \delta) \\ &= log(g+\delta) - \gamma(r^b + \delta) \end{aligned}$$

- Use model to estimate business-cycle sensitivity of GDP from relevant financial indicators:

$$FCI = 0.45 i_t^{10yr} + 0.4 s_t^{bbb} + 0.04 i_t^{FFR} + 0.05 \frac{D_t}{P_t} + 0.06 FX_t$$

Observations:

- Nominal rather than real yields.
- First rather than second moments.
- Weighting implies we are very close to simply constructing the nominal yield on BBB corporate bonds.

Constructing FCI: Alternatives

- Chicago Fed Index – "agnostic" approach that computes the first principal component of a variety of financial variables.
- Gilchrist and Zakrajsek – single index that summarizes conditions in bond markets.
  - EBP: Corporate bond spread after controlling for default risk
- Weighted average of financial indicators based on Bayesian posterior forecasting weights?

Questions:

- Do FCI help forecast?
- Do FCI provide a guide to the source of fluctuations?
- Does monetary policy pass through to FCI?
- Should monetary policy respond to FCI?

BMA Forecasting Performance with Credit Spreads:
Faust, Gilchrist, Wright and Zakrajsek (2013)

Predictor Set: All Variables

	Forecast Horizon (h quarters)				
Economic Activity Indicator	$h = 0$	$h = 1$	$h = 2$	$h = 3$	$h = 4$
GDP	0.94	0.82	0.73	0.79	0.85
	[0.04]	[0.01]	[0.00]	[0.02]	[0.05]
Unemployment rate	0.92	0.78	0.73	0.74	0.77
	[0.01]	[0.00]	[0.00]	[0.00]	[0.02]

NOTE: Relative MSPEs; bootstrapped p-values in brackets.

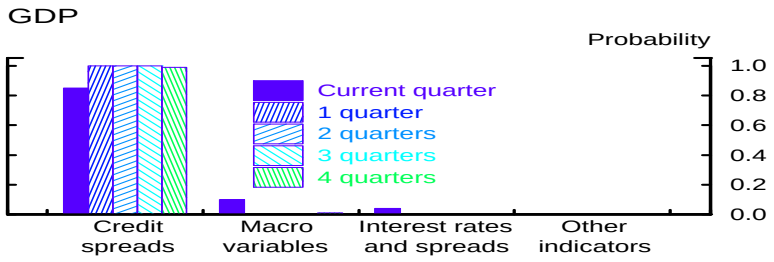
BMA Forecasting Performance without Credit Spreads:
Faust, Gilchrist, Wright and Zakrajsek (2013)

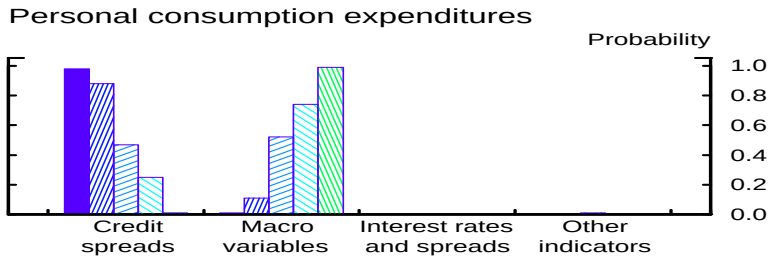
Predictor Set: All Variables Except Option-Adjusted Credit Spreads

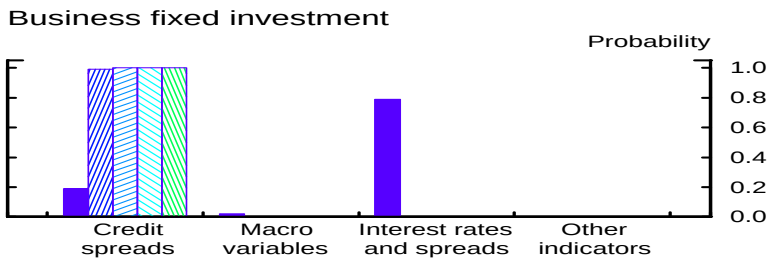
	Forecast Horizon (h quarters)				
Economic Activity Indicator	$h = 0$	$h = 1$	$h = 2$	$h = 3$	$h = 4$
GDP	0.96	0.95	0.95	0.98	0.98
	[0.12]	[0.11]	[0.12]	[0.13]	[0.14]
Unemployment rate	0.93	0.94	1.04	1.11	1.08
	[0.01]	[0.02]	[0.32]	[0.47]	[0.28]

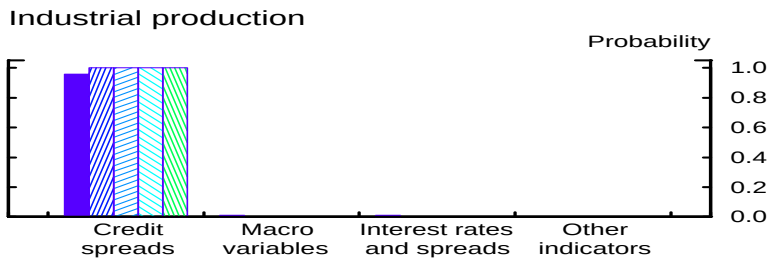
NOTE: Relative MSPEs; bootstrapped p-values in brackets.

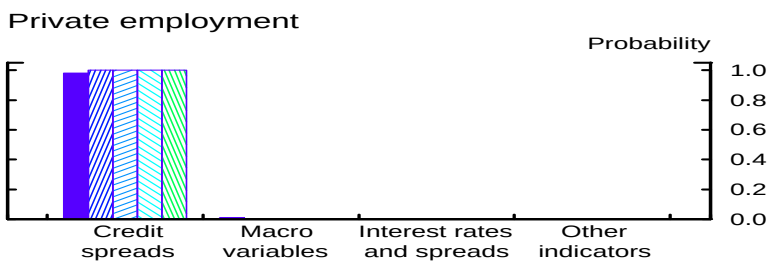
Bayesian Posterior Weights:
Faust, Gilchrist, Wright and Zakrajsek (2013)

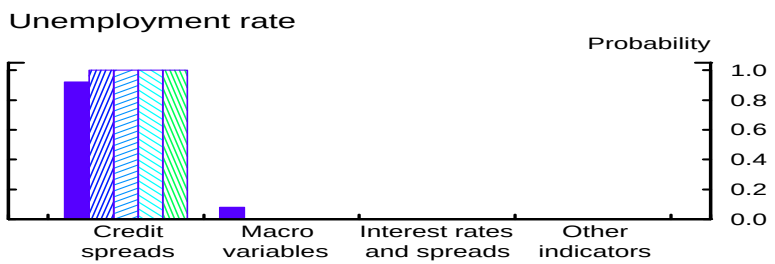


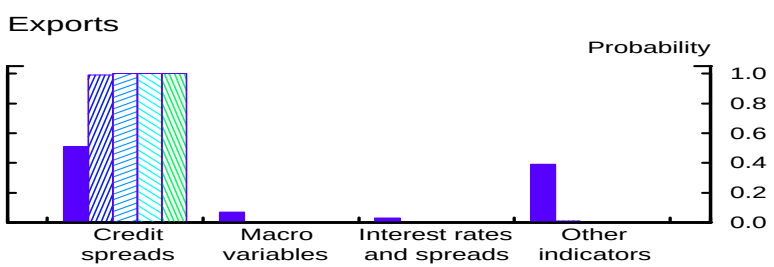


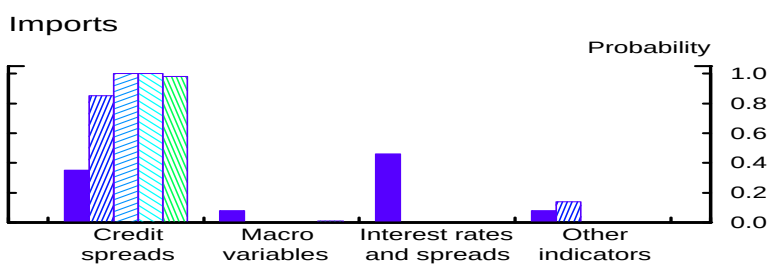




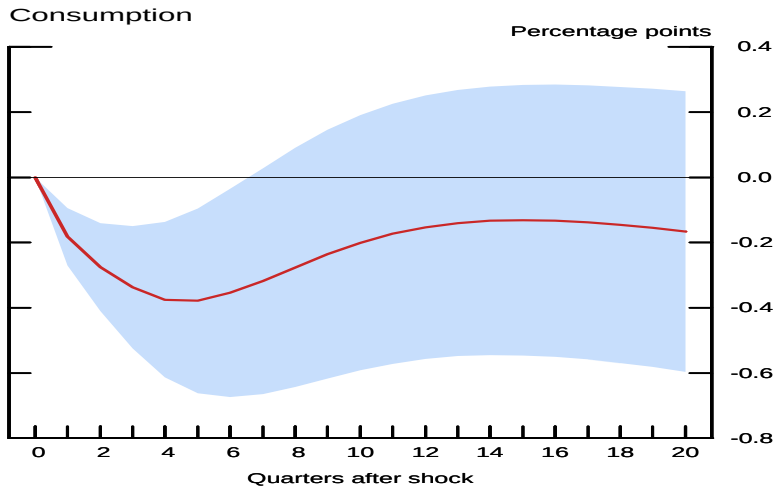


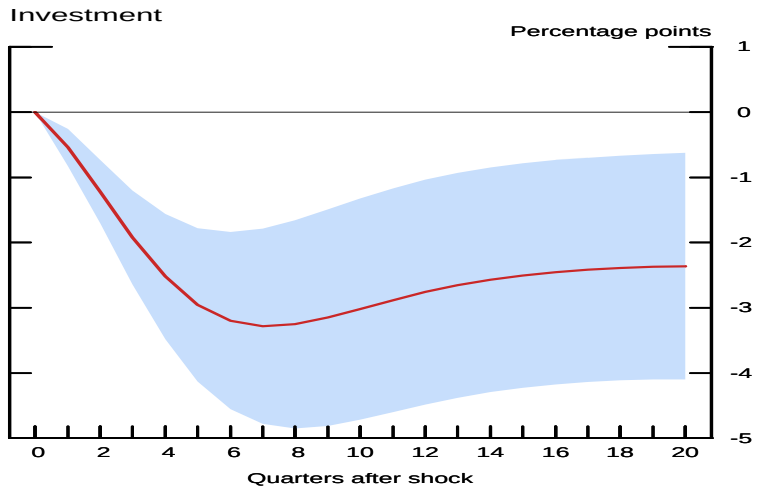


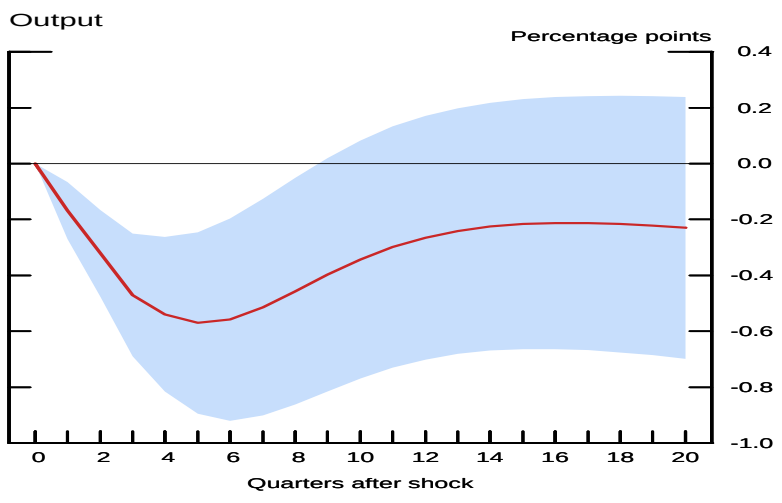


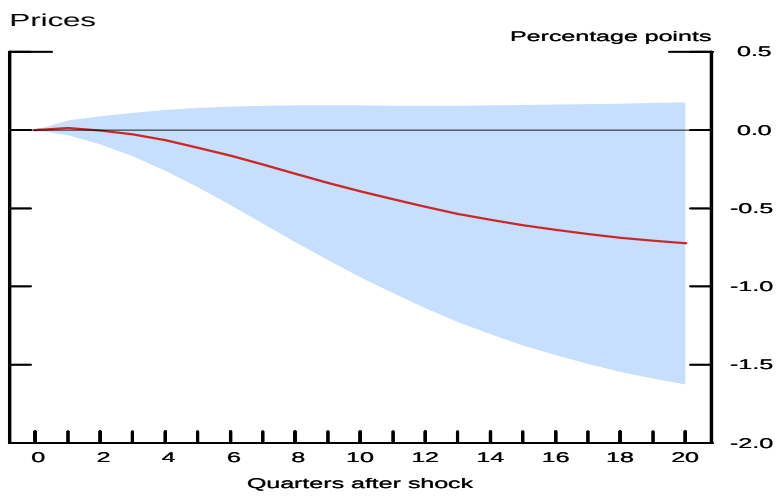


FCI and Business Cycle Fluctuations









Does Monetary Policy Pass Through to FCI?

Gilchrist, Lopez-Salido and Zakrajsek (2015)

	Conventional [a]	Unconventic
Dependent variable	Short	Short
A (10y)	0.559	1.535
	(0.106)	(0.489)
BBB (10y)	0.565	1.425
	(0.104)	(0.418)
Real yield response [d]		
A (10y)	0.557	1.479
	(0.101)	(0.474)
BBB (10y)	0.563	1.369
	(0.088)	(0.406)
Credit spread response [e]		
A (10y)	0.172	−0.082
	(0.072)	(0.265)
BBB (10y)	0.177	−0.192
	(0.057)	(0.248)

Final Comments

- Financial conditions are an important component of forecasting process and arguably an important source of business cycle fluctuations.
- How best to measure FC is an open question (though in my view credit spreads appear to be particularly informative relative to other measures).
- Relationship between monetary policy and FC is relatively stable across policy regimes – primary effect is through the level of real yields due to expectations hypothesis and/or movements in term premia rather than compression in spreads.