Course outline

This is a six week second year PhD course in Empirical Macro-Finance. Course grading will be based on empirical assignments given out in class. The twelve lecture outline is given below.

1 Intro to macro-finance

Why macro-finance, i.e. why should finance matter for the macroeconomy? We start with the theoretical argument that finance is largely a side-show for the macroeconomy, particularly for understanding business cycles. We test and soundly reject this hypothesis.

So how should we model the macroeconomy to incorporate finance? We discuss the basic insights at a high level. Distribution matters, sometimes across firms and banks, and sometimes across creditor and debtor households. Heterogeneity matters, households differ in their MPC, firms differ in their productivity and liquidity constraints. All this makes policy relevant, macro-prudential policy, monetary policy, tax policy, fiscal policy and lender of last resort policy.

The rest of the course is dedicated to understanding these linkages, while remaining loyal to Sir Doyle’s dictum, “It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts.”

2 Financial accelerator, aggregate supply and aggregate demand

Theoretically there are two broad channels through which the financial sector may impact the business cycle, one operating through the supply-side and the other through demand-side of the real economy. We discuss the theory and empirics of analyzing these two channels.


3 Household debt and aggregate demand: rational expectations and common beliefs

Why might household debt amplify business cycle downturns? We discuss theories based on rational expectations and common beliefs where a combination of household heterogeneity, and macro frictions such as zero lower bound constraint or downward nominal wage rigidity generate “over-borrowing” that leads to recessions. The work highlights why individuals may fail to internalize aggregate demand externality, or a pecuniary externality, leading to a case for macro-prudential interventions.


4 The credit-driven household demand channel and Fisher’s debt deflation hypothesis

We outline and test the credit-driven household demand channel and Fisher’s debt-deflation hypothesis.

5 Household debt and aggregate demand: heterogeneous beliefs and behavioral biases

Models with aggregate demand and / or pecuniary externalities can potentially explain credit-induced boom-bust cycles in the real economy. However, there is a lot of evidence that financial variables (credit growth, spreads, financial sector balance sheet health) predict forecasting errors as well. We discuss why heterogeneous beliefs and behavioral biases are important for properly understanding macro-finance evidence, and study empirical evidence in favor of these forces.

6 Heterogeneous agent models, credit and aggregate demand

The micro-foundation of models that connect credit with aggregate demand relies on heterogeneity in marginal propensity to consume and borrow across households. We discuss where such heterogeneity might come from and study some related empirical work.

Econometrica 82 (6): 2197–2223

7 Risk-sharing and business cycles

A key implication of prominent macro-finance models is that risk-sharing matters for aggregate
behavior, with better risk-sharing limiting how much the economy suffers in a downturn and easing
recovery. We discuss implications for security design, regulation and macro-prudential policies and
some related empirical work.

1. Atif Mian and Amir Sufi. 2015. House of debt: How they (and you) caused the Great Recession,
and how we can prevent it from happening again. University of Chicago Press [chapter 12]
2. Peter Ganong and Pascal Noel. 2017. The Effect of Debt on Default and Consumption: Evi-
dence from Housing Policy in the Great Recession. Working Paper
Home Affordable Modification Program”. Journal of Political Economy 125 (3)
Lehman”. NBER working paper

8 Monetary Policy, Liquidity and the Business Cycle

How important is liquidity and central bank’s role as lender for last resort for the macroeconomy?
We also discuss how the effectiveness of monetary policy depends on household balance sheet, and
why.

during the great depression: quasi-experimental evidence from a federal reserve district border,
in Mississippi during the Great Depression”. American Economic Journal: Macroeconomics
5 (1): 81–101
Want to Borrow? Evidence from Credit Cards”. Quarterly Journal of Economics 133 (1):
129–90
Paper
5. James Cloyne, Clodomiro Ferreira, and Paolo Surico. 2016. “Monetary policy when households
have debt: new evidence on the transmission mechanism”
Monetary Policy: the Refinancing Channel”. NBER working paper
nomic Review

9 Estimating The Bank Lending Channel

Do financial shocks to the banking sector matter for the real economy? We investigate this classic
“bank lending channel” question empirically. How does one separate credit supply shocks from

4
credit demand shocks? How can we “aggregate up” the transmission of bank-level shock to the macro level?


10 **Credit supply, moral hazard and agency conflicts**

The credit intermediation process may suffer from moral hazard and agency conflicts - e.g. borrowers may lie on their application and lenders may try to pass-on risk to others / “greater fools”. We discuss such issues and why they may become particularly relevant during waves of “financial innovation”.


11 **Low interest rates and the production side**

The last week takes the focus away from business cycle macro-finance and towards longer term macro-finance questions. This lecture discusses the idea of secular stagnation, credit super cycles
and low long-term interest rates. Our main focus will be on whether these forces feedback to the production-side through their impact on market competition and productivity growth.


### 12 Where does credit come from?

What lies behind the long-term secular rise in credit across the world since 1980? We discuss the possible connection between rising inequality, surplus savings glut and credit creation.


### 13 Additional topics (time permitting)

**Debt overhang and labor supply**


**Student debt**


**Fire sales externality**


**The effectiveness of macro-prudential policies**