

Macroeconomics under Financial Crisis

Lecture 5

The macroeconomics consensus before the crisis

:

June 1, 2016

From the macroeconomic consensus of the early 1970s to the current consensus

- **How the theoretical frameworks we use for analyzing the macroeconomy have evolved over the last three or four decades?**
 - Without overlooking the traditional debate between Keynesians and monetarists, up to the early 1970's a consensus existed on the role of stabilization policy
 - IS-LM, some sort of a Phillips curve, and large scale macroeconomic models
 - Mankiw (1990): “twenty years ago it was easier being a student of macroeconomics”
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From the macroeconomic consensus of the early 1970s to the current consensus

- Are all part of the history of economic thought?
- The IS-LM quite resilient
 - E.g., intermediate-level macroeconomics leading/best selling textbooks one generation ago: Gordon; Hall & Taylor; and Dornbusch & Fischer
 - Today: Blanchard; Abel & Bernanke; and Mankiw
 - In all these books, the basic theory taught is some version of AD-AS and the basic theory of aggregate demand is the IS–LM model.

How the theoretical frameworks evolved from the early 1970s to the late 1990s...

Three main conceptual frameworks

- The rational expectations revolution
 - The real business cycles approach
 - The “New Keynesian” models
 - models with rational expectations and nominal rigidities, where aggregate spending is linked to the quantity theory of money
 - Do the above belong to the history of economic thought?
 - Some elements of the above models have been discredited
 - Other elements of those models, however, survive and are currently incorporated in the toolkit of modern macroeconomists
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Rational expectations.....

- Large models based on unchanging relationships flawed (Lucas, 1976)
- The assumption of rational agents who do not make systematic mistakes implies that they will change behavior when they observe policy. Thus there is no room for exploitable tradeoffs between inflation and unemployment
- Monetary policy can only be effective if it is unanticipated (surprises)

real business cycle (RBC) models



Prescott

- Edward Prescott is the intellectual leader of the *new classicals*—a group of economists interested in explaining fluctuations as the effects of shocks in competitive markets with fully flexible prices and wages.

- Their ***real business cycle (RBC) models*** assume that output is always at its natural level, and fluctuations are movements of the natural level of output. These movements are fundamentally caused by technological progress.

Real Business Cycle Theory.....

- No place for
 - ❑ nominal rigidities
 - ❑ imperfect information
 - ❑ money
 - ❑ the Phillips curve
- Instead focus on stochastic properties of the Ramsey model (equivalently, a representative agent Arrow-Debreu economy), rebaptized as the Real Business Cycle model
- [In the Ramsey model agents (or the dictator) choose consumption and investment optimally so as to maximize their individual utility (or social welfare). This contribution is considered to have established the main characteristics of **modern dynamic macroeconomics**. In contrast, in the Solow model agents (or the dictator) follow a simplistic linear rule for consumption and investment.]

Real Business Cycle Theory.....

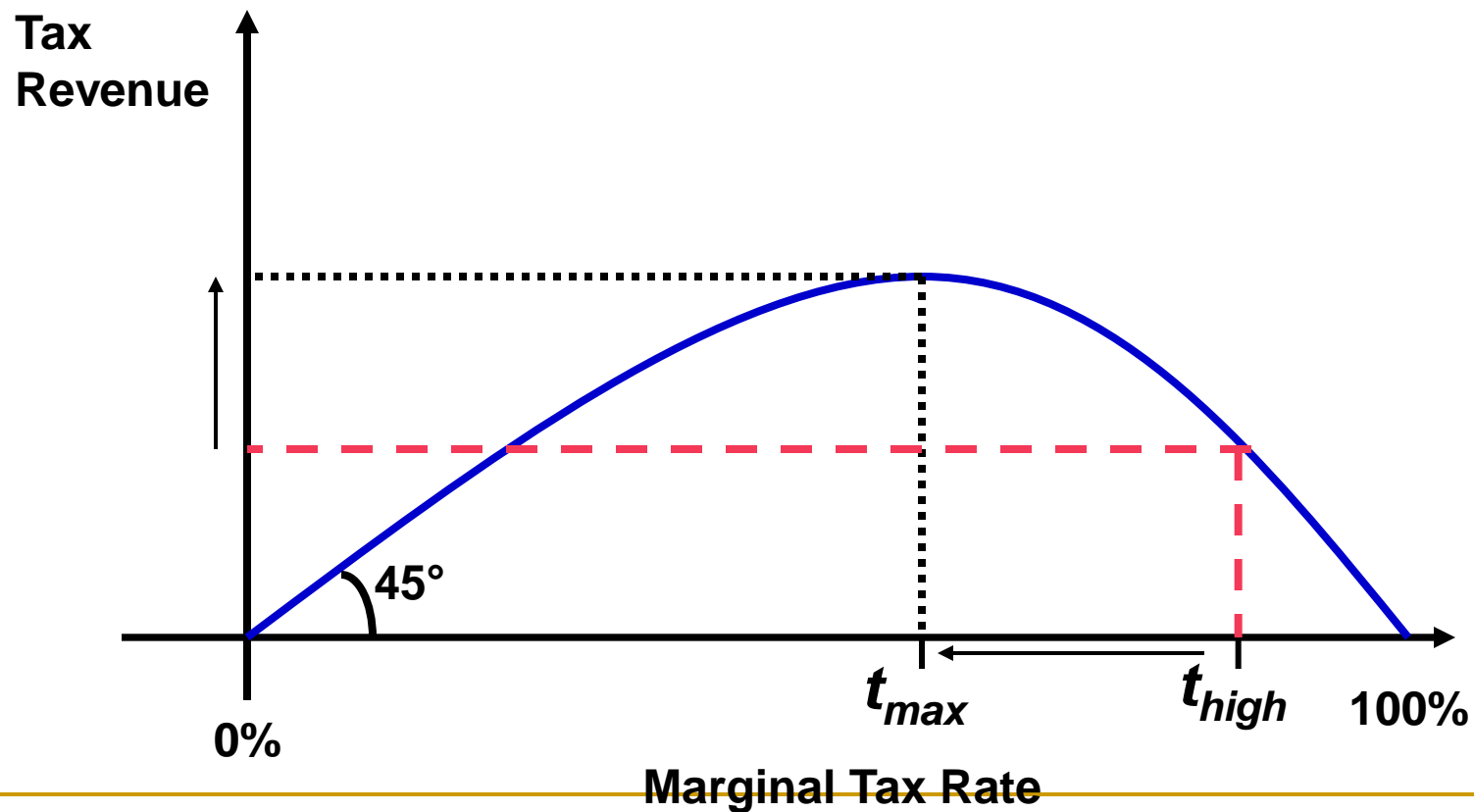
- Features of this research agenda:
 - Explicit micro foundations (*utility and profit maximization*, inter-temporal substitution of consumption & leisure)
 - General equilibrium
 - Prices adjust instantly to clear markets
 - No (or limited) imperfections

- Main source of fluctuations is random technological shocks
 - Not that realistic

Supply side economics

- Theory: Incentives Matter
- Two principles from the first course in economics:
 - If you tax something, you get less of it.
 - If you subsidize something, you get more of it.
- What have we as a society been taxing and subsidizing?

Laffer Curve



New-Keynesian

- General disequilibrium (e.g., Barro and Grossman, 1971)
 - Tools of general equilibrium to analyze situations when markets do not clear
 - Policy prescription: stimulus to demand can have multiplier effects thus overcoming detrimental cycle of insufficient demand
- Rational expectations without market clearing (Fischer, 1977; Taylor, 1979)
 - Policy prescription: systematic monetary policy aimed at stabilization can work

New-Keynesian

- Attempts to build Keynesian arguments based upon rational expectations and microeconomic foundations.
- Sticky Prices
 - Menu costs and other transactions costs:
 - It costs to change prices.
 - A firm might hold prices constant even if demand fell if the firm faced a cost to the price change.
 - Costs: loss of customer good will
 - Potential price war
 - Menu costs
- Monopolistic firms, price-setting power → markup for individual firm rational despite lowering aggregate demand

New-Keynesian

- Efficiency Wage Models: firms pay above market wages in order to induce efficiency
 - Firms wish to buy worker effort, not their “attendance”.
 - Instead of $Y = F(K, N)$, the firm really operates according to $Y = F(K, eN)$, where N is the number of workers or worker-hours, and e is the effort per worker.
 - The firm does not seek to minimize the cost of labor, but rather seeks to minimize the cost per efficiency unit.
- ***Policy prescription:*** nominal rigidities theoretically possible, therefore government demand management policy desirable

Common Beliefs

- Most macroeconomists agree that:
 - ❑ In the short run, shifts in aggregate demand affect output.
 - ❑ In the medium run, output returns to the natural level.
 - ❑ In the long run, capital accumulation and the rate of technological progress are the main factors that determine the evolution of the level of output.
 - ❑ Monetary policy affects output in the short run, but not in the medium run or the long run.
 - ❑ Fiscal policy has short-run, medium-run, and long-run effects on output.

Common Beliefs

- Some of the disagreements involve:
 - The length of the “short run,” the period of time over which aggregate demand affects output.
 - The role of policy. Those who believe that output returns quickly to the natural level advocate the use of tight rules on both fiscal and monetary policy. Those who believe that the adjustment is slow prefer more flexible stabilization policies.

Pre-crisis “consensus” in macroeconomics:

- The pre-crisis “consensus” in macroeconomics:
 - What are its main ingredients?
 - What we agree that we know?
- How broad has been the “consensus”?
 - What are the issues on which macroeconomists agree/disagree?
 - What we do not know?
 - Challenges
- (Is there a difference to the above questions before and after the current crisis?)
- How is theory responding after the crisis?

A consensus in macroeconomics?

- It exists and it is good that it exists
 - (Blanchard; Woodford; Mankiw; Chari & Kehoe)
- Not enough!
 - (Chari, Kehoe & McGrattan, 2009)
- It does not exist or if it exists it is misplaced
 - (Solow, Akerlof)
- I will assume that the former view represents a more accurate assessment

A consensus in macroeconomics

- Why should one want a consensus?
- Recent lines of research emphasize issues like *private sector's* misperceptions, communication policy, etc.
- Developing a consensus on what the model of the economy is may reduce such misperceptions
- Policymaking institutions' analysis as a public good (convergence of views, agreement on the true model, better anchoring of expectations, etc)

A considerable consensus in the late 1990s emerges

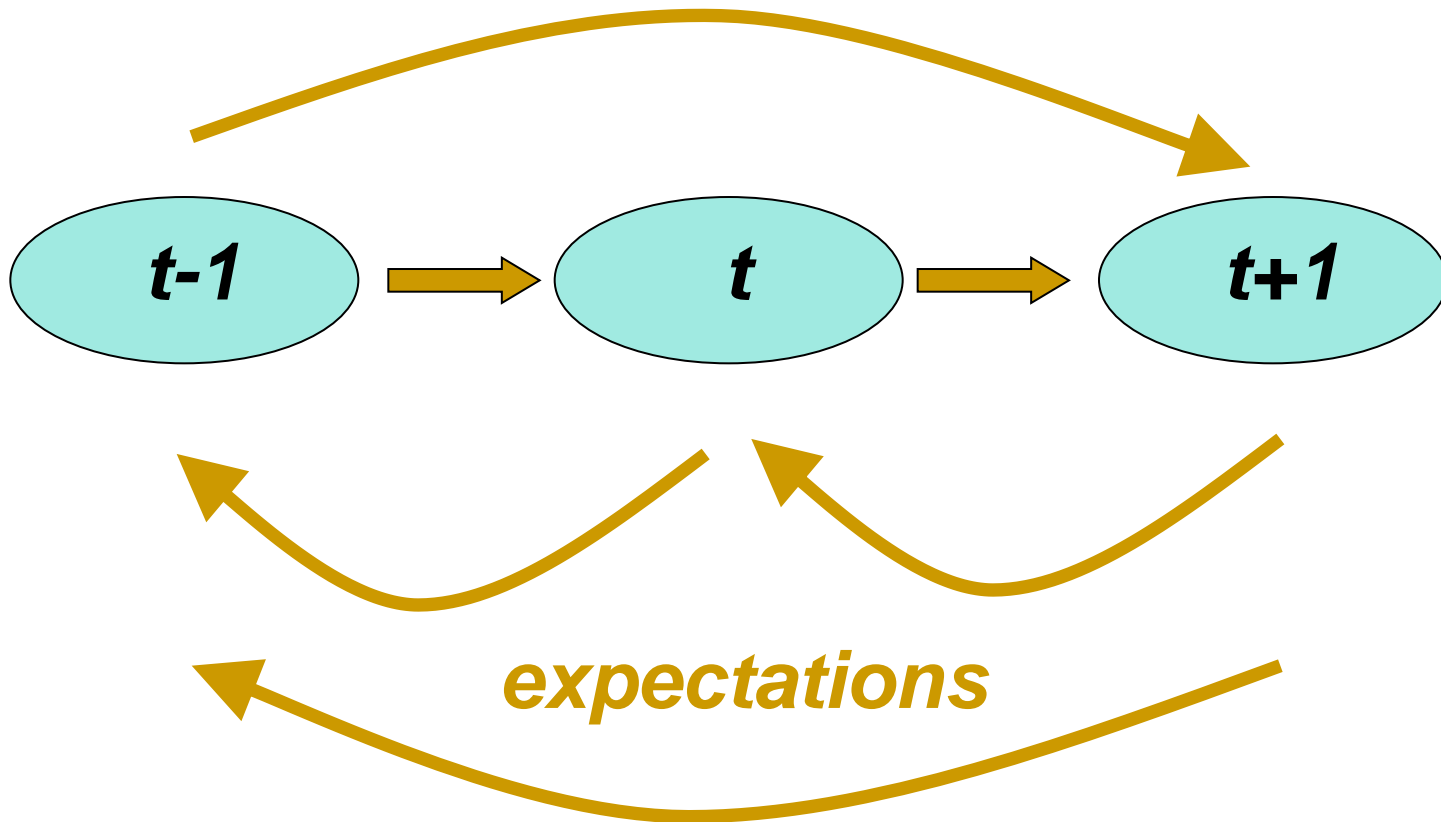
- “New Keynesian Macroeconomics”

or

“New Neo-classical Synthesis”

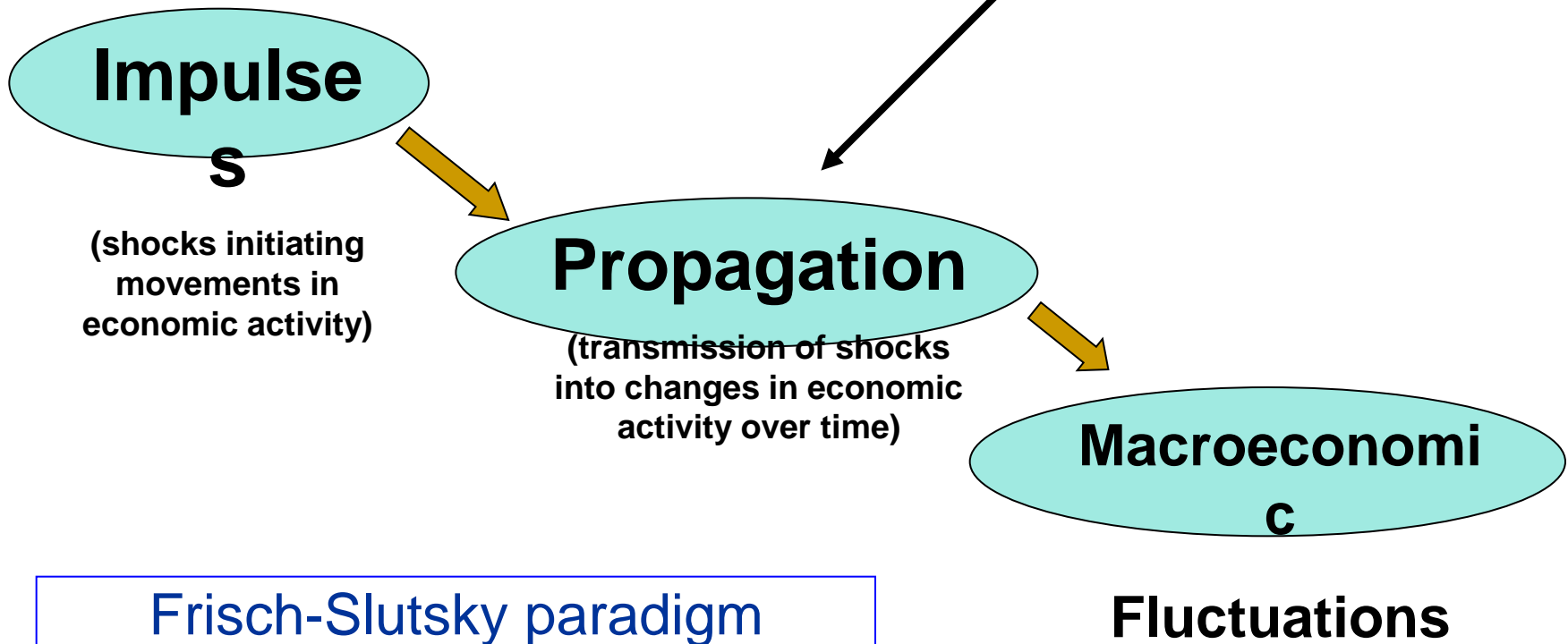
- Dynamic Stochastic General Equilibrium

Dynamic

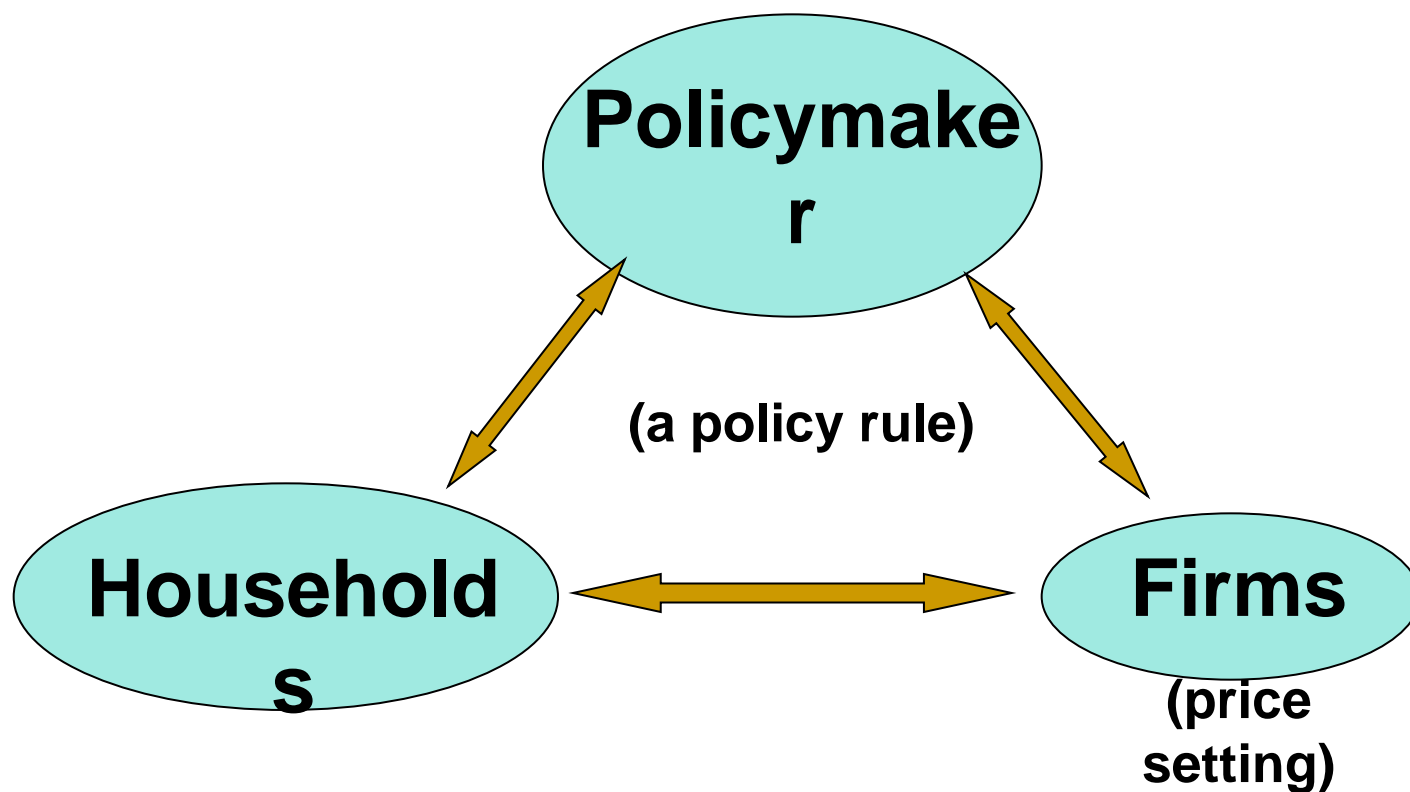


Stochastic

The structural model (reflecting the structure of the economy) determines the way the economy reacts to certain types of shocks. The structure is dependent on the parameters in the particular model we use. The same model can give quite different answers depending on the values of the parameters



General equilibrium



(Euler equation)

The Macroeconomic Framework.....

- Is made up of 4 sectors:
 - ❑ the households,
 - ❑ the firms,
 - ❑ the government, and
 - ❑ (the rest of the world)

- and 3 markets:
 - ❑ the factor (input) market,
 - ❑ the goods (output) market, and
 - ❑ the asset market

Households

- Household decisions are based on (expected, discounted) utility maximization subject to a wealth constraint (given market prices and government policies):
 - Factor (input) supply;
 - Demand for consumer goods;
 - Saving;
 - Portfolio balance (or demand for real and financial assets)

Firms

- Firm decisions are based on (expected) NPV maximization subject to technology constraint (given market prices/demands and government policies):
 - Factor (labor) demand;
 - Output supply;
 - Investment (demand for capital goods);
 - Financing through retained earnings (business saving), loans, or supply of corporate securities.

Government

- Government decisions (based on assumed policy objectives and constraints):

The Rest of the World

The End