



# Advanced Workshop For Central Bankers

September 8-15, 2015

●  
Northwestern University  
Evanston, IL

Markus Brunnermeier  
Lawrence Christiano  
Martin Eichenbaum  
Simon Gilchrist  
Anil Kashyap  
Narayana Kocherlakota  
Joel Mokyr  
Sergio Rebelo  
Jeremy Stein  
James Stock



# Advanced Workshop For Central Bankers

This week-long workshop for central bank economists has two objectives. First, to expose participants to frontier models and techniques in monetary economics. Second, to foster discussion and exchange of ideas about applied monetary policy problems faced by different central banks.

The week is organized around lectures and computer-based assignments.

The workshop has been held annually since 2004. It has been attended, so far, by roughly 450 participants from 41 central bank institutions.

## Participating Institutions

Central banks of: Armenia, Australia, Austria, Bangladesh, Brazil, Belgium, Canada, Colombia, Costa Rica, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, India, Italy, Israel, Japan, Korea, Malaysia, Mexico, Netherlands, Norway, Philippines, Poland, Slovakia, Spain, South Africa, Sweden, Switzerland, and Uruguay.

Federal Reserve Banks: Atlanta, Boston, Cleveland, and Dallas, European Central Bank, the Bank of International Settlements, the Inter- American Development Bank, and the International Monetary Fund.



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## Course lectures

The workshop includes seven three-hour lectures on the following topics.

Empirical methods in monetary economics,

Martin Eichenbaum (Northwestern University)

Alternative techniques to estimate and empirically evaluate models of the monetary transmission mechanism: (i) structural VARs identified with short run restrictions, long run restrictions, and sign restrictions; (ii) fitting dynamic models to impulse response functions; (iii) maximum likelihood methods.

Specification, estimation, and analysis of monetary models,

Lawrence Christiano (Northwestern University)

Structural monetary models: the role of different frictions, such as sticky wages, sticky prices, working capital, and credit market imperfections. The use of Bayesian and other methods to estimate models and a review of recent developments in the use of models in the monetary policy process.

Open economy models,

Sergio Rebelo (Northwestern University)

Parity conditions in dynamic open economy models. Empirical evidence on sources of real exchange rate (RER) fluctuations. Modeling RER fluctuations. An empirical analysis of the failure of uncovered interest parity (UIP). Modeling deviations from UIP.

Macroeconomic forecasting,

James Stock (Harvard University)

A comprehensive review of forecasting methods. Topics include VARs, dynamic factor models, robust Bayes inference, nowcasting, and long-run forecast uncertainty.

Macro-prudential regulation,

Anil Kashyap (University of Chicago)

An introduction to the principles underlying macroprudential regulation and an analysis of how macroprudential considerations alter the use of regulatory tools and the design of financial regulation.



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## Special-topic lectures

There are five additional lectures on the following topics

Lecture 1: Outlook for U.S. monetary policy,  
Narayana Kocherlakota (Federal Reserve Bank of Minnesota)

Lecture 2: Financial frictions and monetary policy,  
Markus Brunnermeier (Princeton)

Lecture 3: Will we face secular stagnation?  
Joel Mokyr (Northwestern University)

Lecture 4: Inflation dynamics during the financial crisis,  
Simon Gilchrist (Boston University)

Lecture 5: Credit markets and the business cycle,  
Jeremy Stein (Harvard University)

## Practicum

The course lectures are complemented with afternoon sessions designed to provide participants with hands-on experience with the techniques presented.

## Logistics

The workshop takes place at the James L. Allen Center, the home of Kellogg's Executive Education Programs. The Center is located on the shores of Lake Michigan at Northwestern University's Evanston campus.



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## Dates

The workshop will take place between Tuesday, September 8 and Tuesday, September 15, 2015. Participants are expected to arrive on Tuesday, September 8 and leave in the afternoon of Tuesday, September 15, 2015. Participants who are interested in attending the Optional Review Session on Tuesday, September 8, 2015 are expected to arrive on Monday, September 7, 2015. This optional session is devoted to a comprehensive tutorial on what you need to know about Matlab to be able to use the software employed in the course.

## Schedule

A preliminary workshop schedule is attached.

## Software and lecture materials

At the end of the workshop, participants receive all the lecture materials and programs used during the practicum sessions.

## Price

The cost of the program is \$6,850 per participant. The fee (payable in U.S. dollars) includes tuition, course materials, accommodations, social program, meals, coffee breaks, and receptions. Enrollment is confirmed only upon receipt of full payment.

Cancellations made before June 1st, 2015 are subject to a 25% fee.

Cancellations made after June 1st, 2015 are subject to the total charge.



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## Advanced Workshop for Central Bankers Schedule, 2015

	08/Sep Tuesday	09/Sep Wednesday	10/Sep Thursday	11/Sep Friday	12/Sep Saturday	13/Sep Sunday	14/Sep Monday	15/Sep Tuesday
7:30 AM to 9:00 AM		Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center
9:00 AM to 10:30 AM		Using VARs Martin Eichenbaum	DSGE models Lawrence Christiano	Model estimation Lawrence Christiano	Financial frictions Lawrence Christiano	Open-economy models Sergio Rebelo	Forecasting James Stock	Macro-prudential regulation Anil Kashyap
10:30 AM to 10:45 AM		Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45 AM to 12:15 PM		Using VARs Martin Eichenbaum	DSGE models Lawrence Christiano	Model estimation Lawrence Christiano	Financial frictions Lawrence Christiano	Open-economy models Sergio Rebelo	Forecasting James Stock	Macro-prudential regulation Anil Kashyap
12:15 PM to 1:30 PM		Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
1:30PM to 4:00 PM	Optional Matlab Review Session	Practicum Session	Practicum Session	Chicago Architectural River Cruise (starts at 3:30 pm)	Practicum Session		Practicum Session	
4:00 PM to 4:15 PM		Coffee Break	Coffee Break		Coffee Break		Coffee Break	
4:15 PM to 5:30 PM	Narayana Kocherlakota Outlook for U.S. monetary policy	Markus Brunnermeier Financial frictions and monetary policy	Joel Mokyr Secular stagnation		Simon Gilchrist Inflation Dynamics During the Financial Crisis		Jeremy Stein Credit Markets and the Business Cycle	
5:30PM to 6:30 PM	Dinner	Cocktails	Cocktails		Dinner		Cocktails	
6:30PM to 8:00 PM		Dinner	Dinner			Optional Dinner	Celebration dinner at Stained Glass (7:15 pm)	
					Show at Chicago Theater			