This annual 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 2005. So far the workshop was attended by more than 200 participants from 33 central bank institutions (Austria, Bangladesh, Brazil, Belgium, Canada, Costa Rica, Denmark, Finland, France, Greece, Iceland, India, Italy, Israel, Japan, Korea, Malaysia, Mexico, the Netherlands, Norway, Poland, Slovakia, Spain, South Africa, Sweden, Switzerland, Uruguay, as well as the European Central Bank, the Federal Reserve Banks of Atlanta, Boston, Cleveland, and Dallas, the Bank of International Settlements, and the International Monetary Fund).
Course Lectures

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

Empirical Methods in Monetary Economics, Martin Eichenbaum
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
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.

Monetary Policy and Credit Markets, Anil Kashyap
Modeling capital market imperfections, particularly the role of banks in the transmission of monetary policy. Review of micro and macro empirical evidence, with emphasis on cross-country comparisons and institutional constraints.

Open Economy Models, Sergio Rebelo
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.
Special-topic Lectures

Lecture 1: Lessons from the financial crisis, Robert Hall (Stanford University)
Lecture 2: Credit frictions and monetary policy, Michael Woodford (Columbia University)
Lecture 3: Recreating the financial system, Raghuram Rajan (University of Chicago)
Lecture 4: Financial and monetary policy in emerging markets, Guillermo Calvo (Columbia University)
Lecture 5: Modeling inflation, Thomas Sargent (New York University)
Lecture 6: Financial factors in macroeconomic modeling and policy analysis, Mark Gertler (New York University)
Lecture 7: Macroeconomic forecasting, James Stock (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.
Dates
The workshop will take place between Tuesday, September 7 and Tuesday, September 14, 2010. Participants are expected to arrive on Tuesday, September 7 and leave in the afternoon of Tuesday, September 14, 2010.

Participants who are interested in attending the Optional Review Session on Tuesday, September 7, 2010 are expected to arrive on Monday, September 6, 2010. 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 a CDrom with lecture materials and with all the programs used during the practicum sessions.

Price
For information on the cost of the program for the current year please email eich@northwestern.edu.

Cancellations made before June 1st, 2010 are subject to a 25% fee. Cancellations made after June 1st, 2010 are subject to the total charge. 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.
## Schedule

<table>
<thead>
<tr>
<th>07/Sept Tuesday</th>
<th>08/Sept Wednesday</th>
<th>09/Sept Thursday</th>
<th>10/Sept Friday</th>
<th>11/Sept Saturday</th>
<th>12/Sept Sunday</th>
<th>13/Sept Monday</th>
<th>14/Sept Tuesday</th>
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<tbody>
<tr>
<td>7:30 AM to 9:00 AM</td>
<td>Breakfast, Allen Center</td>
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<tr>
<td>9:00 AM to 10:30 AM</td>
<td>Martin Eichenbaum Session 1</td>
<td>Lawrence Christiano Session 1</td>
<td>Lawrence Christiano Session 3</td>
<td>Lawrence Christiano Session 5</td>
<td>Anil Kashyap Session 1</td>
<td>James Stock Session 1</td>
<td>Sergio Rebelo Session 1</td>
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<td>10:30 AM to 10:45 AM</td>
<td>Coffee Break</td>
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<tr>
<td>10:45 AM to 12:15 PM</td>
<td>Martin Eichenbaum Session 2</td>
<td>Lawrence Christiano Session 2</td>
<td>Lawrence Christiano Session 4</td>
<td>Lawrence Christiano Session 6</td>
<td>Anil Kashyap Session 2</td>
<td>James Stock Session 2</td>
<td>Sergio Rebelo Session 2</td>
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<td>12:15 PM to 1:30 PM</td>
<td>Lunch</td>
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<tr>
<td>1:30 PM to 4:00 PM</td>
<td>Optional Matlab Review Session</td>
<td>Practicum Session</td>
<td>Practicum Session</td>
<td>Chicago Architectural River Cruise</td>
<td>Practicum Session</td>
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<td>4:00 PM to 4:15 PM</td>
<td>Coffee Break</td>
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<td>4:15 PM to 5:30 PM</td>
<td>Cocktails</td>
<td>Lecture by Robert Hall</td>
<td>Lecture by Michael Woodford</td>
<td>Lecture by Guillermo Calvo</td>
<td>Lecture by Mark Gertler</td>
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<td>5:30 PM to 6:30 PM</td>
<td>Dinner</td>
<td>Cocktails</td>
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<tr>
<td>6:30 PM to 8:00 PM</td>
<td>Dinner</td>
<td>Dinner Speaker: Raghu Rajan</td>
<td>Optional Dinner</td>
<td>Dinner</td>
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**Dinner Speaker:** Raghu Rajan

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### Optional Dinner

- **Show at Second City Theater**