Expected Outcome 1: Competency in Econometric Methods

MS graduates are expected to demonstrate competency with respect to the tools and methods of modern econometrics. There are four specific areas that we expect them to demonstrate satisfactory levels of knowledge and ability:

(E1) Maximum Likelihood and Generalized Least Squares Estimation.
(E2) Univariate Stochastic Models and Impulse-Response Analysis.
(E3) Multivariate Stochastic Models and Identification Strategies.
(E4) Mechanics and Identification of Sharp Regression Discontinuity Design

Assessment Method 1: Comprehensive Examination 1 (June 2014)

Assessment Method Description

MS students take a comprehensive core examination in econometrics after taking their first year of classes. The initial examination is delivered in the early summer and the performance levels of the students on specific questions will allow us a direct assessment concerning the four areas of desired competency. The subset of graduate faculty members that teach first-year graduate classes write the exam questions and categorize the performance of the students into a four category rubric (advanced, intermediate, basic, and little/no ability).

Findings

The students demonstrated relatively strong knowledge of areas (E1) and (E2) with two-thirds of the students showing advanced or intermediate levels of performance. Unfortunately, the results were substantially weaker in the more difficult areas (E3) and (E4), where a majority of the students fell into the lower performance categories (basic and little/no ability). Please see the table below for a summary of the results.
How did you use findings for improvement?
The results indicated that a significant area of weakness for our students related to the issue of identification in both time series models and models with discontinuities. We plan to expand coverage and add additional homework assignments related to these topics in both of our spring semester econometrics courses next year.

Additional Comments

Expected Outcome 2: Competency in Economic Theory
MS graduates are expected to demonstrate competency with respect to modern microeconomic and macroeconomic theory. There are four specific areas that we expect them to demonstrate satisfactory levels of knowledge and ability:
(T1) Consumer Theory and the Derivation of Demand.
(T2) Incomplete Information and Game Theory.
(T3) Classical Models of Economic Growth (Ramsey, OLG, Endogenous).
(T4) Dynamic General Equilibrium Models with Monetary and Fiscal Policy.

Assessment Method 1: Comprehensive Examination 1 (June 2014)

Assessment Method Description
MS students take comprehensive examinations in both microeconomics and macroeconomic theory after taking their first year of classes. The initial examinations are delivered in the early summer and the
performance levels of the students on specific questions will allow us a direct assessment concerning the four areas of desired competency. The subset of graduate faculty members that teach first-year graduate classes write the exam questions and categorize the performance of the students into a four-category rubric (advanced, intermediate, basic, and little/no ability).

**Findings**
The performances in the first three specific areas (T1, T2, T3) were fairly strong with students rarely falling into the lowest category of performance. The most difficult area, T4, relating to the analysis of monetary and fiscal policy in the context of dynamic general equilibrium models had a disappointing level of student performance. Clearly, improvement in this area is needed going forward.

<table>
<thead>
<tr>
<th>Economic Theory</th>
<th>Advanced</th>
<th>Intermediate</th>
<th>Basic</th>
<th>Little/No Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T1) Consumer Theory and the Derivation of Demand</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>(T2) Incomplete Information and Game Theory</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(T3) Classical Models of Economic Growth (Ramsey, OLG, Endogenous)</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(T4) Dynamic General Equilibrium Models with Monetary and Fiscal Policy</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

**How did you use findings for improvement?**
We need to improve student performance in area T4. This material is generally not covered very much until the spring semester macroeconomics course (during the first year of our graduate program). Starting coverage of this material earlier in the program during the late stages of our fall semester macroeconomics course will hopefully give the students more time to master this type of material and improve performance going forward.

**Additional Comments**