Last month we had a fascinating panel discussion on the value of an Economics major. Our speakers were three particularly distinguished alumni of the department: Albert Cantu, Rick Masson, and Renee Bustamante. Albert was the CEO of Terminix and is now an Executive Partner at Waud Capital. Rick Masson was Chief Administrative Officer of the City of Memphis, later became Executive Director of the Plough Foundation, and is now Executive Director of the Shelby Farms Conservancy. Renee is a two-time winner of the prestigious FedEx Corporation Five-Star Award and is currently Staff Director of Corporate Finance at FedEx. Albert, Rick, and Renee each in their own way returned to the same themes: They all emphasized that economics is not a set of answers, but rather a “habit of thought” that helps them to think through complicated problems in a systematic, analytical way. This has given them a competitive advantage that has contributed in no small measure to their success.

The speakers made a compelling case for the value of an economics major. However, I am happy to report a crudely monetary measure of an economics degree that buttresses their argument. Here is a recent study that reports median salaries, both starting and mid-career, for a large number of majors: http://www.payscale.com/best-colleges/degrees.asp. According to this report, Economics has the fifth highest median, mid-career salary ($101,000) among all majors: It ranks lower than only Aerospace engineering ($109,000), Chemical Engineering ($107,000), Computer Engineering ($105,000), and Electrical Engineering ($102,000), and is just above Physics ($98,800). This should be compared with median, mid-career salaries for business degrees: Finance ($89,400), MIS ($87,200), Marketing ($81,500), Accounting ($77,600), Business Administration ($73,000), Business Management ($72,100), Advertising ($71,800), Hotel Business Management ($66,400), Human Resources ($59,600), and Hospitality & Tourism ($54,300). Let’s not hear anymore nonsense about economics not being a lucrative major.

I would like to report two personnel changes to the Department. On the one hand, I am sorry to report that Dr. Rose Rubin has retired. She is staying with us as a Professor Emeritus, however, and will be teaching the Honors Principles class in Microeconomics (ECON 2120) this spring. On the other hand, I would like to welcome Edward Hoang. Ed just finished his PhD at the University of Houston, where he specialized in macro-econometrics and political economy. He has joined us as a Visiting Assistant Professor and is teaching a graduate statistics class and several principles classes. On a different note, I would like to recognize some of our faculty. Dr. Cyril Chang has just been awarded the Palmer Professorship for research by the Fogelman College; Dr. Julie Heath has been honored with the Palmer Professorship for Service. Congratulations, Cyril and Julie!

Three members of our faculty have been named as finalists for the University’s Distinguished Teaching Award: Dr. Julia Heath, Dr. K.K. Fung, and Dr. Albert Okunade. This lends empirical support to my contention that we have more excellent teachers per capita than most any department on campus.

I also would like to congratulate five of our PhD students who had papers accepted for presentation at the Southern Economic Association this fall: Michael Jetter, Debjani Kanjilal, Deepraj Mukherjee, Sophia Pacurar, and Jay Walker. Debjani and Deepraj will graduate this year, and are now on the job market. We wish them the best of luck.

Dr. William T. Smith, Interim Chair
Regulating Carbon Emissions: The Cap-and-Trade Program

By Cletus C. Coughlin and Lesli S. Ott

Increased concentrations of greenhouse gases have heightened concern throughout the world about climate change and global warming. One manifestation of this concern in the United States is reflected in a market-based approach termed "cap and trade" to regulate carbon dioxide emissions; this is contained in the proposed American Clean Energy and Security Act of 2009. This legislation requires a 17 percent reduction in emissions of carbon dioxide by 2020 from 2005 levels. While there are numerous controversial provisions in this legislation, this article focuses on the economic principles underlying the cap-and-trade proposal.

Reducing Carbon Emissions Efficiently

Various regulatory approaches exist for controlling pollution. A common one is "command and control." One example in the context of carbon emissions is the Corporate Average Fuel Efficiency (CAFE) standards, which mandate minimum fleet mileage standards for motor vehicles sold in the United States. Generally speaking, economists tend to prefer market-based approaches, such as a cap-and-trade program, to other regulatory approaches for reducing carbon emissions.

Various economic reasons exist for preferring market-based approaches. First, all polluters face the same marginal cost of reducing pollution, which is a necessary condition for reducing pollution in the most cost-effective way. For example, say that a polluter is either taxed $15 for each ton of carbon emissions or must have a permit that costs $15 per ton of carbon emissions. In either case, $15 is the price that the polluter must pay to emit one ton of additional carbon emissions. Then, each firm must compare this $15 per ton with its own cost of reducing carbon emissions. As long as the firm's incremental costs stay less than or equal to $15, then it will reduce its emissions; if not, assuming it is profitable to do so, then the firm will pay the tax or buy the permit. (Note that part of a firm's adjustment to the higher price to pollute might entail a cut in its production of goods.)

Second, incentives are provided so that pollution is reduced relatively more by firms with relatively lower costs of doing so. In other words, if firms must pay $15 per ton of carbon emissions, then firms that can reduce pollution at relatively lower cost will undertake relatively more abatement than will higher-cost firms.

Third, market-based approaches provide incentives for innovative activity that can lower the cost of reducing pollution. Simply put, firms can increase their profits by finding ways to lower the cost of reducing pollution.

Under a cap-and-trade program, the quantity of carbon emissions is capped. Given an upper limit on the quantity of carbon emissions, market participants will determine the price of these emissions. The supply and demand diagram in Figure 1 can be used to illustrate the basics of a cap-and-trade program. The horizontal axis measures the quantity (Q) of carbon dioxide emissions abated, while the vertical axis measures the value (benefits or costs) per unit (P) of carbon abated. Note that by capping emissions at some level, an abatement quantity is set as well. The marginal benefit (MB) curve is sloped negatively to reflect that the additional benefit to society of abating more carbon declines. This marginal benefit curve reflects the social benefits of reducing pollution. From the perspective of a polluter, the (private) benefit of abatement is zero. Meanwhile, the marginal cost (MC) curve is sloped positively to reflect the assumption of increasing marginal abatement costs. In other words, as a firm attempts to abate more and more carbon emissions, incremental costs to the firm of additional abatement increase.

Given the curves in Figure 1, the ideal quantity of abatement is indicated by Q*. This quantity of abatement will result in a price of carbon emissions of P* per unit. This efficient outcome reflects the fact that emissions abatement should continue until the point at which the marginal benefits equal the marginal costs. Additional abatement beyond Q* is inefficient because the marginal costs exceed the marginal benefits.

Given the curves in Figure 1, the ideal quantity of abatement is indicated by Q*. This quantity of abatement will result in a price of carbon emissions of P* per unit. This efficient outcome reflects the fact that emissions abatement should continue until the point at which the marginal benefits equal the marginal costs. Additional abatement beyond Q* is inefficient because the marginal costs exceed the marginal benefits.

In other words, the benefits of reducing carbon emissions are higher than originally anticipated. In Figure 2, this is represented by a realized marginal benefit (MBR) curve that lies above the expected marginal benefit (MBE).
Regulating Carbon Emissions: The Cap-and-Trade Program (cont.)

Under a cap-and-trade program, regulators, basing their decision on expected costs and benefits, would require abatement of QQ of carbon emissions. In Figure 2, the ideal level of abatement is Q*; so, the cap-and-trade program would result in too little abatement because QQ is less than Q*. Of course, if the realized marginal benefit curve was at a lower level than the expected marginal benefit curve, too much abatement would occur. The key point in this illustration is that, because of uncertainty, the cap-and-trade program is unlikely to produce an ideal outcome all the time. Excessive volatility in the price of pollution is also a possibility. When unintended, large adverse consequences result, specifics of the cap-and-trade program will probably need to be modified. Unfortunately, uncertainty comes into play with all regulatory approaches.

Who Receives the Permits?

After the amount of allowable carbon dioxide emissions is determined, decisions must be made as to who is allowed to emit and how much they are allowed to emit. One approach, which is favored by the Obama administration, is to have the government auction off permits that allow the holder to engage in actions that emit carbon. A fixed number of permits would be auctioned that would be purchased by those who placed the highest value on them. Subsequently, as time passes and circumstances change, those with excess permits could sell them to those who desired more permits.

Government sales of the permits would generate revenue, which could be returned to taxpayers or used for other projects, some of which might be directly related to energy and climate change issues. Currently, auctioning all the permits does not appear to be acceptable politically. A House-passed version of the American Clean Energy and Security Act of 2009 would allow 85 percent of the permits to be allocated administratively, while 15 percent would be auctioned. Electricity distributors would receive the largest share, while the rest would be divided among energy-intensive manufacturers, carmakers, natural-gas distributors, states with renewable energy programs and others. This compromise was viewed as necessary for passage. Such an allocation would mean that the government would receive little revenue because only 15 percent of the permits would be auctioned and that the initial allocation would probably not go to those who value the permits the most. However, this does not necessarily mean that the permits would not eventually be used by those who value them the most. After the initial allocation of permits, subsequent trading might lead to an allocation of the permits to those who value them the most. Of course, the sellers of the permits rather than the federal government would receive the money from these sales.

Economics vs. Politics

The cap-and-trade legislation illustrates the interplay between economics and politics. Uncertainty about the benefits and costs guarantees that any proposal to regulate carbon emissions will be controversial. While the cap-and-trade program working its way through Congress contains desirable economic features, the prospects for an auction process covering all permits for carbon emissions does not seem to be a viable option politically.

(For graphs and citations: http://www.stlouisfed.org/publications/re/articles/?id=1718)
Special Topics - Game Theory — ECON 3027
MW 12:40-2:05
The prerequisite is . This class is taught by Dr. Pinaki Bose.

Intermediate Macro Theory
ECON 3320
MWF 10:20-11:15
Learn more about how the macro economic variables fit together and the implications for government policy. Principles of Macro is a prerequisite. Taught by Dr. Bill Smith.

Economic Forecasting
ECON 4120
TR 1:00-2:25
Forecasting is a valuable tool that will be an asset whether you are headed to the workforce or graduate school. This is a terrific hands-on course. Taught by Dr. Albert Okunade.

Comparative Economic Systems
ECON 4340
MW 2:20-3:45
Why do some economies grow and other struggle? This course discusses the factors that affect the economic performance of different countries. Principles of Micro is the prerequisite. Taught by Dr. K. K. Fung

International Economics
ECON 4350
TR 9:40-11:05
Trade deficit, globalization, comparative advantage…what does it all mean? This course emphasizes policy implications with Principles of Micro as the prerequisite. Taught by Dr. Doug Campbell

History of Economic Thought
ECON 4410/6410
TR 11:20-12:45
Ever wonder how it all began? Economics, that is. This course traces the historical beginning of economics as a discipline, focusing particularly on conflicting schools of thought and 20th century economic thought. Taught by Dr. Michael Gootzeit, principles of macro is a prerequisite.

Programming Concepts and Techniques
ECON 4530
M 5:30—8:30
SAS syntax from the basic to more advanced statistical concepts. Techniques of good programming as well as tips learned from the pros. Prerequisite - ECON 4520, Programming Concepts. Taught by Mehmet Kocak.

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STUDENTS FROM DR. K.K. FUNG’S INTRO TO MICRO CLASS

The students in Dr. Fung’s ECON 2120 class saved almost $6,000 collectively by using a free online textbook written by Professor Fung, “Livingeconomics”. They decided to “pay it forward” and collected enough money to donate $100.00 to three different charities. The Salvation Army, St. Jude, and the Mid-South Food Bank are the charities that benefited from their generosity. They hope their donations will encourage other students to be equally generous to their favorite charities.
Tell us about your life. Where did you grow up? Tell us about your family.

I grew up in the extremely small, Middle Tennessee town of Loretto where we had 2 red lights, 2,500 people, and twice as many cows. I graduated with just over 100 people from your average high school and had a pretty good idea that I wanted to go to a big college in a big city. I’ve always been a sports fanatic and played baseball, basketball, and golf growing up. I also loved to hunt on the 200 acres of land we own behind my house. My mom is a fifth grade teacher at the elementary school down the street and my dad is a Radiological Control Technician for the U.S. Department of Energy. I also have a younger sister who is transferring to Memphis next Spring.

What made you want to become an economics major?

English has always been my favorite subject, but as I got older (and “wiser”) I realized that my career options with an English degree were fairly limited. Therefore, after my first semester I decided to switch to business and began taking all of the basic Accounting, Marketing, Stats, and Econ classes until I figured out exactly what I wanted to do. My first Econ class was Principles of Micro. It only took about two weeks for that to become my favorite class that semester and I do not think I missed a single day all year. I absolutely loved the material and it all just seemed to come naturally to me. After a couple of tests I received one of the notes telling me to consider becoming an Economics Major (I still want to know what kind of commission the teachers get from those). After I met with my professor and talked it over with my parents, I decided to give it a shot. That being said, I could have answered this question in two words: Julie Heath. She made becoming an Econ major one of the easiest and best decisions of my life.

What has been your favorite course(s)?

I realize that I am going to come across as the definition of a suck-up with this response, but I really do not care because it’s true. I have honestly loved all of my Econ classes. They are the only classes that I legitimately enjoy going to and I think 100% of that is attributed to the professors (at least the one’s I have had). I absolutely loved both Theory classes thanks to Dr. Smith and Dr. Hussey and I have now had Dr. Campbell and Dr. Heath 3 times each and would make it 4 next semester if they were teaching anything else I could take. If I had to choose though, I guess I would have to say Economics of Sports was 1A on my list of favorites. The material combined two things I love and my favorite teacher taught it. That’s about as good as it gets.

What do you plan to do after you graduate?

I will be graduating in May and plan on starting Law School in the Fall. I wish I could tell you where, but unfortunately I won’t know for another month or two. I’ve submitted all of my applications and can’t wait to see where I get in. After that I want to get my PhD in Economics and eventually be a college professor at some point down the road.

Why do you think studying economics is important?

If you understand Economics, you understand how the world works. It’s that simple. Plus, economists are just smarter than everyone else.
**Spotlight on...**

**Avi Shaposhnik**  
*U of M Graduate*

**What degree or degrees did you receive from UM? When?**  
In the Fall 06’ I finished my undergraduate degree B.B.A. in International Business with a minor in Economics. In the Fall 08’ I finished my graduate degree: M.A. in Economics.

**What was your first job after graduation?**  
My current job is my first after graduation from grad school. I am working in the business development department for the Michael Davis Group (MDG). The group has two main activities: proprietary trading (spread between domestic and international) and an ETN/ETF company (Tachlit Indices Ltd.) that is issuing certificates on the Tel Aviv stock exchange. I work for the “mother” company so my time is split mostly between developing new certificates for Tachlit and building the international part of the proprietary trading operations.

**What do you like best about your job?**  
The “mother” company that controls all the companies of the group consists of 15 people including me – in such environment even the smallest comment over lunch can become a decision that will be implemented almost immediately. My favorite part of the job is the ability to see my ideas implemented on a large scale.

**Why did you study economics?**  
First of all because of Dr. Smith. A person can find economics in every field but also every field in economics – or in other words, by studying economics one is giving himself an opportunity to enter almost any profession he might seek in the years to come. Economics charmed me with always being able to find a totally new field inside of it. But the most important reason is economics is sexy!

**What were some of your favorite courses or professors?**  
Anything Macro with Dr. Smith!!! It will be hard but it will be great!!! Dr. Fung’s environmental class in my undergrad was a very influential class for me as well.

**How has having an economics degree benefitted you?**  
An economics degree gave me the skills to analyze the environment I am working in and draw rational conclusions. The macroeconomics classes gave me the understanding of the world I am operating in as a professional in the financial industry. The mathematical-economic classes provided me the ability to learn and efficiently implement the actual daily “craft” of my field.

**What advice would you give students who would like to enter your field?**  
I would advise them to take as much math and macro classes as possible. Those are the hardest classes but they are the most important once – while macro gives you the understanding and the intuition of what is going in the world the math background provides you with the necessary tools to work. I believe that with good math skills and deep macro understanding are crucial for success in the financial industry.