## BUB

Economics Undergraduate Board

# The Economizer

Winter Quarter 2002, Volume 12, Issue 2

**University of Washington Economics Department** 

#### Inside this issue...

- State Tax Structure
- Economics Grad School
- Graduating with an econ degree
- An interview with Professor R.W. Parks
- Jazz Economics
- Announcements from Economics Advising
- Model United Nations

#### 2001-2002 Economics Undergraduate Board

Joy Asato
Patrick Chen
Brian Donhauser
Josh Epstein
Elisa Hovander
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Paul Rogers
Paul Vronsky
Rob Wimer

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### **State Tax Structure Revisited**

by Paul Vronsky

Many individuals and corporations complain about taxes in this state because on a daily basis, when they go to the store or eat at a restaurant, they pay some of the highest state and local sales taxes nationwide. Business owners cringe as their companies pay taxes even as they lose money. Last year the Washington State Legislature passed legislation (ESSB 6153) that created the Washington State Tax Structure Committee to evaluate the current tax system and see how it may be altered for the 21st century. The final report must be issued by November 30, 2002.

The Committee is made up of a number of legislative and community leaders as well as members of the academic community. It includes the University of Washington Economics Department Chair, Professor Neil Bruce. He is considered to be an expert in public finance and has published numerous works on the topic, including a leading textbook in the field. Professor Bruce has an undergraduate degree from University of Victoria, British Columbia, a Masters from Queens University Ontario, Canada, and he earned his Ph.D. in Economics from the University of Chicago.

"Being from academia and having studied taxation, I enjoy this opportunity to affect real-world changes," commented Prof. Bruce on his appointment to the Committee. "Ultimately we will present our recommendations before the policy makers of this state and they will decide how to implement those alternatives for the future." continued on page 3

## **Advice for Graduate School**

by Eileen Wang

The last semester has taught me a great deal with regards to feeling prepared for school, adapting to weather patterns, and life in general. I recently started my second semester of the economics PhD program here at the University of Wisconsin-Madison. The month-long winter break provided me with the time to recover from a whirlwind first term as well as reflect on what I had experienced.

Despite the fact that many of my professors and friends who experienced grad school all warned me about the grueling workload and mental test I would face, I could never imagine the intensity of it all. I took many of the courses suggested by the top graduate programs I applied to—advanced micro and macro, econometrics, computer science, and most importantly, math. Even so, the constant barrage of work is often overwhelming. Most of my classmates are foreign students who already have master's degrees, and they struggle as well. Most programs have a core first year schedule that involves micro, macro, and econometrics. Additionally, Wisconsin requires a math course and a paper-writing course.

While writing this article, I took an informal poll of my classmates regarding the most important preparation for economics grad school. Overwhelmingly, the answer is math. One of my friends suggested that I only write the word "MATH" in my article space. Immediately after classes started, I worked with models requiring knowledge of partial derivatives, optimization, matrices, and real analysis. *continued on page 5* 

## A Comparative Advantage

by Bryan Morales

The motivation for choosing an economics major revolves around three goals: attending graduate school sometime in the future, pursuing a career in government/politics, or preparing for the rigors of business. Since I have little interest in the first two paths, many question why I decided to set up camp in Savery instead of Balmer. Doesn't the business school provide a more appropriate curriculum for my goals? Wouldn't a business degree be more respected among recruiting employers?

Well... not exactly.

As I transferred into the University of Washington, I took a brief inventory of my skills in an attempt to narrow the focus of my studies. Obvious was my appreciation for all things quantitative, especially the prospect of modeling future financial events. Although analysis was clearly at the center of my interest, I was unconvinced that the business school could afford me the tools necessary for complex decision-making. While a finance concentration exists within the business program, it seemed to lack a comprehensive statistical and empirical backbone, rendering it nothing more than a collection of valuation recipes.

A Bachelor of Science in Economics appeared much more capable of providing me with both the creative and quantitative tools needed to conquer real business issues. Some may criticize economics for emphasizing theoretical rather than practical applications, however it is exactly these theories that permit me to attack problems falling outside of standard molds. I've been empowered to look beyond a defined regimen of cookie-cutter solutions, and can now offer unique insight regarding financial events and their future implications. Economics has allowed me to think.

Specifically, the B.S. option has given me the opportunity to assess challenges within a broad context, incorporating the standardized solutions of the business school with the macro concerns of a market participant. Courses such as Game Theory and Industrial Organization have provided me with a balanced introduction to optimization strategies, while Econometrics has planted the seeds of responsible and meaningful modeling. Combined with the applied proficiencies gained in financial and managerial accounting, I've given myself a solid overview of the competencies needed for success.

So, has my choice of majors paid off?

I recently completed my degree at the end of December, and had been actively involved in campus recruiting for many months prior. While there is no substitute for aggressive job searching, every candidate needs an edge to set them apart from the adjacent masses, especially within a market that does little to favor new graduates. As the majority of my competition originated from the business school, I found tremendous support for my choice of major among recruiting professionals. The solid combination of quantitative skills and theoretical exposure appeared to be a refreshing contrast to the bland numbers emerging from Balmer.

After a successful recruiting season, I managed to obtain three solid employment offers within the finance industry. After accepting a position in the treasury department of a major oil producer, I was later given encouraging words from their director of recruiting. "We have a definite preference for those possessing a strong economics background. They appear to be much more comfortable handling quantitative and interpretive tasks, and better understand the ramifications of their decisions. With the addition of strong social skills, as well as an introduction to accounting fundamentals, we can imagine no better candidate."

Given the empirical dominance of economics, maybe the business school should concentrate on marketing or group projects. Let us all stick to what we do best and see how it works out in the business world.

#### WHAT IS THE EUB?

The Economics Undergraduate Board was created in 1989 by a group of economics majors who, with the full support of the Economics Department, committed themselves to acting as liasons between students, faculty,staff, and alumni.

They accomplish this by publishing The Economizer, updating and maintaining a website, and organizing Career Seminars presented by economics alumni. The board is also engaged in a number of activities designed to promote faculty, student interaction, including an annual survey of the undergraduate student body and a number of brown bag seminars. They have also created the undergraduate tutoring center and library in Savery 144, working to create a welcoming environment for economics students.

To become a member of next year's board or for general information visit our website at http://depts.washington.edu/ecnboard/.

#### State Tax Structure Revisited continued from page 1

According to fellow Committee member and Professor at the Daniel Evans School of Public Policy, Rep. Jim McIntire said, "Prof. Bruce has been an excellent addition to the group." He went on to comment that the Chair of the Committee and UW Regent, William Gates Sr., "Has relied upon [Prof. Bruce] for vision and economic perspective."

The Tax Structure Committee is examining the elasticity, equity, and adequacy of the taxing structure of the state. The goals of the tax review are the creation of a more harmonious tax structure with our neighboring states, the creation of more businesses, the increase of commerce, and the encouragement of home ownership. The members of the committee may suggest minor changes or a complete overhaul of the state's taxing system.

"The revenue structure of this state has been in place since the 1930s," remarked Prof. Bruce. "The Committee will look to see what improvements or alternatives are necessary for years to come."

Ironically the committee cannot focus on an income tax as a solution to the state's tax problems. Instead it must look at revenue-neutral changes (measures that do not increase or decrease the tax receipts of the state). According to Professor Bruce, tax studies in the past have all resorted to recommending an income tax, but this year's committee will attempt to keep to the mission.

Professor Bruce, according to Rep. McIntire, "Has taken the lead on other options, including the direction on a value added tax; Prof. Bruce has moved past just an income tax."

In addition to those on the Committee, an Advisory Panel of citizens has been created to provide advice and assistance to the Committee. This is a group of over 50 interested parties and special interest groups.

## Interview with the Faculty Professor Richard W. Parks:

By: Paul Rogers

Each quarter, The Economizer brings you an interview with a different member of our faculty. This quarter Professor Richard W. Parks, a past and favorite teacher of mine, took the time to sit down and talk with me.

**EUB**: Where did you grow up and go to college?

**Parks**: I grew up in upstate New York but for high school I attended Phillips Academy, the Massachusetts prep school known as Andover. When it was time to apply to college, the Harvard recruiter came to Andover. I talked to him for about fifteen minutes; he glanced through my file and said, "Okay, you're in." When I said that I needed financial aid, he glanced at my file again then said, "Okay, you have a scholarship." Thus went my college admission process, apart from a routine application. I was one of 35 in my graduating class of 220 to go to Harvard; another 40 went to Yale. It isn't as easy as that nowadays, even at Andover.

**EUB**: What were your undergraduate and graduate school experiences like?

**Parks**: At Harvard I worked hard, but also had a pretty good time. You get points there for being bright or for being a jock: I was a captain on the lacrosse team and did well in the classroom, graduating with an honors degree in economics that was based on an honors thesis. I also met my future wife, Sally, during my last year in college. After I graduated we got married and moved out west because I received a job working for Lockheed in Palo Alto. When I came out of college I had it in the back of my mind that I would go on for a graduate degree in economics. *continued on page 5* 

#### ANNOUNCEMENTS FROM THE ADVISING OFFICE

Senior Economics majors who plan to graduate in June, August, or December 2002, remember to make your SENIOR APPOINTMENT with one of the advisors. To make an appointment, write to econady @u.washington.edu. To receive Graduating Senior Priority registration for Fall quarter, you need to apply to graduate by May 8th. GSP allows seniors to register on the first day of the registration period.

What are you doing after graduation??? Now is a great time to start planning for a career after graduation. The Center for Career Services in Mary Gates Hall frequently holds workshops on interviewing, resume writing, and job-search strategies. You may also make appointments with their advisors to discuss career- planning strategies. Visit their website at http://depts.washington.edu/careers/. Also take advantage of their "e-recruiting" services, which allow you to search for jobs and internships as well as post your resume online.

#### **Interview with Parks** continued from page 3

Meanwhile at Lockheed part of my job was to take some math classes at Stanford. The next year I moved on to graduate school at Berkeley, where Dale Jorgenson (now a Harvard Prof.) was my advisor and mentor. It took me four years to complete grad school. I earned a PhD in economics, specializing in econometrics, and I also got an M.A. in applied statistics.

**EUB**: How did you come to be a teacher here at the University of Washington?

**Parks**: Out of Berkeley I was offered a teaching job at the University of Chicago. I knew that it was not likely that I would get tenure there (no Assistant Professor had been offered tenure at Chicago in the prior thirteen years), but I knew that I could learn a lot there and so I treated it as an apprenticeship, staying on as an assistant professor for five years. After that time I was offered a job at the University of Washington and came here with tenure.

**EUB**: Are finance and econometrics your favorite fields within economics? What kind of research are you doing right now?

**Parks**: Econometrics has always been an important field for me especially with respect to applied micro-econometrics and demand analysis. In the late 1970's I became very interested in finance. I decided that the best way to learn about finance would be to teach it. When I returned from a sabbatical at Stanford in 1976-77, I proposed and created Economics 422 (finance), and along with several of my colleagues, still teach it

**EUB**: What kind of research are you doing right now?

**Parks**: I've done several interesting research projects with Professor Levis Kochin over the years, and we're struggling with a new one now. Although it is a common recommendation that investors change their investment portfolios by lowering the fraction held in equities as they approach retirement, Samuelson showed in the 1970s that standard models didn't give that result. Kochin and I, with some help from Professor Hartman, are trying to show that in a model with adjustment costs for consumption will give a result in which the closer is the consumption horizon, the more you should shift out of equities into safer assets.

I'm also working on an econometrics project that returns to the topic of the first paper I published after grad school. It has to do with the best way to estimate parameters and test hypotheses in a regression model for time-seriescross section data where there is both cross equation and serial correlation. The so called Parks estimator is an available procedure in several econometric programs such as Eviews4.

**EUB**: Are you involved in any other economics-related work, such as consulting, in addition to teaching at UW?

Parks: I regularly do some consulting for attorneys on cases that involve economics and finance. I've worked for the IRS on several very interesting and large cases. One U.S. Tax Court case in the late 1980s involved the prominent Texas oil-man, Nelson Bunker Hunt. It was alleged that during 1979 and 1980 Hunt and other family members tried to corner the silver market. Although they had made billions in the second half of 1979 as the price of silver rose from about \$6 per ounce to over \$50, the price fell sharply in the spring of 1980 and they lost most of their wealth. The dispute with the IRS stemmed from this episode and was a quarrel over a mere \$350 million in tax. I had to make some mental adjustments because the tax returns involved had lots more trailing zeroes than I was used to seeing. My role involved placing a value of a large set of silver futures contracts for days on which there was no observed market price. At that time there were limits on the amount by which the price could change in a day, and if the limit was exceeded the market simply closed.

Professor Parks still enjoys skiing with family and friends, including several of his Econ Department colleagues, a sport he started to pursue seriously when he moved to Seattle. He and his wife, Sally, feel very lucky to have both their adult children as well as two grandchildren living nearby in Seattle.

Thank you to Professor Parks for donating your time for this interview.

As a side note, I strongly recommend that serious economics students take one of Professor Parks's classes. While his courses are demanding, they are very good, and you will learn a lot. (This recommendation is seconded by a couple of my closest academic colleagues, two of whom are my co-writers in this issue.) He regularly teaches Econ 422, often teaches Econ 300, and occasionally teaches Econ 482.

#### Advice for Grad School continued from page 1

Many people here have math minors or majors. Specific to the U, the most applicable math courses are linear algebra (308), real analysis (327), and topology (424-5-6). Many other top programs have a short math camp before classes start, but these are often intended as review.

Study groups form the basis for learning in grad school. The difficulty of the problem sets require even the brightest students to exchange ideas with other classmates in order to share ways to approach and solve the problems. Walking into a first year office reveals ongoing problem-solving on the chalkboards. Sometimes an idea comes after staring at what has been on the board for a couple of days. Also, venting frustrations to people who understand helps to keep the stress at a moderate level. Luckily, I've been told that my class is one of the more social ones that have come to Wisconsin's economics program. As a result, we plan activities and regularly have parties on the weekends to relax.

Though I did not enter the program with funding, I sought out a research assistant job in the agricultural economics department for this semester. Now I am applying all the techniques and skills I learned in computer science (142) and econometrics. It is very important to take CS classes so that one knows basic programming techniques. I have homework assignments requiring the use of the matrix programming language Gauss. My TA gave a brief tutorial for half of section one day, and I was expected to figure out the rest of it on my own with my classmates. I also use Gauss to program my regressions and data analysis for my RA job.

An important factor to consider about grad school is location. It happens to be the case that I am one in a class of 55 this year – a class size much larger than expected. This results in fewer resources to go around (like crowded offices and limited funding sources). Most programs desire class sizes of 20-25 students. This usually implies that all accepted students will have funding. This, and other considerations like climate, makes a big difference once a grad student immerses herself in economics

To reiterate, it is absolutely imperative to take as much math as one can handle during undergrad. I also found the beginning of the intro grad sequence of econometrics at the U useful for coursework here. Taking some of the first year graduate classes at the U allows a student to experience the rigor and course material of first year. This would provide a good immersion and help someone make an educated decision regarding whether or not grad school appeals to him or her. At the least, try to sit in on some of the grad classes and look through the homework problem sets. It's important to know that you are prepared and really want to endure econ grad school before applying and going. If you have further questions, feel free to email me at eiwang@students.wisc.edu.

## **Practicing Jazz Economics**

by Adam Grupp

At this point in the year, many of us grow introspective, wondering why we're all here. Why are we studying economics? Some of us have uncovered a life-changing passion for this social science. Others see it as a stepping stone along the path toward other professional or academic achievement.

At the outset, economics represented a stepping stone for me. I always figured it would precede law school or some such path. Moonlighting as a jazz pianist through my stint in this department, I've begun to realize some noteworthy applications of economics.

For a moment, imagine that you are a jazz pianist. There seems to be very little economics in what you do. You teach piano lessons during the day. Other musicians call you to play with their bands. You play in bars and restaurants, and you get regular work accompanying a church choir for services and rehearsals. You also get gigs playing for private parties and events. But you can't forget to practice your scales and keep learning tunes; that's the only way to stay competitive.

Now try to visualize this using economics. Your firm (you) produces output using labor and capital. In the short run, the cost of capital is fixed and the cost of labor varies with output. Your firm sells its output in markets A, B, C and D: (A) Your firm rents out its capital (human capital) to other firms (teaching piano lessons). (B) Market B is where you sell your primary output (jazz piano) to retailers (other musicians' jazz groups). (C) Here you are selling to consumers directly; you are hired by individuals to play in their establishments or for their private parties. (D) With some adjustment, your firm's capital can also be used to produce some other related output (non-jazz music).

In each market, the level of competition depends on the number of firms perceived by the buyer. Markets A, B and D are competitive, relative to market C, in which firms possess more significant pricing power. The high cost of capital (becoming a skilled jazz musician) in the industry is a barrier to entry. Firms must also continue to reinvest in capital to remain in the industry (practicing). *continued on page 6* 



A special thanks to the Economics Department, especially Professor Michelle Turnovsky, and all EUB members everywhere

The editors welcome any questions, comments, or contributions via email at ecnboard@u.washington.edu

#### Former EUB Members Involved in Model United Nations

Only a short time ago 21 students from the UW found themselves representing the country of Austria on matters ranging from the Digital Divide, to the Aids Epidemic in Africa. One of the tasks facing the delegates was the debate about whether the International Chamber of Commerce would be able to fund the proposed relief program to aid the women and children of Afghanistan. With over 182 countries being represented by university students from Seattle to Sierra Leone, the Harvard Model United Nations Conference was an opportunity to learn about current world events and how to arrive at resolutions. Moreover it was a cultural exchange that brought more than 2000 students together in the city of Boston for a four day conference on February 14th through the 17th of this year.

## **Practicing Jazz Economics**

continued from page 5

Due to the extensive product differentiation by your firm within each market, you measure demand using what you perceive to be consumers' marginal value, on the basis of their individual preferences, budget constraint and elasticity of demand. Since a transaction between buyers and sellers in any of these four markets communicates some of this information, your firm can obtain some sense of consumers' marginal value at a low cost. Customizing output subject to each consumer's characteristics is made possible by the high adaptability of your firm's capital. Your firm's opportunity cost of providing the output is comprised of the risk-weighted cost of output-specific capital (the cost of developing necessary skills unique to a particular gig, accounting for the likelihood of using such skills again) and the cost of producing the output (the cost of labor).

If you can figure out how to do all of this, then pat yourself on the back. Indeed, profit maximization in this particular example is not as easy as it appears in intermediate micro, and I even left a few things out. But was there a point to this? Yes – if economics can help an absent-minded jazz musician stay in the black, there must be some hope for the rest of us. As we complete our degrees in economics, we develop some aptitude for economic thought, our magic wand as economics majors. We might as well take every opportunity to use it.

Events such as the Model United Nations take place at the high school level as well as the university level and engage students from all cultural and academic arenas. The result was a very diverse conference allowing for the most comprehensive learning experience.

"Harvard Model UN to me was an experience of global proportions. I can't think of a better way to get 2000 college students from around the world to engage in formal discussions about topics most people take for granted. Even coming from an international gateway such as the U.W., it was an eye-opening experience and I hope many more U.W. students will be able to experience it for themselves," claims James Ham, economics major, former member of the Economics Undergraduate Board, and part of the UW delegation that represented as Austria at the Harvard Model UN.

Students from the UW that participated in the Harvard Model UN will be acting as Chairs, Moderators, and Secretaries for the second annual Washington State Model UN (WASMUN) for high school students that will be held on the University of Washington campus on April 4th and 5th of this year.

The benefits of participating in a Model United Nations are numerous. Jorge Roberts, an economics and business major and former member of the EUB, touts this program as it has had a profound effect on his life and academic career. For that reason he headed the delegation of 21 students from the UW for the Harvard conference and in addition has founded the Washington State Model United Nations for high school students through collaborated efforts with the World Affairs Council and the University of Washington.

We invite all economics students to get involved in this year's WASMUN conference and next year's delegation to the Yale and Harvard conferences. For information on how to get involved with WASMUN visit our website at www.wasmun.com.