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SESSION 1A – ECONOMIC EDUCATION I: PEDAGOGY

Teaching Economic Theory in a Distributed Education Course

David Culp
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This paper surveys the pedagogy of teaching economic theory in internet-based courses. A case study is presented involving a graduate-level distributed education course in the area of environmental economics. This course is offered through the Parks and Recreation Department at Slippery Rock University in their Masters of Sustainable Systems program. This degree program is wholly Internet-based and offered primarily to National Park Service employees.

The Black-Scholes Call Option Pricing Model: A Hands-On Approach

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Students can find the Black Scholes call option pricing model intimidating. They see a formula with five explanatory variables all combined in a seemingly complex fashion and so they rather quickly begin to view the model as a black box. But it doesn't have to be this way. If we approach the model slowly and make them comfortable with the various parts of the model, when we finally present the full model it can be considerably less intimidating. Through a series of projects that also serve as an introduction to using spreadsheets we will show a hands-on approach to introducing students to the model.

Here are the five projects:

> Computing probabilities when the distribution is normal. With the probability function being used twice in the Black Scholes model, it is important that students feel comfortable with computing probabilities. (This project also serves as the opportunity to introduce the students to the spreadsheet's Table command that will be used in subsequent projects.)
>
> The binary call option pricing model. Students discover that they can find the value of a call option in a world where stock prices will be one of two different possible values at a known time in the future. Using this simple model on a spreadsheet they find that the price behaves in a fashion similar to that shown by actual call options.
>
> The Black Scholes call option pricing model. The extension of this model is the Black Scholes model. Instead of considering two possible stock prices, possible stock prices are distributed log normal. Again the students play with the model so that they see its behavior corresponds to that of the actual market.
>
> Constructing an Excel function. This project is essentially a diversion but it makes the next assignment easier. The students learn how to construct a function – this one with five arguments.
>
> Implied stock variability. While it is possible to compute the variability variable in the Black Scholes model, here we find its value as implied by the observed call prices. We use this approach to test the robustness of the model by comparing the implied variances for options with different exercise prices and expiration dates.

The contents of each assignment will be specified. Included in the presentation will be a discussion of student reactions to and problems with each of the assignments. The presentation will conclude with a summary of the skills and insights that were gained by the students from doing the assignments. Also, possible extensions to the assignments will be suggested.

Estimating the Marginal Wage for Exempt Salaried workers: Are Workers Not Paid For Extra Hours of Work Productive and Does the Market Recognize This?

Monica Cherry
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Over the past several years extensive research has been done examining the determinants of labor supply behavior. Although these studies have varied in estimation techniques, most have relied heavily on the premise that one important determinant of hours of work is the real hourly wage. While this premise may be true for workers who are covered under the Fair Labor Standards Act and are thus compensated for overtime hours, it is not necessarily true for the many salaried workers who are exempt from overtime pay. Most work has failed to distinguish between workers who are paid for each hour of work and those who are not. In addition, there has been very little theoretical work that has explained the behavior of workers who are not compensated for each hour of work.

Although it is clear why firms would desire their workers to work additional unpaid hours, it is not clear why these workers would agree to it. Although several possible incentives may exist to motivate these workers to put forth unpaid hours of work such as fear of job loss or social norms, the incentive I explore in this paper is one of monetary compensation. I do this by estimating the marginal wage for any additional hours of work. One implication that will arise from this is that if the marginal wage is positive, then this implies that the marginal productivity of additional hours for exempt salaried workers is indeed positive and that the market recognizes this. Two further implications arise when I compare the marginal wage to the average wage. Past labor supply literature that has included salaried workers in their sample has used the average wage as an estimate for the marginal wage. However, if the marginal wage is less than the average wage then using the average wage as an estimate for the marginal wage will lead to incorrect estimates. Furthermore if the marginal wage is less than the average wage for exempt salaried workers then this is further evidence that the disutility received from work for salaried employees is less than for workers compensated for each additional hour. This finding can be used to shed further light on why some workers are paid a salary while others are paid hourly.

What Can Be Learned from the Gender Wage Differentials of the Last Five Decades?

Thamir M. Salih
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The sixties experienced socioeconomic and political institutional change. On the social front, the feminist movement was gathering momentum. On the economic front, the war on poverty including manpower training programs, was promulgated. The civil rights movement culminated the political institutional change in the United States. However, during the seventies America was occupied with socioeconomic and political malaise, e.g., the rise in violence, abortion rights, the dollar crisis, stagflation, wages and prices guidelines, unions' demand for COLA, MNCs beginning to relocate to Southeast Asia on a larger scale, the pullout from Vietnam, Watergate – all of these made the demand for equity pay less vocal than it had been during the sixties. Nonetheless, as discussed in part two of this analysis, policymakers continued to adopt measures to ameliorate socioeconomic inequities and practices against minorities, particularly those related to women. Beyond the eighties institutional change continued to take place but at a different magnitude and with a different orientation. Tendencies for gender equal pay began to grow saliently from below rather than from above.

Women played an important role in bringing about these developments. Women have increased their participation in economic as well as sociopolitical activities. However, women have found that the road to actualize oneself and one's worth by promoting socioeconomic and political institutional change is bumpy. Stated differently, for the last four decades, women's labor-force participation has been increasing This increase in the women's labor-force-participation has raised grassroots interest in whether women are receiving pay "equal" to their male counterparts, and if not (as is the case), whether legislative actions to protect women and other minorities from inequitable, discriminatory treatment by their employers has been effective. If not, are the relative income differences based on factors other than discrimination practiced by employers? Or, alternatively stated, can women's and other minorities' employment be considered a perfect substitute for that of white men?

The effort of this paper is directed towards an explanation of the gender wage differential. The empirical analysis focuses on the period after the institution of the EPA in 1964 and through the end of seventies. The rationale behind this is that many extant studies focus on the equity issue and the impact of institutional change on women's wages since the mid-seventies (see for example Blau and Khan, 1997; Chay, 1998; O'Neill and Polachek, 1992). In this analysis, the impact of institutional change that took place during the second half of the sixties through the seventies will be compared with the preceding ten years before the passage of the EPA. Then, of course, comes investigating gender income differentials that exist at the present.

The analysis is organized into four sections. Section one addresses the theoretical approach to gender earning differentials. Legislative actions for equal pay and employment are dealt with in the second section. Section three concerns an empirical estimate of gender employment demand. Section four is devoted to final remarks, other possible hypotheses about what may have contributed to the gender earnings gap, and conclusions.

SESSION 1C – PRODUCTIVITY AND INFLATION

Inflation and Productivity Growth: Is There a Threshold Effect? An Analysis of U.S. and German Data

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Sam Houston State University

In recent years there have been a number of papers done that test for the impact, if any, from changes in the rate of inflation upon measured productivity growth in industrialized nations. Economic theory suggests a number of plausible channels through which increases in inflation rates might reduce productivity growth. Recent work by Freeman and Yerger (2000, 1998, 1997), however, casts doubts on the presumption that most industrialized nations would experience a gain in productivity growth if they further reduced their existing low inflation rates. These papers find no, or minimal, evidence to support the existence of an adverse effect on productivity growth from increased inflation rates – over the modest range of inflation experienced by the industrialized nations over the past 35 years.

A possible shortcoming of the existing empirical research is that it employs standard linear econometric estimation techniques. Consequently, the estimates force the same structural relationship to exist between inflation rates and productivity growth over the entire range of observed inflation rates. If, however, the adverse effects of inflation upon productivity growth only kick in above some threshold inflation rate, then these linear estimates may fail to find an adverse effect from inflation, even if in fact such an effect exists for certain ranges of inflation.

This paper allows for the existence of threshold effects via the use of a “Threshold Vector Autoregressive Model” (TVAR). TVAR estimation allows for nonlinear estimation of the relationship between two variables. In this case, it allows the impact of inflation upon productivity growth to differ above and below the threshold inflation rate. The model itself will be a modification of the TVAR developed by Shen and Chiang (1999) in their investigation of the impact of money supply growth upon inflation rates.

The model is estimated using both U.S. and German quarterly data from the early 1960s through latter 1990s. The preliminary results indicate that at levels of inflation below 3.5% for Germany a rise in inflation causes an increase in productivity growth (inflation as “grease”), but that at levels of inflation above 3.5% a rise in inflation diminishes productivity growth (inflation as “sand”). Results to date for the U.S. are incomplete, but suggest that similar nonlinearities also may exist in the U.S. inflation-productivity growth linkage?

The Cyclical Behavior of Productivity

David W. Ring
SUNY College at Oneonta

In this paper we examine the cyclical behavior of two measures of productivity. The first measure is average labor productivity, which is simply output divided by the number of hours worked. The second is total factor productivity, which is a measure of the influence of technology on output. Neoclassical growth theory implies that over time, both measures of productivity rise when there are advances in technology. In addition, average labor productivity rises when there is an increase in the amount of capital per hour worked. However, over the course of the business cycle the rate of increase in both measures of productivity could vary due to variations in the rate of technological change and/or the amount of capital per hour worked.

Our analysis uses three indicators of where the economy is in terms of the business cycle. The indicators are the unemployment rate, the output ratio, which is a measure of where real GDP is relative to the productive capacity of the economy, and capacity utilization. We use three indicators in an effort to ensure that our results are not sensitive to a particular measure of where the economy is terms of the business cycle.

Our results indicate that productivity behaves procyclically. That is, productivity rises as output rises relative to the productive capacity of the economy. We use our results in an attempt to analyze how productivity growth over the last thirty years has been influenced by cyclical factors. That is, to what extent was the productivity slowdown of the seventies and eighties influenced by output being low relative to the economy's productive capacity and how much of the acceleration in productivity in the late nineties was due to relatively low unemployment.

SESSION 1D – PRODUCTION FUNCTIONS: THEORY AND APPLICATIONS

Ten Cheaper Spades: Production Theory and Cost Curves in the Short Run

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SUNY College at Oneonta

This paper is a response to "Ten Cheaper Spades: Production Theory and Cost Curves in the Short Run," an article published in 2000 by Richard A. Miller. In his article, Miller contends that the theory of short run production and cost presented in most principles and intermediate microeconomics texts needs to be revised. As the standard theories are based on an agricultural analogy, they do not necessarily describe the reality of production and cost in the manufacturing sector of a modern economy. Miller sets out to remedy this situation by creating a new short run production cost model that is consistent with constant MC = AVC and, at least in its broad outlines, with manufacturing reality. To do this, he makes the distinction between the amount of capital available to the firm and the actual use of capital.

While Miller's short run production model may be a better reflection of the reality of production in the manufacturing sector than the standard model, its practical application as a replacement for the standard model is questionable. In my response, I will argue three points: First, Miller does not fully appreciate the importance of the perfectly competitive model. In teaching a principles or intermediate microeconomics course, the perfect competition model provides a useful starting point in explaining resource allocation in an economy. In addition, the fact that it is a model easy to master and manipulate makes the perfect competition model a valuable teaching tool in early to middle level economics courses. Second, while Miller's model describes some production situations reasonably accurately, it does not describe all production situations; it works as a special case, which places it at the same status as the standard model. Finally, empirical estimation of cost functions, used by Miller in his analysis of short run production theory, cannot provide a definitive test of the standard analysis of production and cost.

Although the standard analysis of production and cost does not fit all production situations, no one model can. After analyzing Miller's short run production model, I conclude that the perfect competition model should not be replaced as the focal point of the principles and intermediate microeconomics courses.

Microeconomic Theory of Chemical Production Processes: Application to an Isothermal Continuous Stirred Tank Reactor (CSTR)

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Conventional microeconomic production theory is applied to a simple dilute liquid-phase isothermal chemical reaction carried out in a continuous stirred tank reactor (CSTR). The chemical reaction is the industrially significant liquid phase aqueous hydrolysis of acetic anhydride. Process relationships, which include the overall conservation (mole balance) equation, stoichiometric relationships, and the kinetic reaction rate expression are combined to obtain the engineering process equation set, which expresses the relationships between reactor volume, feed flow rate, and conversion of feed limiting reagents to product flow rate. Cost engineering correlations, which relate the reactor volume and pump size (capacity) to installed cost in base year dollars are used to determine the total process capital requirement. First, the total base year capital (dollar) requirement for equipment items is determined from the tank volume, pump flow rate, etc. Next, an installation factor is applied to determine the installed capital equipment cost in base year dollars. Then, installed process equipment costs in base year dollars are related to a defined basis unit for capital, which is defined as 10 feet of 6-inch schedule 40 carbon steel welded pipe (1 capital unit = $122 (Jan 1990)). Finally, the total installed capital equipment is multiplied by 3.37 to reflect the necessity of plant infrastructure, which includes plumbing, electrical system, controls, building space, land, etc. Process labor requirement (worker hours/day) is determined from published literature correlations that relate labor requirement to total process throughput (tons feed/day). Finally, process energy requirements are determined from design relationships for the feed pump and tank agitator.

Technical analysis, including determination of ridge curves for capital-material isoquants is performed to identify the technically feasible region of production for long-run (planned) plants. Furthermore, both short-run and long-run economic analyses are performed. Short-run average cost (SAC) curves are calculated for plants of various sizes (reactor volumes). The long-run average cost curve is obtained from the tangency points of the envelope of SACs. The output expansion path for inputs is determined from the tangency points of the capital-material isoquants with the associated isocost lines. Several numerical illustrations are given to show model features and behavior.

Production Functions Applied to Inner City Business Data

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While the *theory* of production is rich in its explanation of economic growth and technological change, time series estimation of production functions has fallen short in a number of areas. The first part of my discussion will focus on some of those limitations, including: (1) mismeasurement of outputs and inputs in relation to price deflators and insufficient quality adjustments; (2) inconsistencies and biases in measures of capital stock caused by the handling of obsolescence versus physical decay components of depreciation; (3) the resulting inability of time series production functions and Solow residuals to quantify technical change embodied in capital (as distinct from total factor productivity as a measure of disembodied technical change).

However, estimation of cross-section production functions, in spite of its own limitations, does not suffer from the conceptual and measurement inconsistencies of time series applications. The proposition here is that cross-section estimation of production data provides the opportunity to examine production possibility frontiers, and factors that cause systematic variations in such. I have been encouraged in this endeavor by empirical results within a particular industry (e.g. manufacturing), and across industries for privately held firms in a particular geographic area. The current application of involves estimation of the primary causes of shifts in the production possibilities frontiers for inner-city micro-enterprises.

The primary conclusion is that minority owned businesses, and firms with limited access to capital, are constrained in their ability to generate sales and production – when *compared to peer firms within the same industry*. One direct implication for economic research is that minority-owned firms will fare poorly in typical production function based measures of efficiency and productivity. But is the cause a low level of “productivity,” or is it a lack of access to more fruitful markets and profitable business opportunities? This is obviously an important question for future research efforts.

SESSION 2A – FORENSIC ECONOMICS

Calculation of Social Security Benefits in Disability and Wrongful Death Litigation

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Forensic economists have frequently valued lost social security benefits by projecting lost employer contributions into the system. The virtue of this method is its simplicity. However, the Social Security system does not operate on the principles of a funded pension plan. Benefits received in retirement are not proportionally related to contributions made by employers and employees during the employee's worklife. By design, the social security system ensures a substantial amount of income redistribution from high-wage to low-wage earners. This paper projects lost benefits in retirement by first estimating average indexed monthly earnings over the employee's worklife and using the Social Security administration formula for projecting retirement benefits. The analysis is performed for twelve demographic groups: low, moderate and high-wage males and females who are single and married without a working spouse. The analysis allows identification of demographic groups for which the simple employer contribution method of calculating lost benefits does a reasonable job of estimating lost benefits in retirement and for which groups, if any, ignoring social security benefits is a trivial consideration.

Period of Wealth Improvements to the Plaintiff Unaffected by Earnings Growth Rate

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The purpose of awarding an injured plaintiff a settlement based on lost earnings is to replicate the income flow that would have occurred in the absence of the injury. The settlement may be a lump sum now, structured into the future, or a combination. This article will show that with lump sum awards, when the settlement is based on replacing before-tax earnings, (1) there will be an increase in the plaintiff's wealth that will persist for many years, and (2) this number of years is independent of the assumed growth rate of earnings.

SESSION 2B – STUDENT/FACULTY COLLABORATION

Corruption and Privatization in Eastern Europe

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Elia Kacapyr
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On the surface, nothing could be easier than making the transition to capitalism. It is like falling off a log – abandon state control of production and adopt free markets. But the transition from socialism to capitalism has proved to be much more difficult in reality than in the abstract.

The devil is in the details. How, exactly, is ownership of state enterprises to be transferred to the public? Who wants to own shares in the inefficient enterprises that have only survived because of state subsidization? What is to be done if foreign investors outbid domestic investors for all of the most profitable firms?

Poland has made a better transition to capitalism than the Czech Republic, which in turn, has fared better than Russia. This paper considers some of the factors that affected privatization. Details of specific privatization schemes are assessed. The main focus is on how corruption levels affect the transition to capitalism in Eastern European nations.

It has been suggested that geography, in the sense of propinquity to well-developed and stabile economies can help in the transition toward capitalism. Statistical evidence from Eastern Europe analyzed in this paper suggests that geography is not a determinant of transition success.

Eastern Europe provides examples of successes and failures in economic transition to free enterprise. A variety of transition strategies are on display and the privatization process is carried out in the context of each nation's particular circumstances. Absolute rules and necessary conditions are difficult to pinpoint. However, one thing is clear: There is a significant correlation between economic growth and the level of corruption in a country. It is unusual for a corrupt nation to experience healthy rates of growth.

SESSION 2C – ENVIRONMENTAL ECONOMICS IN NEW YORK STATE

Radon in New York Drinking Water: Costs and Benefits of Mitigation

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Radon is a naturally occurring radioactive gas whose occurrence is widespread across Upstate New York. The National Academy of Science and the EPA believe that exposure to indoor radon poses a risk of lung cancer. Airborne radon enters homes via cracks in basement walls and floors and from drinking water in which it is dissolved and escapes when water taps are open.

This paper estimates compliance costs and mitigation benefits of radon in drinking water for a sample of villages across Upstate. The study focuses on small communities (mean population around 1500) because compliance cost per capita is highest for them due to the primarily fixed-cost nature of the proposed remediation; and the vast majority of affected water systems are small because radon occurs primarily in groundwater (wells and springs). The EPA envisions water filtration and aeration as the preferred strategy. An alternative approach is to change the water source by drilling new wells or finking to uncontaminated systems. Using data from the NYS Environmental Facilities Corp and Dept of Health, actual and proposed ground water source upgrade costs are estimated to determine the least cost mitigation strategy.

Benefits of mitigation arise from avoided cases of lung cancer (statistical lives saved). The Dept of Health compiles actual and predicted lung cancer incidence rates by zip code. It also monitors indoor radon from basement sources. The incidence of lung cancer due to radon in drinking water is the difference between the actual and predicted (adjusted for age and sex) while controlling for smoking and basement radon. Using a standard value of a statistical life, benefits and costs of mitigation may be monetized. Alternately, mitigation costs per life saved may be estimated and compared with other public health measures designed to save lives.

Reducing the NY State Income Tax Burden with a Revenue-Neutral Policy of Environmental Taxation

Thomas R. Sadler
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This paper investigates the possibility of the New York State financing, in a revenue-neutral simulation, lower income tax rates with revenue from an environmental tax on chemical emissions. For its general budget, the New York State government relies on a large flow of annual income tax revenue. Income taxes. however, discourage work activity. Lowering income tax rates at the margin would encourage work effort and reduce the deadweight loss associated with this revenue instrument. In addition, environmental taxes discourage pollution emissions and establish a market price for this negative externality. With revenue substitution, revenue neutrality, lower income to rates, and environmental taxation, the state would encourage the economic "good" of work effort, discourage the economic "bad" of pollution, and maintain the same size of the public sector.

Arguments for the implementation of an environmental tax shift exist inn the public finance literature and the environmental tax literature (Fullerton, 1998; Metcalf, 1998: Hamond et. at., 1997). Many reasons exist for the implementation of such tax policy at the state level. including the ease of administration and the identification of specific pollution sources. Potential benefits from the policy include offering a rationale for taxation by encouraging work and discouraging pollution, increasing economic efficiency by decreasing distortionary taxation at the margin, increasing environmental tax revenue. and providing a more cost-effective approach to environmental management.

This paper calculates the feasibility of an environmental tax shift by simulating the amount of environmental tax revenue generated using different assumed rates and realistic business response. Data come from the Toxics Release Inventory of the Environmental Protection Agency and the state government of New York. By calculating the amount of money generated under realistic environmental tax scenarios that would provide business with the incentive to reduce chemical emissions, the paper determines the extent to which the public sector could adjust income tax rates downward and the burden that would fall on business, and addresses the issue of inter-state competitiveness.

SESSION 2D – ECONOMIC DEVELOPMENT I: CULTURE AND ECONOMY IN AFRICA

Assessing Microlending in South Africa

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As they have for decades, many black women in South Africa struggle to meet the basic needs of their families and themselves because of the lack of control over sufficient resources. In particular, most black women do not have access to credit that could be used to establish an income-generating enterprise. Thus, one emerging strategy for addressing the poverty faced by these women assists them in the establishment of microenterprises – small businesses based in the community- financed through small loans at reasonable interest rates.

This paper will examine the growing literature on microlending/microfinancing programs in developing countries, in light of its applicability to the South African context. In particular this paper will focus on methods for assessing the effectiveness of microlending programs in increasing the standard of living and quality of life for program participants in various parts of the world. It will then articulate a preliminary assessment tool for programs in South Africa. Some of the issues that should be addressed in such an assessment include:

a. How many women participate in microlending programs?

b. How do the rules of the South African programs differ from those in other places (e.g. Grameen Bank of Bangladesh)?

c. What is the rate of successful repayment of loans?

d. Can women improve the quantity and quality of food, clothing, and other basic goods for themselves and their families as a result of their participation in the program?

Although Grameen Bank, the most recognized and one of the oldest microlending programs in the world, has been in operation for two decades, research on microlending beyond the borders of Bangladesh is not extensive. Thus, this paper can make a significant contribution to an emerging literature on ways to address poverty, especially poverty among women in low-income countries who have little or no access to formal credit systems. At a time when development economists recognize the ineffectiveness of relying upon tightly controlled planning efforts, or on laissez-faire infusions of foreign capital, a strategy that relies upon meeting the needs of the poorest segment of the population utilizing inherent skills and creativity may provide an authentic and sustainable development program.

Understanding Altruism in a Small African Village

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Recent empirical studies of a large number of cultures have consistently shown deviations from the standard economic model of behavior represented by *Homo economicus*. In general, people tend to be more altruistic than the economic model predicts. As more and more ultimatum and dictator game studies confirm that cooperation and fairness are essential components of economic behavior, these aspects of behavior have moved from “anomalies” to accepted facts of economic life.

To understand and explain altruism in non-western societies, the ultimatum and dictator games were played in the small Igbo village of Umuluwe in southeastern Nigeria. The game was played anonymously in different settings for a substantial amount of money, the equivalent of one day's wage for casual labor. The mean offer for the ultimatum game was 43 percent of the total and only one offer out of 73 was rejected. Surprisingly, the mean offer in the dictator game was about the same at 42 percent. A simple regression analysis was performed to determine whether offer rates were correlated with socioeconomic indicators such as age, education, gender, and income. Interviews after the games were played suggest that fairness was the overwhelming reason for high offers, not fear of retaliation. These results are in line with those from a number of traditional societies and suggest that the predictive power of the neoclassical model of economic man maybe limited in traditional societies. The model of economic man does not correctly predict the large percentage of rejections when the ultimatum game is played in western societies. Ironically, the economically rational prediction of a high acceptance rate holds in traditional societies but not for the reasons the standard model assumes. Significant gender differences were found in offers in both the ultimatum and dictator games. In contrast to results found in western societies males tended to offer more than females.

SESSION 2E – EXCHANGE RATES AND ECONOMIC POLICY

Structural Incompatibilities and Exchange Rate Policy: Lessons from Australia

Kieron Toner
Anglia Polytechnic University

The objective of this paper is to challenge the conventional liberal orthodoxy as regards macroeconomic policy and reform. The paper takes a macroeconomic focus and examines the economic reform program in Australia under the administrations of Bob Hawke and Paul Keating (1983-1996). This reform program was firmly rooted in this liberal tradition, heavily influenced as it was by the notions of free markets, free trade and deregulation. In Australia, exchange rate liberalization was one of the principal reform elements of Hawke's first year in office. The paper demonstrates that the sequencing of reforms is important and that it is beneficial to achieve macroeconomic and financial stability before attempting to develop a free-floating currency. Even if sequencing of reforms were to be achieved, there is no guarantee that a good dose of western liberal medicine is an effective cure. The paper thus questions both the principle and the practice of reform packages imposed on less developed nations by international organizations such as the International Monetary Fund.

**Riding the Exchange Rate Roller-Coaster:
Speculative Currency Markets and the Stability of the Euro**

Ross E. Catterall
Anglia Polytechnic University

This paper considers the relationship between economic performance and nominal exchange rate movements, and the implications of these movements for the success of the European single currency. Recent research suggests that the links between macroeconomic aggregates and nominal exchange rates are not as clear as was once thought, and that a variety of factors can result in sudden exchange rate changes which have an enormous impact on individual economies. However, for Euroland countries there is a two fold problem: they have to cope with the impacts of fluctuations in the euro itself, as well as dealing with the structural incompatibilities within the monetary union.

This paper builds on the conclusions from recent research on exchange rates and economic policy (particularly in the area of speculative currency crises) and argues that European structural incompatibilities, the behavior of speculators and the realities of political economy could threaten the success of the euro project.

SESSION 3A – ECONOMETRIC METHODS IN INTERNATIONAL FINANCE

Markov Chain Sampling in Doubly-Truncated Regression Model with ARMA or ARMA-GARCH Error

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Hiroki Tsurumi
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We develop a new Markov Chain Monte Carlo procedure and a Bayesian test of stationarity for time series regression models truncated by upper and lower bounds. We use this procedure to test efficient market hypothesis, relative purchasing power parity and interest rate parity when exchange rates are doubly truncated and regression model has ARMA or an ARMA-GARCH error term.

Do Countries With Well-Functioning Financial Markets Enjoy Better Credit Ratings in the World?

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Creditworthiness is measured by the country's credit ratings provided by *Institutional Investors.* Financial market development is measured either by the country's stock market development or by the banking sector development. To provide an answer to the above question, the author modifies an existing model of country risk analysis used by Feder et al. (1985) and Mathieson et al. (1996) to test the determinants of a country's creditworthiness. This model is modified so that, along with a standard set of regressors that are generally used by researchers in the analysis of a country risk, it includes financial development as an additional explanatory variable.

Two econometric methods are used to perform the estimations. The first method is the Anderson & Hsiao method (1981). This method is used to correct for the bias due to the presence of a lagged value of the dependent variable creditworthiness as a regressor in the model. The second method is the Generalized Method of Moments with Instrumental Variables (GMM-IV). The GMM is used to remove any possible bias due to the simultaneity between financial development and creditworthiness. After controlling for the simultaneity between credit ratings and financial market development, the empirical evidence from this paper demonstrates that financial market development affects creditworthiness.

Findings based on a sample of 31 countries for the period 1990-97 show that a one unit rise in financial development increases or decreases creditworthiness between a range of -0.14 units and 0.14 units. These findings suggest that the development of financial markets in developing countries that began in the 1990s attracted economic resources that were directed toward productive investments. This stimulated economic growth and greatly improved developing countries' debt repayment prospects, thus increasing the developing countries' credit ratings. The results also show that the development of the financial markets in some developing countries led to a deterioration of the creditworthiness of these countries' governments. This suggests that these governments became careless about debt-service payment due to overestimating the ability of revenues from financial asset taxation to service increased debt.

SESSION 3B – FINANCE IN THE EUROPEAN UNION

Changes in the Comovements of the Components of European Equity Markets

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Siena College

Within the Finance literature, the effect of removing exchange controls on the aggregate comovements between European equity markets has been examined (Cheley-Steeley & Steeley). As theory would predict, it has been found that the removal of exchange controls in major European economies explains a substantial proportion of the increase in equity market interdependence that we now observe. However, Steeley's and other similar studies focused on aggregate stock indices. This paper seeks to extend our understanding on how the removal of capital controls impacts markets by decomposing the data into its constituent components of season, trend and cycle. Through examining and comparing the changes in behavior of these components for each major European country, we can better understand how the removal of capital controls affected the behavior of these markets. The results can also be generalized to predict the impact of moves to integrate any group of economies on their financial markets and the market's related international financial flows.

The Euro: A Real Success or a Miserable Failure?

Daniel Falkowski
Canisius College

On January 1st, 1999 the Euro became a reality. Eleven nations of the European Union irrevocably fixed their foreign exchange rates, as the first step in the establishment of a single currency. Fourteen member states – Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and United Kingdom – met the criteria for membership in the common currency; Only Greece did not meet the criteria for membership. Denmark resoundingly rejected the Euro on September 28th 2000 in a national referendum, after a heavy campaign by the government. Sweden and the United Kingdom choose not to participate at this time. Greece adopted the Euro on 1st January 2001.

The Euro has been a surprise in two ways:

(1) The Euro – which many observers felt might be too strong a currency – fell from $1.17/ Euro to as low as 82 cents/Euro. While the Euro is clearly undervalued, the dollar is clearly overvalued. At present, the Euro exists only as a virtual currency, with the European Union member's permanently fixing their foreign exchange on January 1st of 1999. Prices have been quoted in both Euros and the national currency. The actual issue of Euro currency and coins will commence in January of 2002 and all of the existing national currency and coin will cease to be legal tender after July 1st 2002. This paper will examine some of the reasons why the Euro has declined in value and why a weak Euro is likely to be a temporary phenomenon.

(2) The Euro has changed the European economy, business practices and financial markets far more and far faster than anyone - even its most ardent supporters – could have predicted. While a lot of the attention has focused on the Euro's fall in value compared to the U. S. dollar, casting the Euro experiment a failure. Little attention has been paid to these far more profound, long-term effects of the new currency. Financial markets have grown larger and far more liquid. National boundaries are breaking down, encouraging national stock and bond markets to consolidate. A common monetary policy – pursued by the European Central Bank – tends to support harmonization of financial markets and other economic policies. The development of a junk bond market has opened the financial markets to firms that have not been traditionally welcomed, as well as, opening this aspect of the financial markets globally. The growth of the financial markets has reduced the cost of capital and made possible the financing of mergers and acquisitions. The value of mergers and acquisitions has doubled since 1998, the year before the birth of the Euro.

This paper proposes to examine some of these less recognized effects of the Euro.

SESSION 3C – REGIONAL ECONOMIES OF NEW YORK STATE

Diversity of Economic Performance in Metropolitan Areas of New York

Jason Bram (Presenting Author)
Federal Reserve Bank of New York

James Orr
Federal Reserve Bank of New York

This project will chronicle the growth in employment and income in the major metropolitan areas in New York State between 1965 and the present. The emphasis will be on examining the diversity in performance across these areas both in terms of their long-run or "equilibrium" growth and local cyclical performance. Differences in long-run growth rates will provide a context for interpreting the health of different areas of the state. For example, a comparison of an area's current growth rate with its long-run or sustainable growth rate can provide a more accurate indication of an area's health than its growth rate alone. We will also examine the impact of the various shocks that have hit different areas within the state in different periods. For example, during the late 1970s and early 1980s a number of manufacturing-oriented areas experienced sharp declines in activity, while the New York City area expanded. In the early 1990s, the shock to the finance sector combined with other imbalances in the city's economy led to a protracted downturn, while many upstate New York areas felt only minor pauses in activity.

The descriptive analysis will focus on key periods in the state's economy in recent decades, highlighting the differences in performance during major national downturns, manufacturing slumps, periods of financial sector weakness, and defense cutbacks, among others. The analysis will then examine the current distribution of growth rates among areas in the state, compare them to their long-term growth rates, and discuss their near-term growth prospects.

A Geospatial Economic Analysis of Income and Its Distribution in the Cayuga Basin

Kent Klitgaard
Wells College

This paper uses a Geographical Information systems approach to augment the literature on sustainable development by focusing on income and it is distribution in a regional watershed. An emerging scientific consensus gives credence to the hypothesis that a growing human economy is nearing, if not exceeding the ecological carrying capacity of the earth's natural systems. Yet, with a third of the world's population living on less than $2 per day, economists of most school's of thought view limits to growth as unfeasible.

Ecological economics straightforwardly addresses the questions of growth and its limits by collaborating with ecologists and atmospheric scientists. If the absorptive capacity of the earth's systems and the throughput of energy limit perpetual growth then increased attention to income distribution is paramount. To this point, the vast majority of studies that link income distribution to potential environmental destruction are conducted on a world scale. Regional studies of income distribution and sustainability are far less developed.

In order to collaborate, ecologists and economists must reconcile their areas of study as well as basic theories. Freshwater ecologists generally choose the watershed as the area of analysis. Economists favor political boundaries. Before analyzing the effect of income distribution on ecological carrying capacity and sustainability, we must first be able to MEASURE it. After establishing a theoretical rationale to study economic trends on a watershed basis, this paper proceeds to offer a measurement method. I reorganize the 1990 block group level census data for the watershed of Cayuga Lake in Central New York. I then use software provided by the Bureau of the Census to calculate Gini coefficients, as well as providing alternate measures of income distribution. I then compare these calculations with national averages and draw limited conclusions about regional sustainability.

SESSION 3D – PUBLIC ECONOMICS

Moynihan's Proposal on Social Security Reform

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Iona College

Joseph Ford
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Francis McGrath
Iona College

Former Senator Daniel Patrick Moynihan has long been associated with efforts to reform social security. He was a member of The National Commission on Social Security Reform (1981-1983), The Bipartisan Commission on Entitlement and Tax Reform (1995). He was a member of the Senate Committee on Aging. Senator Moynihan has been appointed by President Bush to be co-chairman of a bipartisan commission on social security.

In 1998, he sponsored a bill "The Social Security Solvency Act of 1998" with Senator Robert Kerrey. The bill proposed cuts in the FICA tax for thirty years and then increases after 2045, reductions in benefits, increases in coverage and the retirement age. This paper will analyze Moynihan's proposal to establish a Voluntary Personal Savings Account (VPSA). The VPSA would be funded by a worker taking 1% of what he or she pays to FICA and matched by a comparable 1% from his/her employer for a total of 2%. The money would be invested either in voluntary personal accounts modeled on the Federal Thrift Savings Plan managed by a new government board or in special Individual Retirements Accounts managed by financial institutions of their choosing. This is similar to the individual accounts proposal by President Bush in his campaign and his budget report to Congress. The pros and cons will be examined.

The Role of Leader and Policy Board Characteristics in the Implementation of Private Sector Innovations in Local Government

Richard Proctor (Presenting Author)
Siena College

Douglas Ihrke
University of Wisconsin, Milwaukee

This research looks at factors that influence the success or failure of private sector innovations utilized by local governments. Local governments have long been considered laboratories for experimenting with various types of innovations and reforms. Reforms first attempted and refined at the local level often become the standard used by other levels of government (Gabris, Grenell, Ihrke and Kaatz, 2000). Gabris and Golembiewski (1996) argue that local governments are more likely to innovate because of their small size, and their ability to make decisions quickly and decisively.

Local governments have been under increasing pressure to more efficiently utilize their resources, often due to reduced property taxes and decreased aid from the federal and state level. In response to these and other pressures, local governments have increasingly adopted measures originally developed and utilized in the private sector to increase productivity and improve performance. Innovations such as the privatization of public services, TQM, treating the citizen as a customer, formal strategic planning, SWAT analysis, and performance budgeting are increasingly being employed in the public sector.

This study attempts to determine some of the factors that determine the success or failure of these private sector innovations in their application to the public sector. Specifically, we examine the characteristics of the city chief administrative officer, the policy board and the administrative organization in determining the perceived success or failure of these reform efforts. We utilize a leadership credibility index originally developed by Kouzes and Posner (1988, 1993) that measures overall leadership skill. We also examine specific manager/ management/organization characteristics such as communication skills, the establishment of measurable objectives, adaptability to change, the development of a "team" atmosphere, etc., to determine which specific characteristics are most important determining the success of these reforms. We also examine the effect of policy board cooperation/conflict, and the policy board's relationship with the administrative units, on the success or failure of governmental innovation.

The study is based on a survey of local government department heads from the 57 cities and villages of Wisconsin with populations of 10,000 or more. The sample consists of responses from 183 of 561 department heads in the state. The survey consisted of about 100 questions answered using a 5-point Likert scale. The data was reduced to form the measures of innovation, leader, board, and organization characteristics examined in this study. The preliminary results are generally consistent with our hypotheses regarding the various characteristics that determine the success or failure of reforms. Some of the results, however, do not fully conform to our original expectations.

SESSION 4A – CAUSES AND CONSEQUENCES OF MACROECONOMIC UNCERTAINTY

Macroeconomic Implications of Operating Return Trends

Richard Skolnik
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This study links the operating returns of non-financial S&P 500 companies from 19821999 to macroeconomic factors. The study finds that mean operating returns during this period remain relatively stable and exhibit no trend. Returns vary cyclically with changes in GDP; however, the variation in returns is less than the variation in GDP growth. The stability of nominal returns leads to variable real returns. Real operating returns decreased during the late 1980s and increased from 1992 through 1997, first because of increasing margins and then due to falling inflation. This study also finds that the components of operating returns changed during this period. Asset turnover has decreased, while operating margins have increased. Increasing asset intensity of production may lead to wages constituting a smaller share of national income.

Assessing Uncertainty on Federal Reserve Behavior

Dennis Andrew Petruska
Youngstown State University

Included in the Federal Reserve's semi-annual reports to Congress are both monetary targets and projections of several economic variables. In this paper the Federal Reserve's response to economic events is studied using tests that employ a set of dummy variables that indicate where the money supply lies relative to the announced target range and where the economic variables lie relative to the projected ranges. Probit regression equations are estimated while using the binary variables that indicate where the value of money lies relative to the Fed's announced target range as the binary dependent variables and the dummy variables that indicate the where the economic variables lie relative to the Fed's projected ranges as independent variables. The estimated coefficients of the dummy independent variables represent the conditional probabilities that the money supply lies below, within or above the announced target range depending where the economic variables lie relative to the projected ranges. The estimated coefficients are used to test for the symmetry, or asymmetry, of the Fed's response to various economic events. This procedure is also used to create time series that indicate the anticipated Federal Reserve policy and the degree of uncertainty about Fed policy. This procedure represents an attempt to quantify risk. While there exist many techniques to measure the expectations of money market participants regarding actions of the Fed there is disagreement on how to assess uncertainty about Fed actions. This is similar to the topic of measuring uncertainty regarding the inflation rate. Typically, expected values of inflation or of the money supply are obtained through using survey methods. Unfortunately, there is disagreement on how to employ the results of the various surveys to obtain a measurement of risk. This paper attempts to provide a potential solution to the problem of assessing risk.

Responses of the Financial Market to Macroeconomic Announcements Across Economic States

Li Li
Pace University

This paper employs the daily returns of the Dow Jones Industrial Index, the S&P 500 index, the Russell 2000 index and the Treasury Futures to examine financial market reactions to a broad list of macroeconomic announcements such as sales, inflation, employment, housing starts, inventory and trade balances. The states of the economy are classified by different monetary regimes, industrial production, unemployment, leading indicators and the NBER business cycle turning points. Various methods are applied, such as generalized regime-switching model (GRS). We find strong evidence of variations n financial market responses to the same macroeconomic news across different economic states. After allowing the response coefficients to vary across the states of the economy, several announcements concerning real economic activity that have received little attention in previous research are shown to have significant impact on returns of financial markets. We also present preliminary evidence of the different reaction to macroeconomic news of small cap stocks and large cap stocks. For Treasury Futures markets, responses to the same macroeconomic news are studied with different term structure.

SESSION 4B – ECONOMIC EDUCATION II: STUDENT SUCCESS

The Determinants of Success in a Managerial Economics Course Revisited

Charles Callahan III
SUNY Brockport

Factors that have affected student performance in principles of economics have been studied extensively. There have been only a few studies that examined the determinants of student performance in upper-division economics courses. In an earlier paper, an examination of the determinants of success in a managerial economics course was undertaken using ordinary least squares (OLS). We used OLS for purposes of comparison with other studies and related ease of interpretation. However, ordered probit appears to be the best method for analyzing the data when the dependent variable is categorical (takes on value of 0 or 1). This study updates the previous study and runs regressions using ordered probit. Curricular implications of the study are provided.

The Role of Family Variables in Student Performance and Retention

Dal Didia
Jackson State University

How do we recruit and retain students so that they can become productive citizens? This study will tackle this issue by exploring family variables that impact student performance and retention. By using surveys and official university records, we will be able to gather data on the variables that are most likely to affect a student's ability to matriculate and graduate. Based on the results of our regression analysis, we will be able to offer specific policy recommendations to university administrators, faculty, staff, counselors, and all who are engaged in the business of educating young people to enable them to be more productive and effective in discharging their duties.

Student Performance in Intermediate Economic Theory: Does "Diligence" Matter?

William P. O'Dea
SUNY Oneonta

David W. Ring
SUNY Oneonta

In this study, we employ a production function approach to analyze the performance of students who were enrolled in our sections of Intermediate Economic Theory during the 1999-2000 and 2000-2001 academic years. The dependent variables are the student's average examination grade and how well they did on the written, problem, and multiple-choice subsections of the macroeconomics exams. The explanatory variables include: measures of intellectual ability; measures of performance in prerequisite courses; and personal characteristics such as gender, whether the student is a transfer, and whether the student is repeating the course. In particular, we are interested in determining whether diligence, or the willingness of students to give the course "the old college try," has a statistically significant impact on examination performance. Thus, the list of explanatory variables includes three measures of effort: the average grade on homework exercises completed, the share of homework exercises completed, and the number of unexcused absences. Our results indicate that the average grade on homework exercises completed and the number of unexcused absences have statistically significant effects on test performance. Not surprisingly, the test average rises as a student's homework grade rises, whereas an increase in the number of unexcused absences has an adverse affect on examination performance. The percentage of homework exercises completed does not have a statistically significant impact on test grades.

SESSION 4C – ECONOMIC DEVELOPMENT II: CLIMATE, TECHNOLOGY, AND TRADE

On Being Tropical: An Inquiry Into the Linkages Between Climate and Economic Development

Mariam Khawar
Elmira College

The relationship between geographical factors and economic growth and development has, to a large extent, been ignored by economists. However, researchers in other fields (namely historians and biologists) have provided detailed and plausible explanations of the connection between geography/climate and economic progress. Recently a group of economists at the Center for International Development Studies (CIDS) at Harvard University conducted a comprehensive cross-country study to demonstrate the existence of this relationship. Other studies by the CIDS group have carried this work further by examining in particular the effects of climate on agricultural productivity and disease burdens. However many avenues remain unexplored, amongst them this central question – if "being tropical" somehow results in lower levels of GDP per capita, lower growth rates, lower productivity etc., then what particular features of "being tropical" are responsible for such an outcome? Channels under consideration would include the effect on agriculture of the amount and variability of rainfall and the degree and variability of average temperatures. Another possible avenue would be the effect of climate on the spread and control of infectious diseases and their impact on mortality and life expectancy and consequently fertility and population growth.

This paper attempts to investigate the issues mentioned above to try to uncover some of the channels that link climate with economic development. We hope to provide empirical evidence that will bring us closer to an understanding of this complex relationship. From a policy standpoint this is an extremely important issue since almost all research and development on agricultural and public health issues is carried out in developed countries and a serious problem arises if the technology is not suitable for adaptation to developing countries' climate and ecology.

A Simple Inquiry Into the Economic Effects of Information Technology on International Development and Globalization

Tarek H. Selim
George Washington University

The impact of information technology on the globalization of the world market is assumed to have a dual effect from an economic point of view: a micro-economic business effect and a more global developmental effect. A simple micro-economic model that captures the attributes of a dynamically stable "virtual" market equilibrium has been proposed and different constraints found necessary for long run price stability of such a "virtual" equilibrium. In retrospect, systematic firm-specific strategic effects have to be completely offset by aggregate demand growth effects, and indirect utility gains from information availability must exceed consumer disutilities from locational search costs. In addition, the macro-economic impact of information technology has been quantitatively analyzed using a Neoclassical growth model with information technology as an indirect factor within the economy's aggregate production function yielding three main effects on sustainable economic growth: (1) an efficiency effect, which captures idea creation and local innovation; (2) a scale effect, which captures monotonic transformations of the technological base of an economy; and (3) a capital utilization effect, which captures the endogenous choice of information technology in an economy's production process. A balanced growth path shows multiplicative efficiency and scale effects with an additive capital utilization effect on economic growth.

Globalization: Major Challenges Facing the Islamic Republic of Iran

Mehrdad Madresehee
Lycoming College

There is growing evidence in empirical studies in support of the notion that liberalization of trade and opening of markets are the best roads to economic growth. The findings of these studies are in accord with the economic theory that ascertains the existence of a positive relationship between the "level of openness" of particular countries and their "rate of growth." For example, a recent study by Frankel and Romer (1999) estimates that increasing the ratio of trade to GDP by one percentage point raises per-capita income by somewhere between one-half and two percentage points. Other studies (such as ones conducted by Sebastian Edwards (1998) and Dani Rodrik (1999)) reach similar conclusions, though with different estimated size and statistical significance.

While certain less-developed countries have rapidly expanded their activities in the world trade and international capital markets, others (including Iran) have been less involved in this global integration – either by their own volition or being dragged into it by world events. The accelerated pace of integration over the past two decades has shown large disparities among developing countries. Because of this isolation, these countries have recorded weak economic growth since 1980.

According to an IMF study, those developing countries that have grown most rapidly over the past decade or so are ones that have adapted to the world economy through policies that encourage openness and facilitate inflow of foreign capital. Not all developing countries took advantage of these opportunities and because of that, according to this study, in the last decade or so the ratio of trade to GDP fell in 44 out of 93 developing countries. Obviously, the gap between those countries that have joined the "camp" and the remaining group that have opted (or have been forced) to stay out has been widening.

Prior to the Iranian revolution in 1978, the growth in Iran's non-oil export was among the highest in the world. The aforementioned growth has been declining since then and continues to lag behind even among less developed countries. By comparing Iran with other Middle Eastern economies this study will try to investigate the reasons behind this stagnated growth (or even decline) in certain years in Iran's export of non-oil products. In conclusion, the study will also try to offer some solutions for rectifying the problems.

SESSION 4D – ECONOMIC THOUGHT: PAST AND PRESENT

The Historical Influences of Biology on the Development of Economic Methodology

William T. Ganley
Buffalo State College

The natural sciences have had a significant influence on economic theory and methodology. Historically, physics had the dominant influence on economics. However, during some specific historical periods, biology has had a serious influence on economics. Recently, historians of economic thought have begun to investigate the links between economics and biology.

This paper will investigate the historical interaction between biology and economics. One of the more interesting eras to study is the Post-Darwinian period, the later 19^{th} century and early 20^{th} century. Darwin's theory of evolution was gradually accepted, despite its major theoretical gaps. Mendel's genetics had been rediscovered, but was not fully reconciled with the theory of evolution. This paper will analyze the specific influences of biology on economic methodology during this era. Special attention will be given to those theorists who explicitly used biological metaphors in their approach to economic theory and methodology. One question to be addressed: why did biology wane in importance as economic methodology developed in the twentieth century?

The renewed interest by economists to evolutionary models will be reviewed. The paper will attempt to show the relevance of past methodological conflicts to modern economic methodology.

The Evolution of Cooperative Behavior from *Leviathan* to *The Wealth of Nations*

Robert S. D'Intino (Presenting Author)
Pennsylvania State University

John A. Sinisi
Pennsylvania State University

The iterated Prisoner's Dilemma has been used to analyze the wisdom of cooperation versus aggression in a wide variety of contexts. We examine the Prisoner's Dilemma research of Robert Axelrod (1984) and place this research in the context of Hobbesian controversies in economic and political theory, and further develop Axelrod's research to explain how Adam Smith (1776) transformed Hobbes' ideas of "war of every man against every man" into an economic system where self-interest results in economic development and prosperity.

Axelrod observes that civilization requires cooperation but many social situations are structured in ways that give people practical incentives to act selfishly. The question that he poses is "in situations where each has an incentive to be selfish, how can cooperation ever develop?" Axelrod begins with strategic questions: "When should a person cooperate, and when should a person be selfish in an ongoing interaction with another person?...and what pattern of behavior can (one) use to best elicit cooperative behavior from others" (page vii). In modern social theory, iterated Prisoner's Dilemma is frequently used to analyze the wisdom of cooperation versus aggression in a wide variety of contexts (economic struggles within or between business firms, political struggles within or between nations, etc.). We examine the research findings of Axelrod concerning the success of TIT FOR TAT (the strategy of starting with cooperation, and thereafter doing what the other player did on the previous move) in iterated Prisoner's Dilemma contexts and move on to the ideas of Hobbes and Smith.

In his classic treatise *Leviathan*, Thomas Hobbes (1651) argued that before governments existed, selfish individuals competed on such ruthless terms that life was "solitary, poor, nasty, brutish and short." He further argued that a strong government that makes and enforces rules is the only way to end the incessant war of all against all and create a situation where peaceful cooperation is possible. According to Hobbes, cooperation cannot occur without a strong state to make and enforce rules. For without a strong state, it is simply too dangerous to trust that anyone will be peaceful and keep their promises.

But as critics of Hobbes have pointed out, if it is dangerous for individuals to trust each other, it is even more dangerous for individuals to trust a powerful state apparatus to make fair rules and enforce them fairly. Beginning with John Locke in political theory and Adam Smith in economic theory, it was commonly argued that Hobbesian pessimism is rooted in an unduly cynical view of human nature. Locke and Smith agreed with Hobbes that individuals are driven by self interest, but refused to believe that God and nature had create a Hobbesian world in which deceit and unprovoked violence were both natural impulses and logical methods of survival.

Locke and Smith developed a kinder, gentler concept of self-interested human nature. They retained the individualist assumption that humans are motivated by self-interest, but they also assumed that individuals are willing to obey rules and not resort to deceit and violence every time things do not go their own way. Once this more optimistic view of human nature was adopted, more optimistic conclusions were drawn concerning results of self-interest and competition. In political theory, Locke and his followers developed a theory and defense of democracy. In economics, Adam Smith and his followers developed a theory and defense of competitive markets.

But in the 20th century neo-Hobbesian theorists have argued that there are illogical holes in the theoretical edifices constructed by Locke, Smith and their followers. Some people do resort to deceit and violence to further their self-interest. It is just as illogical for Locke and Smith to assume that people typically play fair in their quest for survival, wealth and power as it is for Hobbes to assume that people typically cheat and resort to violence. What is needed is a theory that can leave open the question of probabilities and tendencies to obey rules, use deceit and resort to violence, or choose to cooperate.

Axelrod's arguments in *Evolution of Cooperation* are a move in this direction. He develops what we might call a structuralist interpretation of Hobbesian dilemmas. In this approach the war of all against all is not rooted in a dark human nature, but in fact that in the state of nature, individuals are trapped in a Prisoner's Dilemma. Decisions must be made whether or not to cooperate. We use Axelrod's research into iterated decision making to clarify the theoretical conclusions of Hobbes and Smith.

Consensus Among Economists: Revisited

Doris Geide-Stevenson (Presenting Author)
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Dan Fuller
Weber State University

This paper is based on a survey of economists and continues a line of research that began in 1976 with a survey by Kearl et al. (1979) and was updated in 1990 by Alston et al. (1992). The purpose of previous and current research is to assess whether there exists consensus among economists on a number of specific propositions. The reasons to update previous research after a decade are the unique macroeconomic situation the U.S. enjoyed throughout the 1990s, i.e., the prolonged expansion with increasing productivity late into the business cycles, a phenomenon sometimes dubbed the "New Economy," as well as new research findings on some of the propositions included in previous surveys. The survey consisting of 44 propositions was send to a random sample of AEA members in September 2000. 308 responses were received.

Based on a chi-square test and the relative entropy index, the paper identifies 10 propositions for which substantial consensus exists within the economics profession. The findings indicate strong consensus in the area of international economics with a bias toward strong support of free trade in the context of market-determined, flexible exchange rates. The paper also identifies 9 propositions for which the hypothesis of no consensus cannot be rejected. Five of these propositions listed in table 3 deal with macroeconomic questions. As originally pointed out by Kearl (1979), macroeconomics remains a weak area of consensus for economists. Survey results for 25 propositions are available in 1990 and 2000. For 16 of the 25 questions the hypothesis of identical response patterns can be rejected at the 5% level of significance. Also, while Alston identifies only two of these propositions (12, 29*)* showing no consensus in 1990, the 2000 survey identifies 7 of these 25 propositions showing no consensus. In summary, the current survey shows a shift toward less consensus among economists, largely driven by an ongoing shift in attitude on macroeconomic issues away from what could be considered traditional Keynesian thought.

SESSION 4E – ECONOMIC HISTORY

Corners on the Commodity Futures Markets in the XIXth Century

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University de Caen

We analyze one specific form of market manipulation – corners (or squeezes) on some commodities futures markets. A corner may be defined as a practice of making contracts for the purchase of a commodity, and then taking measures to render it impossible for the seller to fill his contract, for the purpose of extorting money from him.

This type of manipulation was fairly frequent on the floors of commodity futures exchanges in the second half of the XIXth century – especially on the Chicago Board of Trade (the CBoT).

Throughout the historical analysis we focus on the role of some institutional factors such as the storage capacity at the delivery point and the severity of fines imposed on defaulting shorts. We analyze the influence of those factors on the likelihood of occurrence of a corner-style manipulation.

In the XIXth century the futures exchanges were privately regulated organisms with almost no intervention of public authorities. With the emphasis laid on that period we can observe the interactions of purely economic factors with no regulatory incursion. It is interesting to point out that, despite the fact that several public measures were taken, the underlying economic conditions remain the major factor for the success for the failure of a corner.

In the first part of our paper we present few cases of real corners dating from 1860-1885. Some of them, e.g. corners orchestrated by B. Hutchinson in 1866 and in 1888, were very successful. Some, such as J. Lyon's led their initiators to bankruptcy and complete ruin.

In the second part of the paper we try to modelize the mechanism of corners considering them as a game between the manipulator and the hedgers – sellers of the contracts. This type of modelling tries to make existing models (Kyle (1984), Pirrong (1995)) more realistic. They put the emphasis on the interplay between a manipulator and the market makers, which, in our opinion does not exactly reflect the reality.

Our results are quite intuitive. The reduction of the storage capacity and/or the increase of the amount of fines imposed on the defaulting shorts increase the probability of the occurrence of the corners. The latter factor seems paradoxical. The high level of fines in case of default on a futures contract should normally decrease the number of defaults and then make a futures contract more reliable. But it tends to make the corners more frequent and thus make the futures less useful for the hedgers.

Domestic Exchange Rates prior to the Founding of the Federal Reserve System

Michael McAvoy
SUNY College at Oneonta

This paper explores a little-researched topic in financial history, the market for New York exchange, or bank drafts on deposits in New York City. Prior to the founding of the Federal Reserve System, the market was a nationwide one in which banks acquired and sold drafts on deposits in New York City. In New York City the drafts exchanged at par, since one could obtain the amounts of the draft by presenting it to the bank on which the draft was drawn. However, outside New York City the price of New York drafts was determined by supply and demand. The activity in domestic exchange was to a degree such that prices on exchange were regularly published in financial newspapers.

Recent research interprets the behavior of domestic exchange rates in terms of their deviations from par over time, and their cointegration with regional growth rates. The annual June domestic exchange rates trended toward par after 1900 and their ranges decreased as well. Between 1899 and 1908, domestic exchange rates behaved in a manner predicted due to differences in regional growth rates.

I collect domestic exchange rates on New York City for cities across the United States using three national financial newspapers between 1880 and 1917. I study the seasonality contained in the data and relate such to the behavior of the agricultural and trade cycles mentioned frequently by writers of this era.

Did Wages Become Stickier During the Interwar Period?

Ranjit S. Dighe
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Elizabeth Dunne Schmitt
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Historical studies of the cyclical behavior of wages in the United States tend to compare pre-World War I data with post-World War II data. The interwar decades of the 1920s and 1930s do not enter into these studies, partly because of data discontinuities and partly because the post-WWI deflation of 1920-1921 and the Great Depression of the 1930s are seen as anomalous. Yet many scholars allege that wages became decidedly stickier at some point during those decades, such as in the immediate aftermath of the Crash of 1929 or with the First New Deal in 1933. Using monthly data on hourly earnings and prices and industrial production, this paper tests that assertion.

Preliminary results, from a modified Phillips Curve framework in which the monthly change in nominal hourly earnings is regressed against current and lagged values of industrial production and wholesale prices, indicate that wages were sticky in both the 1920s and the 1930s, since in both decades the combined impact of thirteen successive 1% changes in output has a very small predicted effect on wages, and the cumulative impact of thirteen 1% changes in wholesale prices, while sponger, is also much less than one-for-one. Results of regressions with dummy interactive term for the post-1929 and post-1933 periods suggest that wages became significantly stickier in 1933, though not in 1929. This last result seems to contradict the widespread belief that wage stickiness was a key transmission mechanism in the Great Contraction of 1929-33, since the severe nominal shocks of 1920-21 did not result in a long-term depression in the early 1920s, despite the similar degree of wage stickiness in both episodes.

The apparent increase in wage stickiness after 1933 seems wholly congruent with the change in policy regime at that time. President Roosevelt's New Deal ushered in a host of measures that had the effect of shielding workers firm wage cuts. Some of the NIRA codes explicitly forbade cuts in weekly wages; all of the codes imposed minimum wages; and the NIRA's Section 7(a) gave government sanction to unions. By the time of the NIRA's invalidation by the Supreme Court in mid-1935, the surge in union power plus the imminent threat of unionization at nonunion companies, arguably provided a powerful check against wage cutting.

Impulse response functions (IRFs) from a three-variable autoregression (wages, prices, and output) do not indicate that wages were stickier after 1929 or 1933; in fact, they suggest that wages were more flexible in the 1930s than in the 1920s. Thus the IRFs tend to confirm the implication that nominal wage stickiness was not a key transmission mechanism in the Great Contraction of 1929-33, though they contradict the conclusion that the New Deal brought increased wage rigidity. (The conference paper will also include IRFs from a four-variable autoregression that includes the nominal money stock; we expect this specification will give a fuller picture.) At some point we plan to extend the analysis to postwar data, to see how patterns of wage cyclicality have changed or evolved since the 1930s.