
Economics Department

Professor Karen E. Thierfelder
Chair

Faculty members of the Department of Economics were actively engaged in research on a broad range of subjects in 2005-2006. Though every member of the department - professors and officers of varying ranks as well as Visiting Assistant Professors - were involved in productive scholarly and/or creative activities, several of these publications, presentations and research areas deserve mention in this introduction.

Associate Professor Matthew J. Baker completed three publications in refereed journals. He was invited to teach for a year at Hunter College in New York City. Assistant Professor Brendan Cunningham gave four presentations, two of them at international conferences (Hamburg, Germany and Singapore). He had two publications and he was a member of the Editorial Board of the *Journal of Media Economics*. He received an external grant from the Center for Analysis of Property Rights and Innovation from the University of Texas, Dallas. Associate Professor Pamela M. Schmitt had three publications, including one with a former honors major, Justin Mayer, United States Naval Academy (USNA) class of 2003. She continued her role as the Honors Program Advisor and coordinated four honors projects for first class midshipmen. Assistant Professor Katherine A. Smith gave two presentations, one at the Stanford Institute for Theoretical Economics. She had one publication. Associate Professor Kurtis J. Swope served as a thesis supervisor under the LEAD program. He had three journal publications, one of which was with a former honors major, Justin Mayer, USNA class of 2003. Professor Karen E. Thierfelder continued to develop and apply computable general equilibrium models to international trade flows. She had one journal article published and was invited to speak at a conference on computer modeling in South Africa. Professor William R. Bowman was on sabbatical leave for the fall semester and spent part of the time as a Visiting Professor at the University of New South Wales, Australian Defense Force Academy, Canberra, Australian Capital Territory, Australia. He was there for nearly three months and worked with faculty members, admissions staff, and the Australian Army on designated research projects. In addition to research projects, he also conducted research for the Bureau of Naval Personnel, Office of Strategic Planning and Analysis. Professor Rae Jean B. Goodman continued in her role as Director of Teaching and Learning at the United States Naval Academy. Among numerous activities in that role, she organized six workshops at the United States Naval Academy on various aspects of effective college teaching. She presented a workshop at the University of Virginia and was part of a team that reviewed the development of a major in Applied Economics at SUNY in Farmingdale, NY. Professor Rae Jean B. Goodman served on the American Economic Association Committee on Economic Education. She organized a poster session on active learning techniques for the annual meetings in Boston, MA.

Within the Economics Department, students majoring in Economics also distinguished themselves. The Frederick L. Sawyer Prize, awarded to the best senior research paper by a graduating Economics major, was won by Midshipman 1/C Nancy G. Harris, USN.

Sponsored Research

Technological Progress, Population Growth, Property Rights, and the Transition to Agriculture

Researcher: Associate Professor Matthew J. Baker
Sponsor: Naval Academy Research Council (NARC)

Following the rapidly growing literature on the Neolithic revolution, this paper develops a model of mankind's initial transition to agriculture in which population and technological sophistication are both endogenous variables. Total factor productivity in both agriculture and hunting and gathering depend on natural resource endowments and a general purpose technology, but that TFP in agriculture is relatively more dependent on

technological sophistication than TFP in hunting and gathering, and that agriculture requires effort be expended in land enclosure. The model describes combinations of population pressure, technological sophistication, and resource endowments that are sufficient to generate a switch to agriculture and enclosure, but also admits the possibility that no switch will occur. The steady-state relationships of the model are estimated by applying a two-state, two-equation model with endogenous regime switching using information on the incidence of agriculture, population density, technology, and environment among 186 pre-modern societies. Habitat diversity, a relatively flat landscape, and exceptionally heavy rainfall are among factors contributing to total factor productivity in hunting and gathering, while soil quality, climate suitability and proximity to an ocean increase total factor productivity in agriculture. Roughly ten percent of TFP in agriculture can be attributed to technological sophistication, while TFP in hunting and gathering is not influenced by technology. Among other things, there is evidence that endogenous growth effects may be responsible for approximately 40% of observed technological sophistication among agricultural societies, but do not appear important among hunter-gatherers.

Law and the Productivity of Copyright Industries

Researchers: Associate Professor Matthew J. Baker and Assistant Professor Brendan M. Cunningham
Sponsor: Naval Academy Research Council (NARC to BC)

In the past ten years, federal law in the United States has significantly increased the scope of protection for intellectual and cultural works. Is lengthening copyright socially desirable? The social benefit of stronger copyright is fundamentally determined by the productivity of copyright industries. The most precise measure of cultural productivity is the number of registered copyrights. Existing data on copyright case law in the United States does not cover sufficient years to permit a reliable empirical exploration into the determinants of copyright registrations. For this reason, this paper applies the Baker and Cunningham (2004) technique of quantifying the state of copyright in case law to Canada. We then estimate the impact of statutory and common law on copyright registrations internationally.

Business Case Model of Navy Officer Accessions

Researcher: Professor William R. Bowman
Sponsor: Bureau of Naval Personnel, Office of Strategic Planning and Analysis (N14)

The objective of this study is to analyze contrasting methods of cost-effectiveness of major navy officer accessions developed by the Center of Naval Analysis (CNA 2001 & 2003) and the author (Bowman 1996). CNA studies have used a methodology that, in the view of the author, penalizes that accession source which is the most effective in generating least cost senior career officers while also penalizing accession sources employ civilian instructors (especially the United States Naval Academy). In addition, the career patterns of navy officers analyzed by CNA also differ from those of the author and fail to capture source-specific differences that result in biased career continuation rates. Updated longitudinal officer career retention data are used to compare the resulting differences in the two cost methodologies and show the CNA approach results in biased cost-effectiveness estimates for the United States Naval Academy compared with Naval Reserve Officer Training Corps (NROTC) and the Officer Candidate School (OCS).

Faculty: Thy Administrator's Keeper? Theory and Evidence

Researcher: Assistant Professor Brendan M. Cunningham
Sponsor: Naval Academy Research Council (NARC)

This paper presents a stylized principal-agent model of firms in higher education. The model incorporates information asymmetries over the actions chosen by administrators, as the agents of colleges and universities. The model predicts insufficient monitoring of administrators by trustees and, consequentially, shirking as a direct result of the non-profit status under which universities operate. It shows that faculty will serve as "delegated monitors" given the proper incentives. This solution to the asymmetric information problem is most beneficial for the university when: 1) monitoring costs are lower and 2) administrators can not impose significant punishment costs on faculty. The practices of organized faculty participation in governance and tenure naturally achieve such ends. Empirical evidence from a sample of colleges and universities in the United States supports the model's key prediction that features of a faculty's employment have significant effects on a university's financial outcomes.

Price Competition in the Presence of Product Differentiation: Results from the Minneapolis Retail Gasoline Industry

Researchers: Associate Professor Pamela M. Schmitt, Associate Professor Suzanne K. McCoskey,
and Midshipman 1/C James Light, USN

Sponsor: Naval Academy Research Council (NARC to PS)

Retail gasoline stations product differentiate by choosing location and choosing offered amenities. The most flexible mode of competition is left to daily pricing decisions, given location and amenities. In this paper, a model is presented for price competition in this sequential process and then, using price data from the Minneapolis retail gasoline market, the effect for product differentiation on price is investigated empirically. Results indicate that the spatial location of firms and patterns of spatial competition have the largest and most significant effect on firm price. The choice of different amenities has a smaller effect on pricing decisions.

Personality Preferences in Laboratory Economics Experiments

Researchers: Associate Professor Pamela M. Schmitt, Robert Shupp (Ball State University),
Associate Professor Kurtis J. Swope, and Visiting Assistant Professor John J. Cadigan

Sponsor: Naval Academy Research Council (NARC to PS)

Student volunteers at the United States Naval Academy (USNA) participated in one of the following one-shot games: a dictator game, an ultimatum game, a trust game, or a prisoner's dilemma game. We find limited support for the importance of personality type for explaining subjects' decisions. With controls for personality preferences, we find little evidence of behavioral differences between males and females. Furthermore, we conclude that seniority breeds feelings of entitlement - seniors at USNA generally exhibited the least cooperative or other-regarding behavior.

The Composition of Capital Flows When Emerging Market Firms Face Financing Constraints

Researchers: Assistant Professor Katherine A. Smith
and Diego Valderrama (Federal Reserve Bank of San Francisco)

Sponsor: Naval Academy Research Council (NARC to KS)

Using a small open economy framework, we model the composition of capital inflows as the equilibrium outcome of emerging market firms' financing decisions. We show that debt limits, equity issuing costs, and foreign direct investment (FDI) search costs generate a financing premium and that the "cheapest" source of financing depends on the phase of the business cycle and past financing decisions. The model delivers several results that are consistent with stylized facts observed in emerging markets. First, as the cost of each financing instrument changes, the demand for foreign debt, portfolio equity, and foreign direct investment adjusts thereby explaining fluctuations in the composition of the capital account over the business cycle. Second, the financial frictions generate a countercyclical financing premium which is consistent with countercyclical interest rates and a countercyclical current account.

Inflation, Interest Rates, and the Precautionary Demand for Money

Researcher: Assistant Professor Katherine A. Smith

Sponsor: Naval Academy Research Council (NARC)

When firms have limited access to capital, they have an incentive to build-up retained earnings in order to self-finance rather than pay external financing fees or become liquidity constrained in the future. This paper develops a model where firms accumulate retained earnings by increasing investment in fixed capital and money holdings. Since money balances depreciate with the rate of inflation, how much firms invest in fixed capital versus money, depends crucially on inflation. Through its impact on demand for fixed capital, in a general equilibrium set-up, the inflation rate also alters the interest rate, consumption and consumer welfare, creating real effects. This precautionary motive for holding money leads to two important questions. First, if firms are holding money for precautionary reasons what is the optimal inflation rate? Second, in this environment how does monetary policy uncertainty (policy shocks) impact the business cycle?

Personality and the Performance of Economics Majors

Researcher: Associate Professor Kurtis J. Swope and Associate Professor Pamela M. Schmitt

Sponsor: Naval Academy Research Council (NARC)

Using the Myers-Briggs Type Indicator (MBTI) and a sample of 1011 graduates in the economics major at the United States Naval Academy (USNA), we find that judging (J) types tend to have higher major Grade Point Averages (GPAs) than perceiving (P) types. None of the other MBTI personality measures (extraversion (E) / introversion (I), thinking (T) / feeling (F), or sensing (S) / intuition (N)) were statistically significant. Consistent with previous studies, we find evidence that sensing/judging (SJ) types tend to perform better than the other Keirsey-Bates (1984) temperament types. Age and gender were not significant predictors of GPA once we controlled for SAT scores, but grades of male minority students in the economics major at USNA were lower than those of male non-minorities, even with the added controls.

Impact of an Oil Price Shock on the Economy and Households of South Africa: Illustrations from a Macro-Micro Framework

Researcher: Professor Karen E. Thierfelder, B. Essama Nssah (World Bank), Delfin Go (World Bank), Marna Kearney (National Treasury, South Africa), and Sherman Robinson (University of Sussex)

Sponsor: The World Bank, Washington D.C.

The purpose of this paper is to (i) assess the potential impact of a large oil price shock on the economy, poverty and income inequality in South Africa using a combination of a disaggregative CGE model and micro simulation analysis of household surveys; (ii) explore some practical, recursive two-way feedback mechanisms between the two components without sacrificing the rich structure of the economy in the former and the full heterogeneity of the household information in the latter; and as part of a continuing investigation (iii) evaluate whether size distribution of income or the classification of households by income groups (e.g. income deciles) at the CGE model provides a useful and significant means of encapsulating and summarizing the wide-ranging impact on heterogeneous households as calculated by the micro simulation analysis.

Independent Research

The Customary Gender Division of Labor

Researchers: Associate Professor Matthew J. Baker and Joyce Jacobsen (Wesleyan University)

A customary gender division of labor is one in which women and men are directed towards certain tasks and/or explicitly prohibited from performing others. An explanation is offered as to why the gender division of labor is so often enforced by custom, and why customary gender divisions of labor generally involve both direction and prohibition. The model considers both problems in choice of specialty and human capital acquisition. It is shown that wasteful behavior may emerge due to strategic incentives in career choice and human capital acquisition, and that both problems may be mitigated through the customary gender division of labor. However, a gender division of labor is not Pareto-improving; one gender is made worse off. Both the distributional effects and welfare gains to a customary gender division of labor decrease as opportunities to exchange in markets increase. (USNA Working Paper 2003-01, Society of Labor Economists Discussion Paper – Labor and Population Economics Seminars, November 2003).

An Economic Theory of Mortgage Redemption

Researchers: Associate Professor Matthew J. Baker, Tom Miceli (University of Connecticut), and C. F. Sirmans (University of Connecticut)

Redemption laws give mortgagors the right to redeem their property following default for a statutorily set period of time. This paper develops a theory that explains redemption periods as protecting landowners against the loss of non-transferable values associated with their land. A longer redemption period reduces the risk that this value will be lost but also increases the likelihood of default. The optimal redemption period balances these effects.

Empirical analysis of cross-state data from 1920 provides evidence for these factors, in combination with political considerations, in explaining the passage of redemption laws.

Kings and Vikings: On the Dynamics of Competitive Agglomeration

Researchers: Associate Professor Matthew J. Baker and Erwin Bulte (University of Tilburg, Netherlands)

This paper studies the Viking age – the roughly 300 year period beginning in 800 AD – from the perspective of the economics of conflict. The Viking age is interesting because throughout the time period, the scale of conflict increased – small scale raiding behavior eventually evolved into large scale clashes between armies. With this observation in mind, we present a theoretical model describing the incentives both the defending population and the invading population had to agglomerate into larger groups to better defend against attacks, and engage in attacks, respectively. The result is what might be called a theory of competitive agglomeration. The model is also applied in assessing the factors behind the onset of Vikings raids at the end of the 8th century.

A Statistical Analysis of the Naval Academy Midshipmen Selection Process

Researcher: Professor William R. Bowman

The major objective of the study is to analyze the validity of the Naval Academy's admissions formula used to rank order high school applicants over the last fifteen years. The major factors used to compute the whole person multiple by the Admissions Office are related to three major factors found to be related to navy officer fleet performance: graduation, academic performance, and military performance. Statistical regression models show that at most, the major factors used in the construction of the whole person multiple are significantly related to academic performance. However, military performance indicators show a stronger relationship to officer retention and promotion than academic performance. In addition, current Admissions policy no longer uses qualitative information contained in self reported technical or career interest scores – and this further erodes the ability of Academy selection procedures to identify applicants with technical interests and longer-term career interests. The study also finds that the single whole person multiple index score has greater validity for males, especially majority males. The importance of the selection factors in explaining midshipmen performance for non-majority applicants differs widely from that of the male majority, suggesting that the current Admissions policy may, in fact, not be identifying the most successful females and minority applicants. The study concludes by suggesting for an external review of the statistical methodology used currently, as well as to renew former attempts in utilizing qualitative information to select applicants with strong leadership potential.

Credit Cards and Monetary Policy: Are Households still Liquidity-Constrained?

Researcher: Visiting Assistant Professor Ryan R. Brady

Liquidity-constrained households who borrow heavily on credit cards may be an important propagation source for the transmission of monetary policy, through rising interest rates or through credit channels. However, credit card use also suggests that households are more liquid, which may dampen the propagation of monetary policy. This paper estimates non-linear impulse response functions for credit card data from 1990 to 2003 to monetary policy shocks. The data suggests that, 1) households in the aggregate are not liquidity-constrained, and 2) credit cards slow the propagation of monetary policy.

Structural Breaks and Consumer Credit: Is Consumption Smoothing Finally a Reality?

Researcher: Visiting Assistant Professor Ryan R. Brady

Has structural change in consumer credit made consumption smoother? Given recent empirical analysis the consumer's inability to smooth consumption appears as prevalent as ever. In this paper, however, it is shown that structural change in consumer credit appears to have made consumption smoothing a reality. First, using the statistical methods of Bai and Perron (1998, 2003), structural breaks are found in the series for consumer credit and consumption at various points from 1959 through 2005. Most notably, structural breaks occur in total consumer credit and revolving consumer credit in the 1990s. Based on the break date estimates, a structural equation of consumption growth is estimated in line with previous empirical tests of the permanent income hypothesis. Consumption smoothing is evident in the data after the mid-1980s and into the 2000s. The findings of this paper have important implications for a variety of economic research. The evidence for consumption smoothing bears

directly on the efficacy of monetary policy and fiscal policy, as well as on the recent discussion of the decline in macroeconomic volatility since the 1980s.

A Model of Credit Card Liquidity: To Smooth or Not to Smooth?

Researchers: Visiting Assistant Professor Ryan R. Brady
and Kristen VanGaasback (California State, Sacramento)

The implications of credit card borrowing for the economy are uncertain. Hence, in this paper, we present a model of consumer behavior to understand under what conditions it is optimal for a household to borrow on a credit card during both periods of low interests and periods of stable or rising interest rates. *Ceteris paribus*, one might expect that during a period of rising interest rates households will curtail credit card use. Alternatively, during periods of stable or rising interest rates, households may increase credit card borrowing for consumption smoothing purposes. Hence, households can buttress negative shocks to income, suggesting that the propagation of those shocks is muted. Conversely, during periods of falling interest rates, credit card borrowing may also increase, consistent with the falling cost of borrowing and the expectation that incomes will increase in the future. The insights of this study are numerous. First, this is the first attempt (to the best of our knowledge) to document the optimality of credit card use in response to rising interest rates. Brito and Harvey (1995) show the optimality of using credit cards at all relative to available alternative sources of credit. Here, the focus is on the optimal use of credit cards for consumption smoothing. This in itself provides important insight into consumer behavior in today's deregulated and more liquid credit markets, with implications for both economic research and for economic policy.

A Bubble or Just Froth? The Spatial Autocorrelation of rising Housing Prices

Researchers: Visiting Assistant Professor Ryan R. Brady and Associate Professor Matthew J. Baker

The conventional wisdom among economists is that monetary policy should not respond to regional economic conditions (Fratantoni and Schuh (2003)). However, the perceived housing bubble in the United States in recent years may give one pause with respect to that conclusion. In former Federal Reserve Chairman, Alan Greenspan's opinion, the notable appreciation in housing prices represents more of a "froth" than a bubble, and even if "popped," would not have serious macroeconomic effects. This argument rests on the implicit presupposition that an appreciation or depreciation of housing prices is not as "contagious" as say, stock prices. This paper tests an empirical model of spatial autocorrelation with housing prices regressed on regional and macroeconomic variables to see if a rapid rise in housing prices in one region is spatially autocorrelated to changes in prices in surrounding regions. Empirically, this paper documents the degree to which housing markets are correlated and whether policy makers should be concerned about a housing bubble, or a housing froth. Methodologically, this paper provides a unique application of a spatial autocorrelation model to the relationship between regional housing conditions and monetary policy.

Commercial Bank Deregulation and Credit Card Lending: Implications for Consumers and the Macroeconomy

Researcher: Visiting Assistant Professor Ryan R. Brady

Though the conventional wisdom laments the increase in credit card borrowing in recent years, the rise of credit card lending through commercial banks has arguably been a boon to consumers. Deregulation and related structural change in commercial banking has increased the supply of consumer credit and circumvented, if not obliterated, traditional liquidity constraints (see Schmalens and Evans (1999); Maki (2002); and Brady (2005)). In this study, commercial bank credit card data is examined to see if credit card lending makes it easier for consumers to respond to economic shocks (data gathered from the Federal Deposit Insurance Corporation). With the increase in credit card lending, households should be more capable of smoothing consumption—either in response to anticipated or unanticipated shocks—contrary to the expectations of recent research on consumption behavior and liquidity constraints (see Gross and Souleles (2002)). The results of this inquiry have implications for research on consumption behavior, on liquidity constraints in credit markets, on monetary policy, and finally, on the role that deregulation and structural change in commercial banking have played in reducing the volatility of the macroeconomy.

Same Story Different Channel? Competition and Diversity in Broadcast Television News

Researcher: Assistant Professor Brendan M. Cunningham

Consumers derive uncertain utility from media output, in particular news. It is suggested that consumer welfare is enhanced by the existence of diversity in news output and that diversity of news output is related to market structure. Two novel databases measuring broadcast news content are employed at the local and national levels in order to quantify news diversity, and find evidence that measures of market structure among broadcast media firms are a statistically significant determinant of diversity, conditional upon a variety of demographic and economic determinants. Evidence suggests that a broader indicator of market structure, capturing the level of competition from cable programming, displays a positive, significant, and robust relationship with diversity.

Censorship: the Key to Lock-in?

Researcher: Assistant Professor Brendan M. Cunningham

There are two distinguishing features of markets for media and information. First, such markets are frequently characterized by increasing returns to scale in production and distribution. This implies that incumbent technologies enjoy an advantage over newcomer technologies; such markets can become locked into an inferior technology. Second, governments often heavily influence media markets through both direct ownership and censorship. A dynamic model is presented with heterogeneity among consumers and firms in order to analyze the role of censorship in media markets. This paper assumes there is a negative consumption externality across consumers and a negative cost spillover which an incumbent producer imposes on a newcomer. In a decentralized equilibrium, there is over-production of media from the incumbent technology. This reduces consumer utility and engenders lock-in of the inferior incumbent technology. Censorship is modeled as a tax on the media produced under the incumbent technology. A central planner who taxes / censors incumbent media can improve upon the decentralized equilibrium by reducing negative consumption externalities and unlocking the superior technology. The feasibility and Pareto optimality of censorship / taxation coupled with lump-sum transfers across consumers is also established.

Jigsaw Method in Macroeconomics: Scholarship of Teaching and Learning

Researcher: Professor Rae Jean B. Goodman

Within the context of cooperative learning groups, we show how the jigsaw method is used for students to learn consumption, investment, and money demand theories. The results of a small study show that students perform better on exam questions than those taught by lecture and that the students involved with using the jigsaw method preferred that approach to a traditional “chalk and talk” approach. The jigsaw procedure (Johnson, Johnson, Smith; Bartlett) is an alternative to student reading and faculty lecturing on a topic and provides the students with an opportunity to teach and learn material from peers. The procedure is to assign the same topics to all cooperative learning groups; to divide the material into unique parts, like a jigsaw puzzle, so that each member of the group has a “piece of the puzzle.” Each member studies the specific topic assigned, decides how to teach that material to the group, and then teaches the topic. Each student learns all of the topics with the teaching and assistance of the other group members. The jigsaw procedure incorporates the essential elements of cooperative learning: positive interdependence, individual and group accountability, face-to-face interaction, teamwork skills and group processing. The results of using this method to teach consumption, investment and money demand theories are:

1. The class time allocated for the material is less than when presented by the professor in lecture format.
2. Students perform better on examination question than when the material was presented in the lecture format.
3. Student response to the technique and the learning experience is positive.

Assessment of Trends in Defense Industry Consolidation

Researcher: Crowe Chair Professor Victoria A. Greenfield

Conventional wisdom holds that the defense industry has become dramatically more consolidated over the past two decades. To what extent does the statistical evidence bear this out and what might it imply for defense acquisitions? This analysis will examine industry data in aggregate and by product or service area to establish basic trends in industry consolidation. It will then apply micro economic tools to assess implication for acquisitions.

Defense Industry Globalization and the Costs of U.S. Import, Export, and Cross-Border Investment Policies

Researcher: Crowe Chair Professor Victoria A. Greenfield

The United States implements policies that both encourage and discourage imports, exports, and cross-border investment. This research seeks to establish the extent of globalization in the defense industry, both in absolute terms and relative to other industries, and to consider the implications for the economy and national security. The research will include both statistical and analytical components. The analytical component will draw on trade and investment theory and may involve the development and use of a computable general equilibrium model.

An Options Value Approach to Sustaining Multiple Shipyards

Researcher: Crowe Chair Professor Victoria A. Greenfield

Under current policy, the Department of Defense (DoD) appears to incur “excess” cost to sustain multiple shipyards. However, it may, in effect, be purchasing an option on future production capacity and future competition. Is that option “properly” valued? This research will attempt to frame the DoD’s decision in terms of real options, tally the costs of the current policy, and compare them to the potential benefits, only some of which are readily quantifiable.

Application for NSF Grant to develop CGE learning materials

Researchers: Crowe Chair Professor Victoria A. Greenfield,
Visiting Assistant Professor Mary E. Burfisher, and Professor Karen E. Thierfelder

The objective of this project is to develop technology-based learning materials to support advanced undergraduate economics students as they learn to integrate and apply their knowledge of economic theory to real-world economic problems through the use of computable general equilibrium (CGE) models. CGE models are applied, economy-wide analytical tools that provide a theoretically consistent framework for simulating the microeconomic behavior of consumers and producers constrained by the macroeconomic equilibrium of a country’s income and expenditure, savings and investment, and capital and current accounts. With appropriate supporting learning materials, CGE models can be used as applied learning tools to help students integrate and deepen their comprehension of different subject areas of economic theory, leading them from novice toward expert economic thinking as they learn to apply their theoretical economics knowledge to quantitatively analyze real-world economic problems.

The Earnings of Tied-Migrant Husband

Researchers: Professor Roger D. Little and John J. Hisnanick (Bureau of the Census)

Prior empirical research on the earnings losses of a tied-mover has largely focused on the working wives of servicemen. Over the last couple decades increases in the number of women serving in the armed forces now makes it feasible to study a group of male tied-movers, the husbands of servicewomen. Data from the 2000 U.S. Census was used to identify a sample of such men and compare their earnings to civilian husbands of working civilian wives in order to extend and generalize on tied-mover earnings effects. Mean earnings for military husbands are about 70 percent of civilian husbands while for working civilian wives of servicemen it is about 64 percent of the working wives of working civilian husbands, a figure comparable to earlier studies. Multivariate analysis that accounts for sample selection bias and controls for demographic, household and labor market characteristics shows that military husbands earn about 73 percent of civilian husbands, while military wives earned about 44 percent of civilian wives. Although different estimation procedures yield results of somewhat different magnitudes, the findings reveal that tied migration has a detrimental effect on males similar to earlier estimates for females.

Income and Employment Dynamics of Military Families' Transition to the Civilian Labor Market

Researchers: Professor Roger D. Little and John J. Hisnanick (Bureau of the Census)

Starting with those who served in World War II, considerable research has explored the labor market outcomes of veterans. This research, concomitant with conscription, focused on the outcomes for veterans who contextually could be presumed to be the 'typical' draftee. The three-decade experience with an all-volunteer force (AVF) has transformed the military into a more senior force; one composed more of service members with families than non-married individuals. More families mean a larger number of 'trailing' or 'tied' spouses, many of whom contribute to the military family income. For these families, transitions to civilian life involve changes that seemingly are much more complicated than the single soldier completing his draft obligation and returning home to complete his/her education, find a job, and raise a family as one might picture from earlier times. In contrast to the earlier era, this paper explores the outcomes for a service member who chose the military occupation and who now, with his/her family, chooses to pursue a civilian career. Specifically, we focus on military families as they transition to civilian life and attempt to assess their family income and labor market outcomes during the first three years of this evolution.

Social Position and Distributive Justice: Experimental Evidence

Researchers: Associate Professor Pamela M. Schmitt, Robert Shupp (Ball State University), Associate Professor Kurtis J. Swope, and Visiting Assistant Professor John J. Cadigan

Using a simple double-blind dictator experiment, this paper tests if subjects' choices under a laboratory veil of ignorance are consistent with Rawls (1971) concept of distributive justice. The dictator experiments examine the extent to which subjects' views on appropriate distributive shares are influenced by their relative social position. Social position is measured by the initial distributive shares (entitlement) and the subjects' ability to determine the final distributive shares (power). The results are consistent with the Rawlsian concept of distributive justice. That is, individuals act more selfishly in a position with greater power and entitlement. However, "veiled" individuals make choices that are less unanimous and risk-averse than hypothesized.

Inequality, Personality, and the Demand for 'Fair' Outcomes

Researchers: Associate Professor Pamela M. Schmitt, Associate Professor Kurtis J. Swope, and Visiting Assistant Professor John J. Cadigan

A modified dictator game experiment is used to investigate subjects' preferences for fairness. Motivated by recent theoretical research on inequality aversion (see Fehr and Schmidt (1999) and Bolton and Ockenfels (2000)), subjects are presented with several choices over alternative income distributions. Subjects are found to exhibit a downward-sloping demand for equality that is tempered both by altruism and an increase in the experimental stakes. Furthermore, individual's personality characteristics (as measured by the Myers Briggs Type Indicator (MBTI)) have a statistically significant impact on subject's decisions that are consistent with the theoretical underpinnings of the test instrument. Subjects with an orientation to extraversion and preference for using feeling judgment are more likely to be concerned with the other participant's payoffs. Also, females chose to implement equal payoff outcomes more often than males when unequal outcomes were disadvantageous to them.

Personality Preferences and Pre-Commitment: Behavioral Explanations in Ultimatum Games

Researchers: Associate Professor Pamela M. Schmitt, Robert Shupp (Ball State University), Associate Professor Kurtis J. Swope, and Midshipman 1/C Justin Mayer, USN

This paper explores the role of personality type in explaining economic behavior. Volunteers are drawn from the student body at the United States Naval Academy (USNA) to test for correlations between dominant personality characteristics, as measured by the widely used Myers-Briggs Type Indicator (MBTI), and behavior in single-round ultimatum bargaining experiments. Using USNA students provided a unique opportunity to avoid the uncertain framing effects of administering a personality questionnaire either pre or post-experiment because all students completed the MBTI upon entrance to the Academy. Three experimental design details are noteworthy: (1) one variant requires responders to make a nonbinding pre-commitment rejection level prior to seeing the offer, (2)

one variant requires responders to make a binding pre-commitment rejection level, and (3) one variant includes a third person (or “hostage”) who makes no decision, but whose payment depends on the proposal being accepted. The results indicate that thinking (T) types make significantly lower offers than feeling (F) types, and that extraverted (E) types pre-commit to accepting significantly lower offers than introverted (I) types. Furthermore, offers are higher when proposers know that responders make a binding pre-commitment, but are not different when a hostage is present. Responders make lower pre-commitments when they are binding and when a hostage is present.

Can Occasionally Binding Financing Constraints Explain Asset Price Dynamics?

Researcher: Assistant Professor Katherine A. Smith

This paper proposes that a high premium on equity results from occasionally binding financing constraints that limit producer’s ability to provide a smooth return on investment. A general equilibrium model where liquidity constraints make financing choices relevant to investment decisions delivers quantitative implications in the range of the observed historical equity premium. The ability of this model to replicate the magnitude of the equity premium as well as other standard business cycle quantity and price moments rests on the fact that the occasionally binding financing constraints increase the marginal cost of investing without altering marginal rate of substitution directly. High costs of investing limit investment keeping ex-post returns to capital high while the risk free rate remains low and consumption relatively smooth. The financial frictions drive a wedge between the marginal rate of substitution and the firms internal discount factor so that the shadow value of capital is no longer tied to the average price of capital generating increased asset price volatility. The model is solved using value function iteration avoiding any potential smoothing issues related to linearizing.

Capital Structure over the Business Cycle

Researcher: Assistant Professor Katherine A. Smith

Can costly external financing explain aggregate financing and investment patterns over the business cycle? This paper proposes an answer to this question by examining quantitative implications of a model where liquidity constraints and transaction costs make financing choices relevant to investment decisions. By creating a wedge between the three main sources of financing (retained earnings, external equity, and debt), these financial frictions generate a firm financing hierarchy. As the economy responds to technology shocks, the form and cost of financing fluctuates. The changing cost of capital, in turn, impacts the quantity of investment and the return on capital. In this manner, the model produces an endogenous pecking order of financing instruments that explains observed aggregate financing and investment patterns.

Capital Account Liberalization and Sudden Stops

Researchers: Assistant Professor Katherine A. Smith
and Enrique Mendoza (University of Maryland, National Bureau of Economic Research)

This paper attempts to show how the Sudden Stops crisis in the emerging markets may be linked to the recent liberalizing of an economy’s capital account. While theoretical arguments can be made that openness to trade and capital in the long run can contribute to both economic growth and stability, we show how optimal debt accumulation in response to financial openness may precipitate the Sudden Stop. We solve numerically for the transitional dynamics of a small closed economy as it opens and match the both qualitatively and quantitatively the simulated dynamics to the data. Calibrating our model to the various emerging economies we can match the patterns of consumption, capital flows, debt-equity ratios observed in the aftermath of various liberalizations and the ensuing Sudden Stops. Last, given the increased probability of a sudden stop soon after liberalization we attempt to ask the question whether or not there is an optimal way to liberalize?

Asset Pricing at the Frontier: The Origins of Ownership and Asset Markets

Researchers: Associate Professor Mathew J. Baker and Assistant Professor Katherine A. Smith

When and how does an asset market emerge? How does the emergence of an asset market influence people’s assertion of rights over an asset? The idea of this research is to approach these basic questions using three different sorts of theoretical models in current use in economics: 1) models of the origins of property rights, in which economic agents decide how much of an asset (land) to own, and how rigorously to defend property rights

over the asset, 2) models of costly search and bargaining, in which perspective buyers and sellers of assets must invest costly effort in finding an exchange partner on the other side of the market, and (3) models of asset prices, which typically involve a relationship between current dividends received from the asset and possible future returns.

Personality Preferences in Laboratory Economics Experiments

Researchers: Associate Professor Kurtis J. Swope, Associate Professor Pamela M. Schmitt, Robert Shupp (Ball State University) and Visiting Assistant Professor John J. Cadigan

Student volunteers at the United States Naval Academy (USNA) participated in one of the following one-shot games: a dictator game, an ultimatum game, a trust game, or a prisoner's dilemma game. There is limited support for the importance of personality type for explaining subjects' decisions. With controls for personality preferences, little evidence of behavioral differences exists between males and females. Furthermore, the results suggest that seniority breeds feelings of entitlement - seniors at USNA generally exhibited the least cooperative or other-regarding behavior.

Power, Entitlement, and Distributive Justice: Experimental Evidence

Researchers: Associate Professor Kurtis J. Swope, Associate Professor Pamela M. Schmitt, Robert Shupp (Ball State University) and Visiting Assistant Professor John J. Cadigan

In simple double-blind dictator experiments, systematically removing subjects' levels of power and entitlement increases their choice of an income distribution generally consistent with Rawls (1971) concept of distributive justice, although choices are less unanimous and risk-averse than hypothesized.

Contingent Bargaining, Market Failure, and Eminent Domain: Theory and Experimental Evidence

Researchers: Associate Professor Kurtis J. Swope, Associate Professor Pamela M. Schmitt, Robert Shupp (Ball State University) and Visiting Assistant Professor John J. Cadigan

Contingent bargaining refers to bargaining situations in which a market exchange requires that multiple sellers and/or buyers must agree to the terms of multiple co-dependent transactions that are part of a single larger exchange. For example, real estate development may require the purchase of multiple properties. If one or more of the parties refuse the terms of the transaction, the entire exchange fails. Disagreements result in a market failure because of a loss in potential consumer and producer surplus. Disagreements may occur because parties have only private information about the relevant costs and benefits of the transaction, and/or because some parties seek to extract so much of the bargaining surplus that bargaining breaks down. Such cases may provide an economic rationale for government to "force" the exchange by using the power of eminent domain to increase market efficiency by taking property from one private owner and effectively transferring it to another. The extent to which inefficient disagreements occur is an empirical one. Inefficient disagreement in a laboratory experiment where single market exchanges involve multiple buyers or sellers is investigated. The impact on disagreement rates is systematically examined from (1) providing complete information about reservation prices, (2) increasing the number of parties to the transaction, (3) increasing the level of competition, and (4) allowing parties to communicate. Bargaining occurs over multiple rounds, and the bargaining game ends according to a probabilistic rule that increases the probability of termination exponentially with additional rounds.

Technical Documentation of the Globe Computable General Equilibrium (CGE) Model

Researchers: Professor Karen E. Thierfelder and Scott McDonald (University of Sheffield)

This paper provides a technical description of a global computable general equilibrium (CGE) model that is calibrated from a Social Accounting Matrix (SAM) representation of the Global Trade Analysis Project (GTAP) database. A distinctive feature of the model is the treatment of nominal and real exchange rates and hence the specification of multiple numeraire.

Trade and the Skilled-Unskilled Wage Gap in a Model with Differentiated Goods

Researchers: Professor Karen E. Thierfelder and Sherman Robinson (University of Sussex)

There is a continuing debate about whether international trade is responsible for the observed widening of the skilled-unskilled wage gap in many countries over the past twenty-five years. The empirical models used to analyze the issue fall into two broad groups: (1) partial equilibrium models of the labor market focusing on changes in the supply and demand of labor by skill category, linking these changes to the factor content of trade; and (2) general equilibrium trade models linking domestic factor returns to changes in world prices and the structure of trade. In this paper we present a general equilibrium trade model with non-traded goods—imports are differentiated from domestic goods. We show how changes in relative factor returns can be decomposed into changes in commodity prices, changes in the trade balance, and changes in the factor endowment. The general equilibrium model with differentiated goods provides a framework that reconciles trade theory with partial-equilibrium, labor-market analysis. In some cases even the sign of effects is different between the two models. We then use a computable general equilibrium (CGE) trade model calibrated to the U.S. economy in 1982 to analyze the effects of these shocks, as well as technology changes, observed in the U.S. in the 1980's.

Deep Integration and Trade Productivity Links: Tentative Lessons for CGE International Trade Models

Researchers: Professor Karen E. Thierfelder, Visiting Assistant Professor Mary E. Burfisher, Scott McDonald (University of Sheffield) and Sherman Robinson (University of Sheffield)

There is a significant body of Computable General Equilibrium (CGE) work using the methods of old trade theory to analyze the impact of new regionalism. The old paradigm is well developed, well understood, and comfortable, providing a body of conventional wisdom that facilitates analysis. The standard CGE model provides a structural empirical model framework that incorporates this body of theory. Much of this work, however, is unsatisfactory, focusing on a narrow range of forces at work and missing a lot of the action arising from deep integration that goes well beyond commodity trade flows. It is time to move beyond this work and incorporate elements of new trade theory in empirical and theoretical analysis of new RTAs, and CGE models.

Economic Integration in Asia

Researchers: Professor Karen E. Thierfelder, Scott McDonald (University of Sheffield), and Sherman Robinson (University of Sussex)

Using a new global general equilibrium trade model, this paper analyzes the impact on the global economy, especially developing countries, of the dramatic expansion of trade by India, China, and an integrated East and Southeast (E&SE) Asia trade bloc. While both India and China are very large economies, the two "Asian Drivers" differ in economic structures and trade patterns. China is an integral member of the E&SE Asia bloc, with strong links through value chains and trade in intermediate inputs, while India is not part of any trade bloc. The analysis considers the importance of their different degrees of integration into regional and global economies, focusing on potential complementarities and competition with other developing countries.

The Doha Development Agenda and Africa: Taking Armington Seriously

Researchers: Professor Karen E. Thierfelder and Scott McDonald (University of Sheffield)

The implications of the Doha Development Agenda (DDA) for developing and, especially, least developed countries are largely an empirical matter. Of particular concern are the implications for the world's poorest countries, which are disproportionately concentrated in sub-Saharan Africa, and yet it is arguable that African regions have been relatively neglected in published studies of the DDA. This study uses a global computable general equilibrium (CGE) model that is calibrated using the GTAP database (version 6) to partly address this matter by using an aggregation of the GTAP that includes five African regions together with seven other regions. The simulations are stylized representations of DDA proposals. The preliminary results indicate that African economies are likely to benefit less from the DDA the less the extent of commodity differentiation between their domestic and export commodities and the greater the degree of differentiation between domestic and import commodities. In part this arises from increased competition between sources of supply and in part from the reduction in 'market power', through the terms of trade effects, associated with larger elasticities of substitution.

Midshipman Research Course Projects

Group Self-Enforcement and Conformance to Rules

Researcher: Midshipman 1/C Chris Crabbe, USN
Adviser: Associate Professor Pamela M. Schmitt

Current economic analysis on individual behavior for breaking the law uses laboratory public good games. These studies find that severe laws deter lawbreaking and promote law-abiding; however, these studies do not consider the costs or benefits that people might incur when enforcing laws on others. This study not only explores the effects of severity of law on law abiding, but it also explores different enforcement scenarios. The results are consistent with previous studies (severe law leads to less lawbreaking), in addition, this study finds that people are more willing to punish others for breaking severe laws. Interestingly, this study also shows that people's willingness to break the law is unchanged under situations in which people receive a cost, no cost, or a benefit for enforcing the law.

Two Thumbs Up! Roger Ebert's Star Rankings and Motion Picture Box Office Sales

Researcher: Midshipman 1/C John J. Donovan III, USN
Adviser: Associate Professor Kurtis J. Swope

This paper examines the effect of Roger Ebert's movie reviews, specifically the number of stars he awards, on opening weekend box office sales. The effects of his reviews are analyzed using data on approximately 450 movies from 1989 to 2005. This data was used to model an expression that shows the effect Ebert's star ranking system has on opening weekend box office sales, as well as other factors that significantly affect the success of movies during the opening weekend. This subject has been given considerable attention recently, perhaps due to the uncertainty involved in predicting whether or not a movie will be successful. The significance of Ebert's reviews for opening weekend box office sales was sensitive to the inclusion of advertising expenditures as an explanatory variable. For a smaller sample of movies for which advertising expenditure data was available, reviews and budget were not significant when advertising was included. However, reviews and budget were significant when advertising was dropped in order to use a larger sample. Other factors that played significant roles were whether the movie was a sequel or franchise, the number of screens it was released on, and what month it was released in. The results show that opening weekend box office sales have been decreasing with time.

The Human Development Index: A Truly 'Redundant' Indicator? An Evaluation of the Index at Varying Levels of Human Development

Researcher: Midshipman 1/C Sean Holloway, USN
Adviser: Crowe Chair Professor Victoria A. Greenfield

Economists have long searched for the best way to statistically describe economic development and human development within and across countries. For many decades, Gross Domestic Product per Capita (GDP/C) was viewed as the best available proxy for both. Recently, other variables, such as life expectancy and educational attainment, have emerged as potentially important in depicting human development. The United Nations (UN) has created an index, i.e., the Human Development Index (HDI) that combines GDP/C and these other variables; however, some economists claim that the HDI and GDP/C are redundant. This paper examines the differences between the HDI and GDP/C at varying levels of human development, as delineated by the UN's annual Human Development Report. We begin this analysis through the use of a Pearson zero order correlation, to assess the basic statistical relationship between the two variables at the aggregate level as well as the three levels of human development. This analysis concludes with the use of the two variables in question as both dependent and independent variables in a series of linear regressions based on Solow's classical growth model and Barro's model of democratization. We find that as human development decreases, the HDI and GDP/C no longer provide the same information, thus refuting the claim that the HDI is "yet another redundant composite development indicator."

Junior Sailor Reenlistment Trends: Bridging the Gap between Single and Married Sailors

Researcher: Midshipman 1/C Daniel E. Provenzano, USN

Adviser: Professor William R. Bowman

This study attempts to explain the closing gap of reenlistment rate that has been observed between junior enlisted bachelors and multiple dependent sailors since 1990. The model used will provide valuable insight as to why and what factors have accounted for the rising trend of junior enlisted reenlistment that occurred in the past decade.

Publications

Journal (Refereed) Manuscripts

BAKER, Matthew J., Associate Professor, and Joyce P. Jacobsen, "A Human Capital Based Theory of Post Marital Residence Rules," *Journal of Law, Economics, and Organization*, forthcoming 2006.

In pre-modern societies the residence of a newly-wedded couple is often decided by custom. This paper formulates a theory of optimal post-marital residence rules based on contracting problems created by the nature of pre-marriage human capital investments. A fixed post-marital residence rule may mitigate a hold-up problem by specifying marriage terms and limiting possibilities for renegotiation; the trade-off is that the rule may prohibit beneficial renegotiation of post-marital location. A point of interest of our approach is that the magnitude and direction of transfers accompanying marriage are endogenous. The theoretical results are applied to understanding cross-cultural post-marital residence patterns. There is some predictive ability in variables related to outside options, control over the environment, and potential degree of social control.

BAKER, Matthew J., Associate Professor, and CUNNINGHAM, Brendan, Assistant Professor, "Court Decisions and Equity Markets: Estimating the Value of Copyright Protection" *Journal of Law and Economics*, forthcoming October 2006.

A novel database on U. S. federal court decisions is used to measure the changes in the state of copyright protection in both statute and case law. Combining an index of copyright breadth derived from this database with a quarterly panel of firms in creative industries over the years 1986-1998, the impact of changes in the breadth of copyright on the market valuation of firm equity is measured. The assumption that equity markets will incorporate the value of copyright innovations into the price of equity is maintained. After controlling for a variety of fundamental determinants of firm-level excess returns to equity, it is found that a court case broadening copyright is associated with a statistically significant 23-45 basis points increase in a firm's excess return. The results obtain across both 4-5 year sub-samples and the size distribution of firms.

BAKER, Matthew J., Associate Professor, and Miceli, Tom, "Credible Criminal Enforcement," *European Journal of Law and Economics* 20(1), 2005, pp.5-15.

Economic models of crime and punishment implicitly assume that the government can credibly commit to the fines, sentences, and apprehension rates it has chosen. This paper studies the government's problem when credibility is an issue. Several of the standard predictions of the economic model are altered when commitment is taken into account. Specifically, when only fines are used, commitment results in a lower apprehension rate and hence a higher crime rate. However, when jail is used (with or without fines), apprehension rates and jail terms may be higher or lower compared to the optimal static policy.

BURFISHER, Mary E., Visiting Assistant Professor, (co-author), "Policy Reform and U.S. Agricultural Adjustment Capacity: A Macro-Micro Simulation," in David Blandford and Berkeley Hill, eds. *Policy Reform and Adjustment in the Agricultural Sectors of Developed Countries*. CABI Publishing, Oxfordshire, UK, 2006.

This research describes the distribution of farmer response to changes in U.S. agricultural policy, using a general equilibrium model that incorporates measures of human capital and adjustment flexibility.

CUNNINGHAM, B. M., Assistant Professor and BAKER, M. J., Associate Professor, "Court Decisions and Equity Markets: Estimating the Value of Copyright Protection," *Journal of Law and Economics*, forthcoming, vol. 49, 2006.

We construct a database of U. S. federal court decisions pertaining to copyright and changes in federal statutory copyright law, and use this database to assemble indices measuring changes in the breadth of copyright protection. We combine our indices with information on excess returns to equity from a quarterly panel of firms operating in creative industries over the years 1986-1998. Using this data, we measure the impact of changes in the breadth of copyright protection on the market valuation of firm equity. After controlling for fundamental determinants of firm-level excess returns to equity, we find that a typical statute that increases the breadth of copyright generates an increase in a firm's excess return to equity of approximately 40 to 209 basis points, depending on the exact time frame, the size of the firm, and the importance of the change in statutory law. A typical high court decision expanding copyright breadth generates a 13 to 105 basis point increase in excess returns. Our results are robust across 4-5 year sub-samples and the size distribution of firms. Our statutory findings are strongest in the most recent portion of the sample.

CUNNINGHAM, B. M., Assistant Professor and Alexander, P. J., "Public and Private Decision Making: The Value of Diversity in Broadcast Television News," *Media Diversity and Localism: Meaning and Metrics*, Philip M. Napoli (Ed.), Laurence Earlbaum Associates, Mahwah, NJ., forthcoming.

The Federal Communications Commission (FCC) has a statutory obligation to pursue the public interest through its regulation of broadcast media. The FCC's interpretation of the public interest has led it to pursue three policy objectives: competition, localism, and diversity. This policy triad reflects both efficiency and antitrust considerations and concerns about the social, political, and cultural effects of media. Therefore, in addition to pursuing competition in broadcast markets through quasi-antitrust analysis, the FCC considers the additional elements of diversity and localism. These elements can add considerable nuance and complexity, especially in light of possible interactions between competition and media content. We explore the nature of diversity in broadcast television and examine a large database of actual television news stories. We suggest that diversity in broadcast output, in particular news, may be an essential input into a healthy democratic process, although the provision of diverse news is not sufficient to guarantee the robustness of a democratic system.

SCHMITT, Pamela M., Associate Professor, and SWOPE, Kurtis J., Associate Professor, "Personality and the Performance of Majors," *Journal of Economic Education*, forthcoming.

Using the Myers-Briggs Type Indicator (MBTI) and a sample of 1011 graduates in the economics major at the U.S. Naval Academy (USNA), we find that judging (J) types tend to have higher major GPA's than perceiving (P) types. None of the other MBTI personality measures (extraversion (E) / introversion (I), thinking (T) / feeling (F), or sensing (S) / intuition (N)) were statistically significant. Consistent with previous studies, we find evidence that sensing/judging (SJ) types tend to perform better than the other Keirsey-Bates (1984) temperament types. Age and gender were not significant predictors of GPA once we controlled for SAT scores, but grades of male minority students in the economics major at USNA were lower than those of male non-minorities, even with the added controls.

SCHMITT, Pamela M., Associate Professor, Schupp, Robert, and SWOPE, Kurtis J., Associate Professor, "On the Role of the Hostage in Ultimatum Games," *Journal of Socio-economics*, Vol. 35 (3), 2006, pp.399-411.

This paper examines behavior in a three-player ultimatum game. The payoff to the non-decision-making player (the "hostage") is separate from the bargaining pie and varies. We find that while responders may behave altruistically towards the hostage, they are more likely to reject a given offer if it leaves them with a more inequitable payoff relative to the hostage. Offers appear to be unaffected by the presence of a hostage. Though not a direct test of the Fehr and Schmidt (1999) and Bolton and Ockenfels (2000) models, our results are qualitatively consistent with their predictions.

SCHMITT, Pamela M., Associate Professor, and SWOPE, Kurtis J., Associate Professor, "The Performance of Economics Graduates over an Entire Economics Curriculum: A New Look at the Determinants of Success," *Journal of Economic Education*, forthcoming.

The majority of theoretical and experimental research stemming from Tullock's (1980) model of rent-seeking considers static, single-period contests. This paper contributes to a growing body of research on multi-period rent-seeking contests by developing and experimentally testing a model in which a player's effort affects the probability of winning a contest in both the current and future periods. Theory predicts that rent-seeking effort will be shifted forward from later to earlier periods, with no change in overall rent-seeking expenditures relative to the static contest. Experimental results indicate a significant shift forward when "carryover" is present and that the amount shifted is directly related to the carryover rate. Finally, although experimental expenditures are greater than the equilibrium predictions, overall rent-seeking effort in the carryover contests is lower than in similar static contests.

SMITH, Katherine A., Assistant Professor (co-author), "Quantitative Implications of a Debt-Deflation Theory of Sudden Stops and Asset Prices," *Journal of International Economics*, forthcoming.

"Sudden Stops" experienced during emerging markets crises are characterized by large reversals of capital inflows and the current account, deep recessions, and collapses in asset prices. This paper proposes an open-economy equilibrium asset-pricing model in which financial frictions cause Sudden Stops. Margin requirements impose a collateral constraint on foreign borrowing by domestic agents and trading costs distort asset trading by foreign securities firms. At equilibrium, margin constraints may or may not bind depending on portfolio decisions and equilibrium asset prices. If margin constraints do not bind, productivity shocks cause a moderate fall in consumption and a widening current account deficit. If debt is high relative to asset holdings, the same productivity shocks trigger margin calls forcing domestic agents to fire-sell equity to foreign traders. This sets off a Fisherian asset-price deflation and subsequent rounds of margin calls. A current account reversal and a collapse in consumption occur when equity sales cannot prevent a sharp rise in net foreign assets.

THIERFELDER, Karen E., Professor, (co-author), "Impact of Switching Production to Bioenergy Crops: The Switchgrass Example," *Energy Economics*, Vol 20, 2006, pp.243-265.

This paper reports the results from simulations that evaluate the general equilibrium effects of substituting switchgrass, a biomass, for crude oil in USA petroleum production. The new production process is less efficient and USA GDP declines slightly. As switchgrass production expands, USA agriculture contracts and the world price of cereals increases. The world price of crude oil falls as USA import demand declines. The net effect of the price and income changes is a general decline in economic welfare. Moreover, the declines in welfare are proportionately greater for developing countries who produce small quantities of agricultural commodities whose prices increase.

Presentations at Professional Meetings and Conferences

BOWMAN, William R., Professor, "Research in Personnel Economics of American Naval Officers," School of Business, University of New South Wales – Australian Defense Force Academy.

BOWMAN, William R., Professor, “Benefit-Cost Analysis and U. S. Naval Officer Accession Programs”, Australian Command and Staff Defense University.

BRADY, Ryan R., Visiting Assistant Professor, “Structural Breaks, Consumer Credit and Consumption Smoothing,” U.S. Naval Academy Economics Department Seminar, Annapolis, MD, December 2005.

CUNNINGHAM, Brendan M., Assistant Professor, “Law and Productivity in Copyright Industries,” Society for the Economic Research on Copyright and Innovation Annual Congress, Singapore, 30 June 2006.

CUNNINGHAM, Brendan M., Assistant Professor, “Media Economics,” Microeconomics Seminar, Economic and Commercial Services Division, Foreign Service Division, U. S. Department of State, Arlington, VA, 7 March 2006.

CUNNINGHAM, Brendan M., Assistant Professor, “Law and Productivity in Copyright Industries,” Department of Economics Faculty Seminar, Villanova University, 9 December 2005.

CUNNINGHAM, Brendan M., Assistant Professor, “Same Story Different Channel? Competition and Diversity in Broadcast Television News,” 3rd Workshop on Media Economics, Helmut-Schmidt University, Hamburg, Germany, 15 October 2005.

GREENFIELD, Victoria A., Crowe Chair Professor, “Risk Management and Performance in the Balkans Support Contract,” U.S. Naval Academy Economics Department Faculty Presentation, Annapolis, MD, 8 November 2005.

SMITH, Katherine A., Assistant Professor, Discussed “Sovereign Default and Debt Renegotiation” (Vivian Yue, NYU), American Economic Association (AEA), Boston, MA, January 2006.

SMITH, Katherine A., Assistant Professor and Valderrama, Diego, “The Composition of Capital Flows When Emerging Market Firms Face Financing Constraints,” Stanford Institute for Theoretical Economics (SITE), Stanford University, June 2006.

SMITH, Katherine A., Assistant Professor and Valderrama, Diego, “The Composition of Capital Flows When Emerging Market Firms Face Financing Constraints”, U.S. Naval Academy Economics Department, Annapolis, MD, June 2006.

SWOPE, Kurtis J., Associate Professor, “Behavioral Explanations in Bargaining Games”, University of Pretoria, South Africa, August 2005.

THIERFELDER, Karen E., Professor, “PROVIDE Project Evaluation Report on (1) CGE Modelling Techniques, (2) SeeResults and SAMgator Programs, and (3) CGE Model Applications,” PROVIDE Senior Steering Committee Meeting, Krueger Park, South Africa, 25 May 2006.