Business Economics Program Sessions

Wednesday, March 23, 2022

BUSINESS ECONOMICS

1:30 – 2:45 p.m. …….. Logan Room, 3rd Floor

Theme: Economic Impact of COVID 19 and the Cares Act

Chair: Timothy S. Vaughan, University of Wisconsin – Eau Claire

COVID19- Economic Impact of Stimulus Payments- A Tale of Two Stories

Anthony Narsing, Middle Georgia State University
Greg George, Middle Georgia State University
Summer-Beattie Moore, Middle Georgia State University

Abstract

In the United States, the Coronavirus pandemic has not only created a public health crisis, but it has also created an economic crisis as well. The U.S. government enacted legislation that provided citizens with much needed relief in the form of three economic impact payments, termed "stimulus payments". Although legislation provided some relief to American citizens and residents to pay bills, car repairs, food, pay down debt, and other necessities; it was not sustainable for some families who were affected the most during the pandemic. This paper examined issues surrounding the distribution of economic impact payments. The authors argued that these collective payment streams further complicated supply chains and contributed to increased inflation driving up both the cost of goods and services. This chain of events only served to further constrict the welfare of American families who are desperately trying to survive during these difficult times.

The Impact of the Cares Act on Local Labor Markets

Anthony Narsing, Middle Georgia State University
Greg George, Middle Georgia State University

Abstract

In response to the onset of the Covid19 Pandemic in March, 2020, congress passed the CARES Act, which provided emergency economic relief to American families and businesses through various programs such as the Payroll Protection Program (PPP; Title I, Sec. 1102) and the Pandemic Unemployment Assistance Program (PUA; Title II, Sec. 2102) . In particular, the PUA program provided direct money to states to supplement state unemployment benefits and to provide an additional $600 per week to individuals dislocated from their jobs as a result of the pandemic response. While state unemployment benefits vary considerably from state to state, eligible Georgians received up to $365 in state benefits in addition to the $600 provided under the Cares Act. In Bibb County, this amounted to potential annual benefits of $50,180 to individuals, not including additional stimulus checks, child tax credits or Coronavirus Food Assistance Programs. Median Income in Bibb County was $24,904 in 2019. In this study, we explore the distortionary effects, such a program has on local labor markets.

"The Great Resignation": A Graphical Interpretation
Timothy S. Vaughan, University of Wisconsin – Eau Claire

Abstract
August 2021 Bureau of Labor Statistics data revealed a new record high value for the monthly number of voluntary job separations. A graphical analysis suggests this may reflect a simple Covid-related "backlog" of such voluntary separations, as opposed to some recent structural change in employment tendencies. This analysis has been useful in demonstrating the power of simple graphical analysis in an undergraduate business quantitative methods class.

BUSINESS ECONOMICS

3:00 – 4:15 p.m. …….. Logan Room, 3rd Floor

Theme: Topics in Pedagogy I

Chair: Matthew Kutch, Ohio Northern University

Demographic and Socioeconomic Factors Affecting Educational Outcomes of High School Students
Joel F. Schwartz, Purdue University Northwest
Taylor Kroon, Purdue University Northwest
Amlan Mitra, Purdue University Northwest

Abstract
Past studies have examined the association between income and educational inequality. While some focused on the causes of income and education inequality, others examined the causal relationships between the two inequalities. The purpose of this study is to provide a comprehensive analysis of the socioeconomic status (SES) and income distribution in the cities and school districts of Northwest Indiana (NWI) and analyze their impacts on educational outcomes.

NWI consists of urban and rural areas with varying levels of income and educational attainment. It is necessary for policy makers to identify the causes of these inequalities. Census data (2016-2017) on SES and school enrollment from 53 cities across seven counties were used. These included population, income, educational attainment, single parent households, student enrollment by race/ethnicity, percent rural, disability status, special education needs, free reduced lunch, English language learners, etc.

The overall hypothesis is that socioeconomic status and income distribution impact educational outcomes in Northwest Indiana. Before testing the research hypothesis, both sets of data were described and the differences in the SES variables among the cities and school districts were identified. Educational outcomes were defined as the percentage of students who passed the Grade 10 Indiana standardized test (ISTEP 10) and the graduation rates. A Panel Ordinary Least Squares Regression technique was used to estimate the impact of these variables on the educational outcomes.

Four empirical models were developed and compared to estimate the impacts of city and school enrollment characteristics on educational outcomes. The first set of models estimated the impacts of

enrollment data on ISTEP 10 and graduation rates. The second set focused on estimating the impact of population data on ISTEP 10 and graduation rates. The results from the four regression models show that both demographic and socioeconomic variables have greater statistically significant impacts on standard tests than on the high school graduation rates. The impacts of race and ethnicity on educational outcomes were mixed. Students from African-American and Native American backgrounds were relatively behind in academic performance compared to students from Asian and Hispanic origins. Students from single parent households negatively impacted educational outcomes. While enrollments in English language learner requirements have negative significant impacts on educational outcomes, special education enrollment helped to improve educational outcomes. The percentage of students in the free reduced lunch program do not have positive significant impacts on both ISTEP and graduation rates.

In conclusion, this research contributed to a better understanding of the demographic and socio-economic factors that are impacting the educational outcomes in Northwest Indiana. The findings of this study could be used to assist policy makers and economic development agencies to improve the educational outcomes. Future studies are needed with recent data for validity and replicability of these results as well as for addressing any methodological issues due to data limitations.

Incorporating Economic Forecasting into Introductory Business Statistics Classes

Jeanne Boeh, Augsburg University
Ibrahim Keita, Augsburg University

Abstract

Degree programs in business or data analytics have increased substantially in the last decade in response to the increasing demand for data scientists. Historically, there have been conflicting pressures in business education between theory, concepts and skills. While all students don't have the mathematical skills to become data scientists, we believe there is a role for increasing the preparation of the average business graduate to become more proficient in Excel and data visualization skills. Indeed, for many students, proficiency in Excel is the difference between obtaining and retaining not only the first position but moving into middle management. Our main objective for this presentation is to provide an overview of changes made in our introductory statistics class to improve the Excel and data presentation skills of all of our business majors.

Assessment and Retention of Microeconomics Knowledge

Matthew Kutch, Ohio Northern University

Abstract

Economic learning and knowledge retention have been frequent topics for research through the years. Much thought, development, and study has gone into understanding factors that influence economic performance, including explanatory variables outside of the control of faculty and curricular designs and mechanism to enhance performance. This paper seeks to assess the impact of time on the retention of knowledge from a Principles of Microeconomics course. It uses performance collected from graduating seniors on an internally-created, comprehensive assessment of a business knowledge as part of an Assurance of Learning process. The results indicate a complex relationship between the number of

semesters since a student earned credit for Microeconomics and knowledge retention. While performance decreased as the number of semesters increased, the effect appeared to be mitigated by a higher ACT. These initial results imply there are some interesting possibilities to enhance overall four-year performance with curricular interventions more targeted to specific students. The results are presented alongside a pretest/posttest from within a semester of a Principles of Microeconomics course and alongside similar models for Macroeconomics knowledge.

Thursday, March 24, 2022

BUSINESS ECONOMICS

8:00 – 9:00 a.m. …….. Logan Room, 3rd Floor

Theme: Topics in Fiscal Policy

Chair: Thomas R. Sadler, Western Illinois University

The Impact of State Fiscal Policy on States' Resilience Exiting the Great Recession
Kathy Paulson Gjerde, Butler University
Peter Prescott, Butler University

Abstract
This study employs a state-level model of recovery and a comprehensive set of tax- and expenditure-related variables to explore the effect that the states' fiscal policy decisions had on their recoveries after the Great Recession in the United States. In addition, we combine those findings with our resistance results from two earlier studies to identify the structural and fiscal-policy factors that consistently strengthened or weakened the states' economic resilience entering, during, and exiting that recession. Although our analysis indicates that resistance and recovery are distinctly different economic resilience phenomena, states that avoided sales and corporate income taxes, and that committed a greater share of their resources to public welfare and public safety expenditures, fared better than others. This knowledge may aid state governments' fiscal policy decision making as they prepare for future recessionary shocks.

An Economic Evaluation of the European Union's 2030 Climate Policy Plan
Thomas R. Sadler, Western Illinois University

Abstract
The European Union's "Fit for 55" plan, announced in 2021 as part of the European Green Deal, intends to meet a 2030 goal of reducing carbon emissions by 55 percent from 1990 levels. This plan is part of the EU's overall goal of climate neutrality by 2050, the world's first climate-neutral continent-wide proposal. Because the environmental policies in the proposal intend to internalize the marginal external cost of the carbon externality, an evaluation framework in this paper addresses the EU policies, including the carbon border tax, emissions trading system, energy efficiency, and emission standards. With the evaluation criteria, the paper assesses both the potential effectiveness and tradeoffs of policy design, revealing the

extent to which the policy framework may achieve the plan's target of emission reduction. The paper finds that the revenue-neutral carbon border tax and emissions trading system with auctioned allowances satisfies the most evaluation criteria.

BUSINESS ECONOMICS

9:15 – 10:30 a.m. …….. Logan Room, 3rd Floor

Theme: Undergraduate Research Session

Chair: Viet Tran, Purdue University Fort Wayne

Public Policy Analysis of Superfund Sites in Northwest Indiana Region
Farida Akhmadullina, Purdue University Northwest
Wendy Marie Wells, Purdue University Northwest
Jack Mansmith, Purdue University Northwest
Jacob Slater, Purdue University Northwest

Abstract
The research was conducted in the Northwest Indiana region, specifically Lake, LaPorte, Porter, Jasper, Newton, and Pulaski counties. The study looks at the dangerous sites added to the National Priority List in NWI, as well as at other pending uncompleted sites in the region. The aim of this paper is to recommend EPA authorities various public policies that will aid the reconstructive work of the waste territories "on hold". The researchers used multiple regression analysis to assess the danger of the sites located close to residential areas. The results showed that the proximity of the sites results in about a 6-month decrease in Life expectancy in each census tract. Furthermore, it was discovered that funding, labor management, and lack of the economic redevelopment approach are the policy regulation aspects needed to restructure the EPA Superfund Program.

The Impact of Air Quality on Indiana Standardized Test Scores
Tyler A. Stoeger, Purdue University Northwest

Abstract
It is well-documented that poor air quality has a negative effect on human health. There is now a growing body of work examining the impact air quality has on cognition. One activity where cognition is important is standardized testing. Standardized tests play a role in determining an individual's educational attainment, which affects that individual's future career, earnings, and quality of life. Previous research has examined the effects of air quality on test scores in areas with relatively polluted air and a large amount of variability in pollution levels; however, less focus has been devoted to measuring the impacts in areas with relatively good air and low amounts of variability in pollution levels. I use air quality index (AQI) data from the U.S. Environmental Protection Agency and Indiana high school pass rates from the Indiana Department of Education on the 10th grade ISTEP standardized test for the years 2016 to 2019 and perform both a fixed effects and random effects multiple regression to determine the impact that air quality has school pass rates. I find that a one-point increase in the AQI decreases a school's ISTEP pass

rate by approximately 0.30 percent. An increase in the AQI by about one standard deviation decreases a school's ISTEP pass rate by about 1.00 percent. While the overall impact is small, the results are significant and weaken the case for the use of standardized tests. My findings can be extrapolated to other types of standardized tests, including college entrance exams, and show that these tests are not as unbiased as they claim to be.

Economic Impact of the Poke-Bache Trail
Nodir Adilov, Purdue University Fort Wayne
Nikolas Albertson, Purdue University Fort Wayne
David Bresnahan, Purdue University Fort Wayne
Heather L.R. Tierney, Purdue University Fort Wayne
Viet Tran, Purdue University Fort Wayne

Abstract
The aim of this study is to provide a regionally-focused economic impact study of the Poka-Bache Connector (PBC) trail in Indiana. The trail starts in Pokagon State Park in Angola and ends at Oubache State Park in Bluffton. Over half of the trail has been completed to date. The study estimates the annual spending on various goods and services by day-trippers and by over-night visitors. Furthermore, this study measures the impact of the PBC on property values as part of the economic impact on the local community. The study uses the data from various sources including the survey data, motion-sensor cameras data, visitor and website data from the city of Fort Wayne, and property tax data. The analysis of economic impact values is presented for the four counties directly affected by the trail (Allen, DeKalb, Steuben, and Wells) as well as for the region as a whole.

BUSINESS ECONOMICS

10:45 a.m. – 12:00 p.m. …….. Logan Room, 3rd Floor

Theme: Topics in Microeconomics

Chair: Valerica Vlad, Penn State Behrend

Do Consumer Bankruptcies Exhibit Seasonality?
Donald Hackney, Gonzaga University
Dan Friesner, North Dakota State University
Heather L.R. Tierney, Purdue University Fort Wayne

Abstract
A standard tenet of empirical economics is that household consumption patterns fluctuate over the course of the calendar year, a concept known as seasonality in consumer behavior. Some of the causes and consequences of seasonal consumption patterns are driven by habitual or cultural considerations. Others are driven by seasonal weather patterns, which cause changes in consumption through seasonal variation in consumer incomes. At the level of the individual market or product, the source of the seasonality may be equally clear (i.e., the consumption of fresh fruits and vegetables) or challenging (i.e., seasonality of cigarette sales, where peak smoking occurs in the summer months) to explain. In the latter cases, identifying the latent causes of seasonal consumption are a primary objective of empirical consumer behavior. One important, but under-appreciated social insurance program is the consumer

bankruptcy process. Households who unable to meet their financial obligations may apply for protection under the U.S. Bankruptcy Code, and in doing so may reorganize their finances (often discharging outstanding debts) and re-establish themselves finically. Concomitantly, bankruptcy is a social insurance program with a high cost, since creditors whose debt holdings are discharged through the bankruptcy process pass along those losses to other parts of society in the form of higher prices and/or interest rates. This raises an important policy question: if seasonality exists in the consumption of economically vulnerable households who exist on thin financial margins, and if bankruptcy is a viable means for households to reestablish themselves financially, do consumer bankruptcy filings also exhibit seasonal variations? To date this question remains unresolved in the literature. Like public health and nutrition initiatives, a better understanding of seasonal variations in bankruptcy filings (should they exist) may inform policy initiatives designed to ensure efficient and appropriate use of the bankruptcy process. The purpose of this paper is to empirically investigate whether consumer bankruptcy filings exhibit statistically significant seasonal variations. As an exploratory analysis, this study adopts a null hypothesis of no mean/median variations in the number of consumer bankruptcy filings, and the total dollar value of debts per filing, over time. The null hypothesis is analyzed using a random sample of data drawn from the U.S. Bankruptcy Court's Eastern District of Washington's Public Access to Court Electronic Records (PACER) database during the 2003, 2005, 2009, 2009, 2011, 2014, 2016, and 2020 calendar years. We find statistically significant seasonal trends in both the number of filings, and in the dollar value of total debts per filing, by month.

Do Non-Financial Characteristics Impact Financial Statement Comparability?

Dan Friesner, North Dakota State University
Andrew Brajcich, Gonzaga University

Abstract

Financial statement comparability is often defined as the "degree of similarity in accounting choices" made by firms operating in similar industries (Do, Finance Research Letters, 40, 2021, Article 1016932021). Greater financial statement comparability allows for relative assessments between the firm and its peers, which provides both more, and higher quality, financial information to external stakeholders (Qingyuan and Lumeng, China Journal of Accounting Studies, 2018, 6 (4), 448-473). This not only benefits external stakeholders who are evaluating the firm, but also the firm itself, since greater comparability enhances the firm's ability to secure access to credit and equity investments. Unfortunately, most empirical methodologies that can be used to assess financial statement comparability cannot be applied within the context of firms with a not-for-profit tax status (De Franco, Kothari, and Verdi, Journal of Accounting Research, 2011, 49 (4), 895-931). Recently, Brajcich and Friesner (Journal of Theoretical Accounting, 2022, forthcoming) posited a third approach to assessing financial statement comparability. Their approach combines information entropy theory with simple spreadsheet modelling to assess the comparability of firms. The primary attributes of this methodology are i) its methodological simplicity; and ii) its ability to incorporate information from all entries of one or more accounting statements. The latter feature is especially beneficial because it facilitates estimates of financial statement comparability for not-for-profit organizations. The primary drawbacks of the Brajcich and Friesner (2022) methodology are also twofold. First, the authors claim that their methodology can accommodate both financial statement and non-financial indicators of comparability. Second, Brajcich and Friesner's (2022) methodology does not utilize an explicit statistical foundation, nor does it facilitate hypothesis testing. This goal of this manuscript is twofold. First, we demonstrate how non-financial information can be incorporated simultaneously with

financial information. Second, we develop a simple and robust means to test null hypotheses about financial statement comparability within the Brajcich and Friesner (2022) framework. Consistent with Brajcich and Friesner's original study, which aimed to develop measures of financial statement comparability for not-for-profit organizations, we operationalize our study using data drawn from primary care, outpatient clinics in the State of California for the calendar year 2020. We find that comparability varies significantly based on geographic location, staffing decisions for providers, and staffing decisions for other types of employees.

Synergistic Effects of Multiple Policy Instruments: A case of Two Environmental R&Ds.
Valerica Vlad, Penn State Behrend

Abstract
The paper develops a model of imperfect competition: a polluting industry that invests in two types of *environmental R&D*: a process *R&D* and an *end-of-pipe R&D.* In addition, the model uses three policy instruments: one environmental policy and two types of subsidies corresponding to the two types of R&D undertaken by the industrial sector. We determine the optimal level of the two subsidies. In addition, we analyze two piecemeal policy scenarios: an emission-neutral reform and a welfare-neutral policy

BUSINESS ECONOMICS

1:30 – 2:45 p.m. …….. Logan Room, 3rd Floor

Theme: Topics in Time Series

Chair: Matt Lutey Indiana University Northwest

Risk of the Cross-sectional returns in Foreign Exchange Markets
Jinsuk Yang, University of Southern Indiana
Sung Myun Kang, University of Texas-Arlington
Sang Woo Heo, University of Southern Indiana

Abstract
The fluctuation and volatility of foreign exchange rates were triggered by the collapse of Bretton Woods. As a means of eliminating exchange risks, the U.S. Chicago Mercantile Exchange (CME) adopted the foreign currency futures transaction. Despite this newly adopted transaction, global foreign exchange market has witnessed ever-increasing volatility of foreign exchange rates, resulting in high exchange risks. In this context, forecasting the future spot exchange rates has emerged as an important issue.

Researchers have made attempts to forecast the future spot exchange rates. One of these attempts is related to the forward rate unbiasedness hypothesis (FRUH) which is under the assumption of rational expectation and risk neutrality. However, due to the risk-averse tendency of investors, researchers must incorporate risk premium into estimating unbiased future spot rates. And, to capture the risk and risk premium, scholars explore historical returns because of the nature of a risk premium, which is in effect an ex post facto variable. And, these historical returns are known to have asymmetric distributions (Bakshi et al., 2008; Johnson, 2002). Furthermore, skewness in currency return distribution is highly related to the

risk premium (Carr and Wu, 2007), and kurtosis plays an important role in understanding exchange rate behavior and its return (Khademalomoom, et al., 2019).

Our study aims to find the most appropriate variables using the methodology in Chang et al., (2013). The cross section of foreign exchange returns has substantial exposure to risk captured by international parity conditions. We analyzed relations between individual countries' exchange rate risk premium and market risk premium, volatility, skewness and kurtosis using risk proxy variables. We investigate if the market-wide volatility, skewness, and kurtosis would be risk factors in the cross section of foreign exchange returns.

The present study shows a causal relationship in a stark contrast to the risk premium used as a dependent variable. Specifically, volatility is positively, not negatively, correlated with the risk premium, where the difference is statistically significant. By contrast, skewness and kurtosis are now negatively, not positively, correlated with the risk premium, where the difference is not statistically significant. These findings are considered attributable to the relativity, i.e. individual countries' exchange rates move in the opposite direction to the USD. Similarly, the regression analysis with 1-period lag applied proves statistically significant differences in market risk premiums and volatility, whereas skewness and kurtosis are insignificant and same as the result of no lag.

The results are robust in the empirical setup. The analysis of grand mean values indicates that market beta, volatility and forward substantially affect individual countries' exchange-rate risk premiums. In the group-level, market risk premiums, volatility, forward CPI and interest show statistically significant relations with risk premiums.

Does Okun's Law and its Coefficient, $\beta = 3$ exists? Evidence from 15 South and Southeast Asian Countries.

Abdus Samad, Utah Valley University

Abstract

This paper examines the causality relationship between inflation, money supply, and economic growth of the four South Asian countries; Pakistan, India, Bangladesh, and Sri Lanka, during 1970-2018. Using annual time series data, this applied the vector error correction (VEC) model and the Grander causality test in exploring causal relation.

As required, before applying the VEC (Vector Error Correction), the paper applied, the Augmented-Dicky Fuller (ADF) test, the Philllip-Paron (PP) test, and Andrew-Zivot (Zvot) for stationary test. Results of these tests showed that all variables are non-stationary at level but stationary at first difference. Once the stationarity of series was determined, the paper performed the Johansen Cointegration test in determining whether series were cointegrated. Results test Johansen Cointegration shows all series: price, money, and GDP are cointegrated.

Results of the VEC showed that the coefficient of the ECT for CPI are (-0.27), (-0.39), and (-0.12) for Pakistan, Bangladesh, and Sri Lanka respectively suggesting that inflation is error correcting that any disequilibrium in inflation will be corrected at the rate of 27%, 39%, and 14% for Pakistan, Bangladesh and Sri Lanka respectively.

The Vector Error Correction Cointegration Estimate shows that money supply has negative and economic growth has positive long run impact on price level for all four countries.

The coefficient of lagged ΔM1 and ΔGDP (which represent short run effect) show that they are not significant for Pakistan, Bangladesh, and Sri Lanka. However, for India ΔM1 and ΔGDP have significant impact on price level in the short run.

Results of VEC Granger Causality/Block Exogeneity Wald Test, in Table 5, showed that money supply (M1) Granger caused price level (CPI) for India and Bangladesh. The unidirectional relation running from money supply to price level suggest **money is neutral** in India and Bangladesh. Both money supply (M1) and economic growth (GDP) have impact on price level.

India is only country that shows bidirectional causality between money and price level.

For Sri Lanka, money Granger causes GDP. This unidirectional Granger causality running from M1 to GDP (economic growth) suggesting that **money is not neutral** in Sri Lanka. GDP had no impact on money and price.

For Pakistan, there is a bidirectional Granger causality between GDP and CPI. Money has no impact on economic growth nor economic growth have impact on money

Both VEC Residual serial correlation LM test and VEC Residual Heteroskedasty show that there are no serial correlation and no heteroskedasticity in the regression results for all four countries. High chi square value cannot reject the null hypothesis of no serio correlation and heteroskedasticity

Ichimoku Forecasting Technique in U.S., France, Germany Japan, U.K.

Matt Lutey, Indiana University Northwest
Dave Rayome, Marquette University

Abstract

Equity premium has been studied in various forms and is a major part of modern asset pricing. Historic articles have shown promising results for both macro fundamentals and technical indicators. Indicators such as the moving average and momentum have been used along with on balance volume. We introduce a new technical indicator, the Ichimoku Cloud for forecasting risk premia and provide initial extensive testing of it in the U.S. We extend the sample to include foreign markets such as France, Japan, Germany and the U.K. and compare it to the performance of the moving average, momentum and on balance volume in these markets. We find that the Ichimoku Cloud performs better than the already known technical indicators in the U.S. and the known indicators including both moving average and momentum extend well to be successful in all of the foreign markets. We do not have enough volume data to find meaningful results in the foreign markets but would expect it to work well when more data is available. Volume follows a similar theme to the moving average and momentum on a low number of observations. Overall the Ichimoku Cloud has stronger R2, stronger t-statistics and is robust to a variety of specifications that are default to the standard parameters outlined in print literature and practice. The default parameters are 9, 26, and 52 which relate to the number of days in two Japanese trading weeks (9), the number of days in a Japanese trading month (26), and two Japanese trading months (52).

BUSINESS ECONOMICS

3:00 – 4:15 p.m. …….. Logan Room, 3rd Floor

Theme: Topics in Public Policy

Chair: Robert Kao, Park University

Female Leadership, Democratization, and Firm Innovation: Social Inequalities and Gender Issues in Post-Communist Economies:
Adrita Iman, Purdue University Fort Wayne
Zafar Nazarov, Purdue University Fort Wayne
Anastassia Obydenkova, Uppsalla University

U.S. Urban-Rural Income Differences: A 2019 State-Level Study
Mark Jelavich, Baker University

Abstract
In the US rural (non-MSA) areas have lagged behind urban areas both in terms of per capita personal incomes (PCPI) and poverty rates. This study examines how 2019 state-level ratios of urban to rural PCPI varies with state-level urbanization rates, poverty rates and unemployment rates. The income ratio increases with both urbanization and poverty rates. Some policy implications are drawn, especially for "backwash" areas.

Benefits of Applying LG Tax Simplification Method for Federal Government, Businesses, and Individuals
Robert Kao, Park University
John Lee, Rigel Technology Corporation

Abstract
Taxpayers and companies prefer a simplified and efficient federal tax system to the current complex one. This paper measures benefits and values by comparing the existing Federal tax calculation system to the proposed linear and gradual (LG) tax simplification for withholding tax, income tax, tax return, analysis, projection, fiscal note, tax evasion, tax fraud, and tax reform. The proposed tax simplification method could help simplify the Federal tax system by matching and reducing the existing seven to three tax brackets and improving the existing overburdened 21-page of the Withholding Tables and 224 formulas. Most taxpayers with standard deductions and tax credits may benefit from tax returns by using the proposed tax simplification method to increase efficiency and reduce the related administrative costs of the federal tax bureau. The research estimates several benefits and calculates cost-saving amounts by applying the proposed LG tax simplification method, which can streamline the federal government taxation process. Additionally, the proposed method can also benefit businesses and individuals by lowering administrative costs and reducing the tax processing time.

Friday, March 25, 2022

BUSINESS ECONOMICS

8:00 – 9:15 a.m. …….. Logan Room, 3rd Floor

Theme: Risk in Microeconomic Issues

Chair: John R. Stinespring, University of Tampa

Measuring the rate of technological change in the satellite launch industry
Nodir Adilov, Purdue University Fort Wayne
Nikolas Albertson, Purdue University Fort Wayne
Peter J. Alexander, Federal Communications Commission
Brendan M. Cunningham, Eastern Connecticut State University

Abstract
As the satellite launch costs have decreased in the last two decades, the number of commercial satellites has increased exponentially. By analyzing the changes in satellite launch costs, we find that the average per-satellite launch cost to low-Earth orbit fell at a faster rate than the average per-kg launch cost since 2000. We also find that the average launch cost for commercial satellites decreased at a faster rate than the average launch cost for non-commercial satellites. We project that the average launch cost to low-Earth orbit will fall below $100 per kg by 2100.

Before, During, and After: The Reduction of the Perceived Risk in Travel Through the Use of Thematic Tour Groups
Aaron J. Schibik, University of Evansville
Peggy O. Shields, University of Southern Indiana
Timothy J. Schibik, University of Southern Indiana

Abstract
Going on a trip to a new and exotic locale is risky. Before traveling, you have to throw caution to the wind and commit to a new experience. During travel, you have to carefully plan out your experience to seize every day. Finally, after you get back, you have to decide if the experience was all worth it. In the end, the consumer may decide at any point that the perceived risk is simply not worth the reward.

Consumer perceived risk is historically defined as a combination of uncertainty and negative consequences (Bauer, 1960). Generally speaking, when the consumer perceives a risk, they are less likely to engage in "risky" behavior. Thus, to reduce a consumer's perceived risk and encourage behavior, either the uncertainty or the consequences associated with the decision need to be reduced (Cox, 1967).

How does one reduce the perceived risk associated with a travel experience? We believe one solution is what we call a thematic tour group. Thematic tour groups are guided excursions consisting of likeminded individuals designed around a subject of interest (e.g., an Anime themed tour of Japan). Thematic tour groups reduce the perceived risk of travel at all stages of the travel experience by reducing the uncertainty and negative consequences of travel. These reductions occur because thematic tour groups make many

of the planning decisions for the consumers while also providing them with a safe environment traveling with other consumers who have similar interests (Dion, Baron, and Miller, 1970; Hogg, 2007).

This paper attempts to lay the groundwork by showing how thematic tour groups lower the consumers perceived risk associated with travel before, during, and after the travel experience. In particular, we will focus on how thematic tour groups lower two types of perceived risk that have received little consideration in the marketing travel and tourism literature: the perceived psychological and social risk associated with travel. In the end, we hope to offer suggestions on how traveling in groups around a central theme can lower perceived risk and lead to a more enjoyable experience. Data gathered from a survey administered to undergraduate students at two Midwestern comprehensive universities will be utilized to address the research questions.

Loss Aversion is a Feature Not a Bug of Neoclassical Microeconomics
John R. Stinespring, University of Tampa
Aaron D. Wood, University of Tampa

Abstract
Loss aversion occurs when losses loom larger than gains to agents, and behavioral economists assert that it is a paradox beyond the scope of orthodox economic tools. In this exploratory paper, we examine the supposed disconnect between loss aversion and neoclassical microeconomic analysis. Instead of using the value function or kinked indifference curves proposed by behavioral economists, we maintain classical assumptions and utilize a straightforward indifference curve approach to show that loss aversion is to be expected in a standard model of consumer choice. Additionally, popular examples of the endowment, framing, and anchoring effects are discussed for illustration and are argued to belong within a single category of loss aversion that can be modeled with the indifference curves of neoclassical consumer choice theory.

BUSINESS ECONOMICS

9:30 – 10:45 a.m. …….. Logan Room, 3rd Floor

Theme: Topics in Pedagogy II

Chair: Stella Koutroumanes Hofrenning, Augsburg University

Applying Normative Ethics to Teach Economic Concepts
David McClough, Ohio Northern University

Abstract
Economics is not a value neutral discipline. Teaching economics as a positive social science ignores the intrinsic normative nature of the discipline. Acknowledging the practical socio-political challenges inherit in economic decisions contextualizes the presentation of economic and contributes to student appreciation and understanding of economics as an academic discipline while enhancing student civic engagement. This essay applies normative concepts to a variety of economic topics.

Classroom Activities from Interdisciplinary Collaborations between Math and Economics

Stella Koutroumanes Hofrenning, Augsburg University

Abstract

Economics uses mathematics as a tool to understand economic concepts and to apply those concepts to real world problems. However, students often fail to see the connections between mathematics and economics and rarely do faculty from mathematics and economics engage in meaningful conversations about how the subject is taught. A National Consortium for Synergistic Undergraduate Mathematics via Multi-Institutional Interdisciplinary Teaching Partnerships (SUMMIT-P), a project funded by the National Science Foundation (NSF), is an effort to engage in interdisciplinary collaborations within and across institutions to improve the teaching of mathematics courses. The goal of these collaborations is to build stronger support for partner disciplines and to encourage critical thinking skills in all fields. Research has shown that undergraduate students benefit from seeing examples of mathematics applied to real-world situations. This session describes the work of SUMMIT-P and presents activities created by math, economics and business faculty that illustrate applications of topics studied in algebra, precalculus and calculus.

Midterm Grades, Information, and Student Effort

Jeffrey Cline, Purdue University Fort Wayne

Abstract

Many institutions now give first-year students midterm grade reports to allow students to alter their behavior before the official end of course grades are entered onto their transcript. I use a regression discontinuity design to provide the first causal evidence on how students respond to information from their midterm grades. To do so, I merge institutional administrative data with information I collected on detailed intra-course grades for approximately six thousand economics and physics students. Consistent with the related literature, I find that lower course grades in economics and physics appear to discourage women and cause them to perform worse in the remainder of the semester. There is no similar effect among men.