ECONOMICS

The Mathematics of Democracy

Building a Legacy

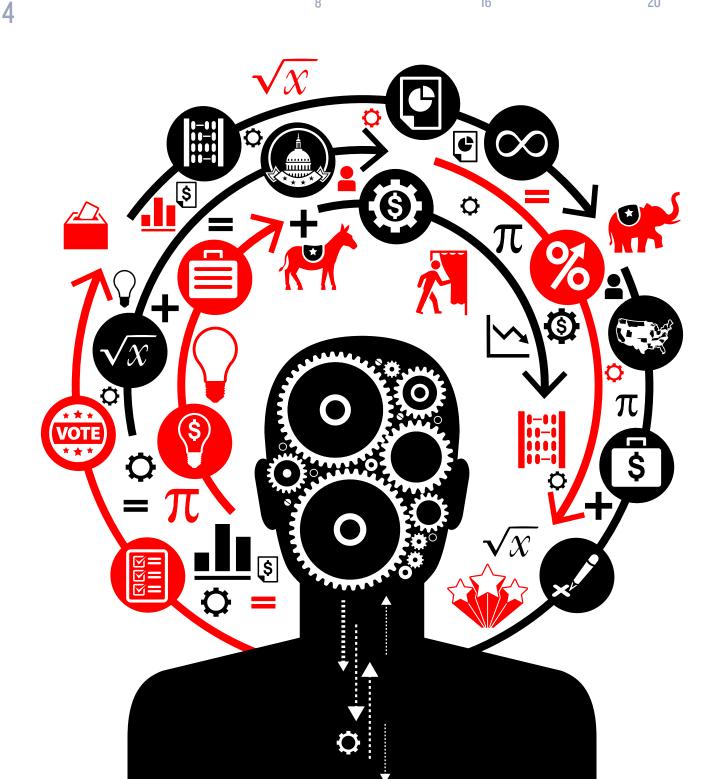
the story of the founders of the economics department 8

The Dream Team

go behind the scenes and meet the economics faculty

Google vs. Oracle

from the perspective of expert witness JR Kearl 20







you raise my interest rate thirty basis points without a corresponding drop off in consumer enthusiasm

- valentine from an economist

J. R. Kearl Joseph McMurray Joseph Price David Spencer Larry Wimmer

Assistant Editors

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ECONOMICS

BRIGHAM YOUNG UNIVERSITY DEPARTMENT MAGAZINE ISSUE #1 FALL 2012

From the Chair

I hope you enjoy our alumni magazine.

OUR INTENT IS TO HIGHLIGHT the activities of our students, alumni, and faculty. We are grateful for the opportunity to work with bright and hard-working students in the classroom, as teaching and research assistants, and even as coauthors of journal articles. We are pleased to see many of our students pursue valuable internships, receive job offers with a wide range of employers in diverse industries, and gain admission to first-rate graduate programs. In this issue, you will learn about some of our students and the activities and projects in which they are engaged during their time with us.

You will also learn about our faculty members' current research projects, and in particular the ways in which faculty involve students in their research. Some of our faculty members have recently published in top economics journals such as the Journal of Political Economy, the Review of Economics Studies, the Review of Economics and Statistics, and the Journal of Econometrics. I believe you will also be interested to read about several of our faculty members whose research has been featured in prominent news outlets, and who have testified as expert witnesses in high profile legal cases and before the U.S.

On behalf of the BYU Economics Department, I extend our best regards and hope you enjoy reconnecting with us.

Sincerely,

Girk. Cirle

Eric R. Eide Department Chair

$a^{2} + b^{2} = c^{2}$ $x = \frac{-b}{2a} \pm \frac{\sqrt{b^{2} + 4ac}}{2a} + \frac{2}{2a}$ $a^{2} + b^{2} = c^{2}$ 2x + 3y = 12 $x = \frac{-b}{2a} \pm \frac{\sqrt{b^{2} + 4ac}}{2a} + \frac{2}{2a}$

The Mathematics of Democracy

Joseph McMurray discusses the effects of the uninformed voter vs. informed voter in the election process.

FEATURES



The Veggie Project

Joseph Price investigates approaches schools can use to encourage children to eat more fruits and vegetables during lunch.



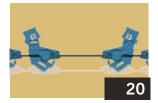
The Dream Team – Economics Faculty

Go behind the scenes to meet our faculty.



Building a Legacy

How did the BYU Department of Economics begin? John Swenson, Elmer Miller, and A. Smith Pond laid the critical groundwork of the economics department we know today.



Google vs. Oracle

Expert witness J.R. Kearl reviews the lawsuit Oracle filed against Google to protect intellectual property and the intricacies of patent and copyright laws.



Optimizing Our Returns

Economics students are making their mark across the United States and internationally with their internships, jobs, and graduate school placements.



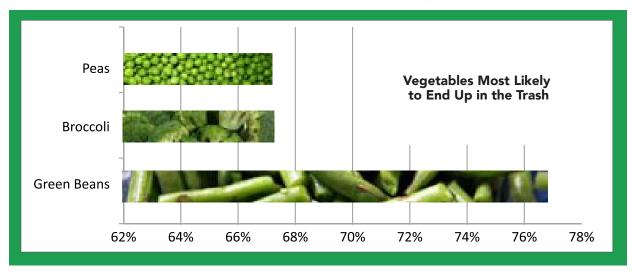
Welcome to Boot Camp

Faculty and students share their experience of participating in the first ever Macroeconomics and Computational Boot Camp.

ALSO IN THIS ISSUE

3	Awards	26	New Faculty
22	Alumni Spotlight	27	In the News
24	Student Spotlight	28	Recommended Reads





77% of children are likely to throw their green beans away.

THE BYU VEGGIE PROJECT has been funded by the USDA for the last four years and is directed by BYU economics assistant professor, Joe Price. Collaborators on the project include David Just (Cornell), Kevin Volpp (Penn), Jason Riis (Harvard), and George Loewenstein (Carnegie Mellon). The purpose of the project is to examine various approaches that schools can use to encourage children to eat more fruits and vegetables during lunch. More than 100 BYU economics students have worked as research assistants on the project, running different field experiments at elementary schools in Utah, conducting the analysis of different interventions, and helping with various other aspects of the project.

The project provides a novel way to measure food consumption during lunch with an Apple mobile app called "vproject." The app allows research assistants to record the number of servings of each fruit and vegetable item that children eat and throw away. Over the last few years, our researchers have collected more than 70,000 child-day observations. On average, about one third of children eat at least one serving of fruits and vegetables during lunch (with girls being about 33% higher than boys). Sadly, over 40% of the fruits and vegetables

that are served end up in the trash. One of the project's studies indicates that wastage will be even higher starting in the fall with the implementation of new guidelines that require that fruits and vegetables be placed on every child's tray.

One of the major goals of the project is to use principles from behavioral economics to identify approaches schools can use to ensure that more of the fruits and vegetables end up in the tummy and fewer in the trash. Many of the approaches involve small incremental changes such as increasing the number of options provided (each additional item increases fruit and vegetable consumption by 10%), moving recess before lunch, or placing the fruits and vegetables in more convenient locations. Other approaches involve novel interventions such as having a competition during lunch (which we are conducting with a new company called Nutrislice) or providing children with a small reward (which doubles the fraction of children eating fruits and vegetables and reduces waste by 50%).

The small rewards approach provides some particularly interesting insights into when and where incentives have a positive impact and how long it takes for a long-run habit to form. The rewards that the project uses are a set of specially made veggie coins. Children can receive one coin each day they eat a serving of fruits and vegetables. Each coin is worth a quarter and can be spent at a school store, book sale, or school event such as a carnival. We work with each school's PTA to provide options for the children to spend their veggie coins, thus providing a great fundraising opportunity for the PTA (we write the PTA a check for each coin that gets redeemed). The length of the rewards period is randomly assigned to each school which we use to estimate the elasticity between intervention duration and long-run behavioral change.

We currently have the capacity to include elementary schools anywhere in the country. If you think your local school might be interested in participating, just contact: veggies@byu.edu. In addition, we would welcome any children of BYU alumni to try out their own interventions to encourage healthy eating at school as a science fair project. BYU research assistants on the project can provide training materials and help in using the vproject app to collect data and assist with any data analysis.

More information about the project at: http://byuresearch.org/veggieproject/veggie.html



Awards



Recipients of the Karl G. Maeser Distinguished Faculty Lecturer Award must demonstrate exellence in research, teaching, and university citizenship.

Rulon Pope

RULON D. POPE, professor of economics, received the 2011-2012 Karl G. Maeser Distinguished Faculty Lecturer Award, which is Brigham Young University's highest faculty honor. Recipients of this award must demonstrate excellence in research, teaching, and university citizenship. Throughout his career, Professor Pope has been a role model in all three areas

Dr. Pope received his doctorate from the University of California-Berkeley in 1976. Prior to coming to BYU in 1982, he held positions at the University of California-Davis and Texas A&M University. He is a fellow of the Agricultural and Applied Economics Association and has served on editorial boards and as associate editor of the association's journal, the American Journal of Agricultural Economics. Additionally, he has been president of the Western Agricultural Economics Association and has received a number of research awards from these two professional associations. Dr. Pope is a recipient of the Karl G. Maeser Research and Creative Arts Award and holds the Warren and Wilson Dusenberry Professorship. His primary research is in agricultural economics, econometrics, and microeconomic theory. He has a strong interest in reducing poverty and malnutrition and improving the conditions for food security throughout the world.

In May 2012, Dr. Pope delivered the 2012 Karl G. Maeser Distinguished Faculty Lecture addressing food production and Engle's Law, concluding that Engle's Law implies the behavior of the poor will be more sensitive to price changes of food than the behavior of the wealthy.

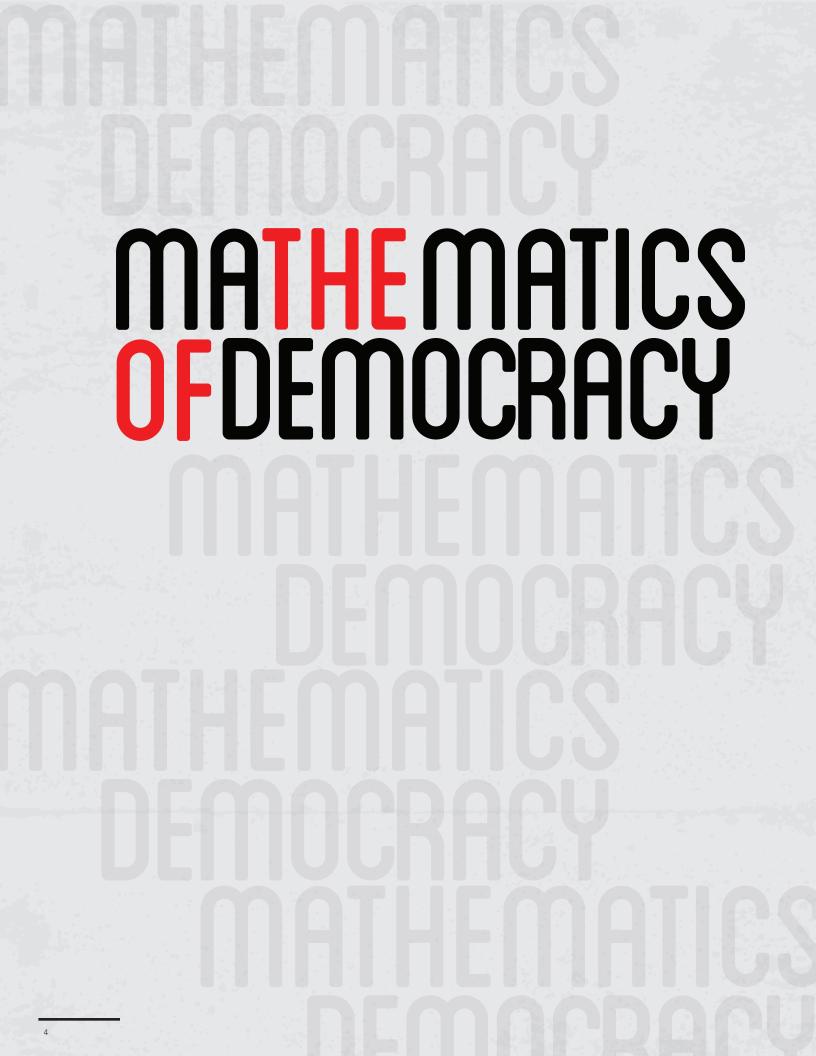
To listen to his address, visit http://speeches.byu.edu/?act=viewitem&id=2032.

Steven Waters

ADJUNCT FACULTY, through their professional experience, bring wellroundedness to students' education and play an important role in assisting the university to achieve the aims of a BYU education in the lives of students. The Adjunct Faculty Excellence Award acknowledges this role and is awarded to a faculty member who demonstrates excellence in teaching or other professional responsibilities in service to the university and students over a period of at least five years. Dr. Steven Waters brings extensive experience into his classroom providing an enriching education for his students.

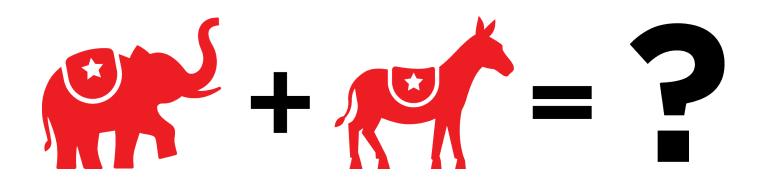
For the past ten years, Dr. Waters has taught microeconomics in the Economics Department. In addition to his teaching position at BYU, he is an economic consultant. His experience includes developing statistical models of damages used in litigation involving environmental contamination in North Carolina and more than fourteen years working on matters such as antitrust, intellectual property, breach of contract, employment, and wage discrimination at LECG in its Washington, D.C. and Salt Lake City offices and currently at Charles River Associates. Dr. Waters has given expert trial and deposition testimony in federal and state district courts and has presented to the Department of Justice. He also consults for The Nature of Strategic Thinking, a strategy consulting firm, and serves as a member of the board for the Mali Rising Foundation, a nonprofit organization focused on building schools in the West African nation of Mali.

RR





THE MATHEMATICS OF DEMOCRACY



AN INTERESTING, IF SOMEWHAT UNCOM-

MON, lens through which to view politics is that of mathematics. One of the strongest arguments ever made in favor of democracy, for example, was in 1785 by the political philosopher-mathematician, Nicolas de Condorcet. Because different people possess different pieces of information about an issue, he reasoned, they predict different outcomes from the same policy proposals, and will thus favor different policies, even when they actually share a common goal. Ultimately, however, if the future were perfectly known, some of these predictions would prove more accurate than others. From a present vantage point, then, each voter has some probability of actually favoring an inferior policy. Individually, this probability may be rather high, but collective decisions draw information from large numbers of sources, making mistakes less likely.

To clarify Condorcet's argument, note that an individual who knows nothing can identify the more effective of two policies with 50% probability; if she knows a lot about an issue, her odds are higher. For the sake of argument, suppose that a citizen correctly identifies the better alternative 51% of the time. On any given issue, then, many will erroneously support the inferior policy, but (assuming that voters form opinions independently, in a statistical sense) a 51%

majority will favor whichever policy is actually superior. More formally, the probability of a collective mistake approaches zero as the number of voters grows large.

Condorcet's mathematical analysis assumes that voters' opinions are equally reliable, but in reality, expertise varies widely on any issue, which raises the question of who should be voting? One conventional view is that everyone should participate; in fact, this has a mathematical justification, since in Condorcet's model, collective errors become less likely as the number of voters increases. On the other hand, another common view is that citizens with only limited information should abstain, leaving a decision to those who know the most about the issue. Ultimately, the question must be settled mathematically: assuming that different citizens have different probabilities of correctly identifying good policies, what configuration of voter participation maximizes the probability of making the right collective decision?

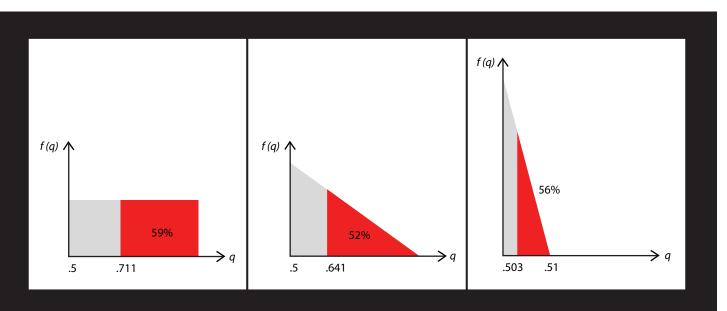
It turns out that, when voters differ in expertise, it is not optimal for all to vote, even when each citizen's private accuracy exceeds 50%. In other words, a citizen with only limited expertise on an issue can best serve the electorate by ignoring her own opinion and abstaining, in deference to those who know more. Mathematically, it

might seem that more information is always better, if only slightly. This would indeed be the case, except that each vote takes weight away from other votes, which may be better informed

If voters recognize the potential harm of an uninformed vote, this could explain why many citizens vote in some races, but skip others on the same ballot, or vote in general elections, but not in primaries, where information is more limited. This raises a new question, however, which is who should continue voting: if the least informed citizens all abstain, then a moderately informed citizen now becomes the least informed voter; should she abstain, as well?

Mathematically, it turns out that for any distribution of expertise, there is a threshold above which citizens should continue voting, no matter how large the electorate grows. A citizen right at this threshold is less knowledgeable than other voters, but nevertheless improves the collective electoral decision by bolstering the number of votes. The formula that derives this threshold is of limited practical use, since voter accuracies cannot readily be measured, but simple example distributions demonstrate that voting may well be optimal for a sizeable majority of the electorate.

The dual message that poorly informed votes reduce the quality of electoral deci-



ÖPTIMAL VOTER PARTICIPATION

An individual who knows nothing can choose the better of two alternatives with probability q=.5 (e.g. by flipping a coin). For an expert on the issue, this probability is higher—maybe q=.8. What if decisions are made according to the majority opinion of a large group of voters, whose expertise varies (i.e. q values ranging from .5 to 1)? Should everyone vote? Or just those with q close to one? The precise answer depends on the distribution of expertise, but some examples are illustrated here. If all values of q between .5 and 1 were equally common (panel 1), for example, those with expertise

above q=.711 should vote, while those below the threshold do better to abstain. When expertise is less common, so that the distribution is skewed (e.g. panel 2, and especially panel 3) this threshold may be much lower. It is never optimal for everyone to vote, but the collective decision does benefit from moderately informed votes, no matter how many experts there are.

Figures reproduced from: "Aggregating Information by Voting: The Wisdom of the Experts versus the Wisdom of the Masses," forthcoming in The Review of Economic Studies (2012).

sions, but that moderately informed votes can improve even the decisions made even by more expert peers, may leave an individual feeling conflicted as to whether she should express her tentative opinions, or abstain in deference to those with better expertise. Assuming that her peers vote and abstain optimally, it may be useful to first predict voter turnout, and then participate (or not) accordingly: when half the electorate votes, it should be the better-informed half; when voter turnout is 75%, all but the least-informed quartile should participate.

An important caveat of Condorcet's probability analysis is that disagreements are actually illusory: if voters envisioned the same policy outcomes, they would largely support the same policies. Whether this is accurate or not is an open philosophical question, but voters seem implicitly to em-

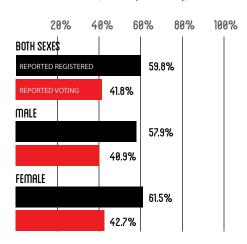
brace this assumption when they attempt to persuade and convert one another via debate, endorsements, or policy research: such efforts are only worthwhile if an individual expects others, once convinced, to abandon their former policy positions, in favor of her own. Some policies also do receive overwhelming public support.

If Condorcet's basic premise is right, an uninformed citizen's highest contribution may actually be to abstain from voting, trusting her peers to make decisions on her behalf. At the same time, voters with only limited expertise can rest assured that a single, moderately-informed vote can improve upon the decision made by a large number of experts. One might say that this is the true essence of democracy.

This article will appear on the Oxford University Press blog (blog.oup.com).

REPORTED VOTING AND REGISTRATION FOR THE UNITED STATES, 2010

Source: U.S. Census Bureau, Current Population Survey, November 2010





"To review the achievements of the University since its founding 70 years ago, reads like a fairy tale."

JOHN SWENSON, 1966

FROM AN UNPRETENTIOUS FRONTIER SCHOOL with a rugged and young student body, Brigham Young Academy advanced rapidly and provided a quality education.² By 1896, twenty-one years after its founding, the Academy formed a Collegiate Department to provide advanced education to its older students, as well as its first courses in economics, listed under Philosophical Studies. The course began 116 continuous years during which economics courses have been offered at this Institution.

IT WOULD BE 30 MORE YEARS, however, before an economics department would be established, during which time the commitment and enormous contributions of three scholars—John C. Swenson, Elmer Miller, and A. Smith Pond—made the department possible and created the path by which it would be recognized as one of the top undergraduate departments. Swenson, Miller, and Pond played invaluable roles in the creation, growth, and support of economic education, the Department of Economics, and Brigham Young University.

An Overview of BYA's First Economics Courses

SURPRISINGLY MODERN FOR ITS TIME,

the first course, *Political Economics*, was described as "Elementary [economics] as found in [Francis A.] Walker's *Elements.*" ³ A professor at Yale and MIT, as well as one of the most prominent American economists of his day, Walker authored many books in economics that "excelled more in common sense than in theoretical subtlety." ⁴ He continues to be honored today for his role as the founder and first president of the American Economic Association. The use of this

textbook indicates the unexpected degree to which BYA's economic education taught modern, state-of-the-discipline content, from the most widely used introductory text in America.

Initially taught by a "Mr. Anderson," the course then moved to the Commercial College where it was picked up by Bryant S. Hinckley—Gordon B. Hinckley's father—who taught at the Academy from 1893 to 1900, but seems to have only taught economics during the last three years of his tenure. As Hinckley took over the course, he changed the name to Descriptive Economics and adopted a new text: Descriptive Economics: An Introduction to Economic Science written by Myron T. Bly.

Bly declared his text to be a "wide departure from the ordinary plan of most elementary works." ⁵ His intention was not to engage in an "abstract discussion of wealth or value," but to make use of the new "Historical Approach" that had recently been imported from the German School. Examining both these texts (Walker and Bly), Bly's is a radical departure from Walker's discussion of wages, rents, and money. Bly describes his book as addressing "the manner in which men obtained a living and satisfied their material wants *in all the past*" and how

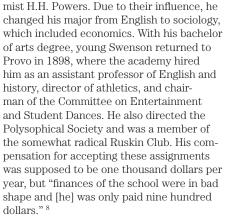
that could be used to understand how "they satisfy them *today* (emphasis added)." ⁶ The "German Historical School," rather than looking for general theories, attempted to discover the "unique" manner in which each "industrial society has passed through certain well defined [economic] stages." ⁷ It was intended as a new, non-Marxian challenge to the British Classical School of Adam Smith, David Ricardo, John Stuart Mill, and others. It is intriguing and somewhat puzzling that this international pedagogical debate should so early make its way into the classrooms at Brigham Young Academy.

The economics class continued to change hands as Hinckley left and the class was passed to Robert E. Allen who taught for two years; consequently, economics needed a new mentor. That person, **John C. Swenson**, would influence the future of the discipline at Brigham Young more than any other person.

A promising young student, John Swenson enrolled in the Provo Academy at age fourteen and graduated after only two years. Five years later, after teaching at various stake academies in Panguitch and Fillmore, Swenson enrolled at Stanford University as an English major. At Stanford, he met sociologist David Starr Jordan and econo-



This designation of "university" was more a declaration of hope and optimism than a validation of status. The plan was to slowly incorporate more collegiate level courses that would eventually change the institution itself.



Swenson and the economics course were transferred to the new Department of History and Civics and, by 1902, he taught English, theology, history, and economics courses. He expanded the single economics course to a full year course and introduced a new pedagogical approach and a new text. The text, by Charles Jesse Bullock, Ph.D., was entitled An Introduction to the Study of Economics, and, unlike the Bly text, it sought to familiarize students with the modern "marginalist revolution" of Alfred Marshall. 9 At the time, Marshall's book, Principles of Economics, was barely a decade old, and much of the economics profession remained embroiled in the ongoing debate between the earlier classical and the more recent historical schools of economic thought. Again, it was remarkable that students at a small rural school should be studying from a text emphasizing the relatively new neoclassical tools of demand, supply, elasticity, and theory of household consumption and firm production.

Is the Hat too Big for the Head? A Change in Name (Only?)

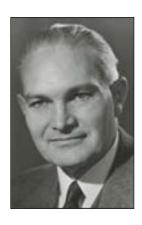
THE YEAR FOLLOWING the transfer of economics into the new department, the Board of Trustees agreed to a proposal to change the name from Brigham Young Academy to Brigham Young University. This designation of "university" was more a declaration of hope and optimism than a validation of status. The plan was to slowly incorporate more collegiate level courses that would eventually change the institution itself. Anthon H. Lund of the First Presidency and an opponent of the change wrote in his diary, "I hope their head will grow big enough for their hat." By October 23, 1903, the First Presidency had approved the new title of the school, and Brigham Young University celebrated its first Founders' Day.

During this period, economics was in its own formative curriculum period. Two years after being placed in the Department of History and Civics, the department changed to the Department of History and Economics in 1905-1906 (the first year in which "economics" appeared in the title of any department on campus); four years later in 1909, "economics" disappeared from the title and the courses were included in the Department of History and Social Studies; another two years later in 1911-1912, "economics" reappeared as the Department of Economics, Sociology, and Commerce.

Several of these changes reflected the education and interests of John Swenson. By 1911, the number of economics courses increased from the initial one to a total of ten, eight of which Swenson taught. This heavy teaching load was all the more impressive,







(FROM TOP TO BOTTOM)

John C. Swenson, Elmer

Miller, and A. Smith Pond.

Together, their dedicated
service totaled over 100
years between 1898 and
1959.

Photos courtesy of L.Tom Perry Special Collections, Harold B. Lee Library, Brigham Young University, Provo, Utah.

In the early 20th century,
America experienced its first
home-grown school of economic
thought, which became known
as the Institutional
School...Institutionalists
engaged in extensive study
of particular institutions
such as banking, trade
unions, corporations,
transportation, and
government.

or perhaps oppressive, considering the wide scope of courses. The academic catalogue records the ten economics courses:

- 1. General Principles of Economics
- 2. Money and Banking
- 3. Corporate Industry
- 4. Labor Principles and Legislation
- 5. Economic History of the United States
- 6. Ocean and Railway Transportation
- 7. Public Finance
- 8. Accounting
- 9. Social Economics
- 10. Social Economics—continued

The Formation of the Department of Economics. 1921

SWENSON'S substantial responsibilities did not end. In 1921, when BYU formed its first Department of Economics, Swenson was appointed as its first chairman, a position he held until 1935—a total of fourteen years. ¹⁰ During a number of these years, Swenson was also acting dean of the College of Education, a member of the State Board of Education (1917-1942), and chair of the new Sociology Department. He was also instrumental in creating the West's first lyceum or forum program at BYU. ¹¹

During the 1920-1921 school year, Swenson took a leave of absence to receive his master's degree in sociology from Columbia University. In addition to his formative role in developing BYU's Department of Economics, Swenson utilized his additional education and became known as the father of the modern Department of Sociology, in which he also served as chair from its founding in 1923 to 1944.

Given his divided time among the two

departments, other university and civic responsibilities, and his shifting emphasis to sociology, Swenson sought additional help, particularly in economics. In 1923, BYU hired **Elmer Miller**, who devoted his entire career to economics covering the period from 1923 to 1956. Swenson, however, continued to teach courses in economics as well as sociology until 1930 after which time he was primarily involved in university administration and teaching sociology. Swenson retired in 1942, but continued to teach sociology until his death in 1953.

A New School of Thought, 1923-1956

PRIOR TO HIS EMPLOYMENT at BYU, Elmer Miller served as superintendent of the Alpine School District. After teaching at BYU for one year (1908-1909), he left to study at Stanford where he received his bachelor's degree in 1914. Besides his studies at Stanford, Miller pursued graduate work at the University of Chicago from 1914-1916 and 1919, later studied at the University of California at Berkeley in 1918 and 1921, and again at Stanford from 1929-1930. As Swenson shifted his emphasis to sociology, Miller became responsible for teaching the majority of the fifteen courses listed under economics as early as 1924. Using his extensive education, he played a critical role in developing economics into a professional specialization.12

Further, Miller's courses reflected a change taking place in economic pedagogy at the national level. In the early 20th century, America experienced its first homegrown school of economic thought which

became known as the Institutional School. This new institutional approach emphasized the importance of economic "rules and institutions" as the principle determinant of economic patterns and progress, and instead of general theories found in the classical school or detailed histories of specific national economies in the German historical school, Institutionalists engaged in extensive study of particular institutions such as banking, trade unions, corporations, transportation, and government.

Laurence Leamer, one of the founders of the Institutional School and chair of economics at the University of Chicago, had declared that "economics was at last to be made practical," that the abstract classical views of economics were to be "replaced by a concrete description of real business institutions [...] distinguished by its emphasis upon a non-theoretical and often non-historical description of contemporary economic problems and institutions." 13 Elmer Miller likely studied under Leamer while at the University of Chicago and incorporated this new "pragmatic" or "institutional" approach into the courses he taught. Undoubtedly, he also studied under neoclassical scholars because one of his courses professed to instruct students in "advanced work in economic theory with application to present day economic problems." 14 Miller's work bridged the gap between the neoclassical, theoretical approach and the newer Institutional approach for economic courses at Brigham Young University. Once again, at a very early date, economics at BYU was engaged in a national pedagogical debate regarding the most effective method of understanding and teaching economics.



Further, with Swenson's help, Miller organized the curriculum into a lower division, an upper division, and three graduate courses in "Advanced Economics." One of Miller's courses stipulated that *only* "those students who had had sufficient preparation and who are desirous of gaining a greater familiarity with some particular phase of economics" need register. ¹⁵ These advanced courses were open by invitation only to seniors and graduate students.

Miller continued his professional development as well to keep up with the latest economic training. During the 1942-1943 school year he took a leave of absence to study at Harvard University.¹⁶

By the year preceding Miller's leave, 1941-1942, the economics curriculum had grown to include twenty-six courses, twelve of them upper division courses and eleven graduate courses including a master's degree and thesis. ¹⁷ These twenty-six courses and their multiple sections were taught by a mere mere two full-time faculty (Pond and Miller) and four part-time faculty in economics.

Economics for the Common Man, 1937-1959

IN RESPONSE TO GROWING ENROLLMENT and curriculum, A. Smith Pond was hired in 1937, completing the triumvirate of the three principle founders of the modern Department of Economics at Brigham Young University. Along with Swenson and Miller, Pond devoted almost his entire career to building the Economics Department. While influenced by the historical and institutional approaches to economic education, Pond was a force for returning BYU to the fold of modern economics—a return to the marginalist approach of neoclassical economic thought. Pond was hired during the depths of the Great Depression, after completing undergraduate work at the University of Utah (1926) and several years of graduate work at Northwestern University under Richard T. Ely (who was later the president

of the American Economic Association) and William Jaffe (translator and popularizer of Leon Walras). Pond became the first member of the Department of Economics to receive a doctorate degree, having received his Ph.D. from Northwestern in 1942.

Returning to BYU with Ph.D. in hand, Pond quickly became a valuable resource, teaching lower and upper-division courses. The latter included the History of Economic Thought, Advanced Economics, and Government Finance and Taxation, as well as other courses in economic theory.¹⁸ In addition to these general economic courses, Pond chaired and taught in the new Department of Agricultural Economics. 19 Considering he wrote his Ph.D. dissertation on Urban Special Assessments in Down State Illinois, 1925-1937, the number and breadth of courses Pond taught demonstrate the degree of versatility required of BYU faculty as late as 1950.20

In 1956, an alternative to the encyclopedic text of Paul Samuelson was born as Pond turned his expertise and experience to improve students' introduction to economics. By 1953, Pond was sending queries to academic publishers about writing a different kind of economics textbook that would better introduce students who were fulfilling general education requirements in the discipline of economics. In a letter to one of his old mentors, James Washington Bell at Northwestern University, Pond wrote, "the traditional textbook for the introductory course is not very well adapted to the needs of the student who does not go beyond that first course," and thus, rather than an introductory text for economics majors, he wanted to write a textbook emphasizing the fact "that the overwhelming majority of students who come under our leadership will not be professional economists, but they will be citizens, voters, breadwinners, and in some cases public servants." 21 Despite publishers' initial reluctance, Harcourt and Brace eventually contracted to publish his proposed text. In 1956, Pond published Essential Economics under the general editorship of Albert Gailord Hart of Columbia University. As Hart noted in his introduction, "the standard of the book is to bring the student to a real working command of a considerable amount of economics, rather than to bring a vast amount of economics to the level of a parlor accomplishment." ²²

Pond's textbook went through several editions and received considerable support from the education community. His reviewers included such notable economists as Arnold Sametz of Princeton University, George H. Hildebrand of the University of California, and Lawrence Leamer of the University of Chicago. James F. Becker of New York University called Pond's text "a superior volume" 4 – perhaps surprising comments from the future author of *Marxist Political Economics: An Outline*." 25

In addition to his teaching and publication record, Pond held many important positions in Brigham Young University's administration. He served on the "Superior Student Program" committee (that would later become the Honors Program), the "Committee on Forensic Council," as well as serving as president and faculty leader of the BYU chapter of Phi Kappa Phi. He had incredible influence as the Chairman of the Curriculum Committee during President Earnest Wilkinson's overhaul of BYU's general education curriculum. Later, Pond served as both dean of the College of Humanities and Social Sciences and the dean of the Graduate School.²⁶

In addition to his many responsibilities, Pond was engaged in advancing BYU's role in the larger academic community. He was Chairman of the Resolutions Committee of the Western Economics Association and wrote a significant report of BYU's economic education projects for the Joint Economic Education Council. He also worked in educational organizations such as the Association for Higher Education and the Utah Conference for Higher Education. Pond frequently met with administrators of local public schools across Utah, encouraging the study of economics in secondary schools.

During the **2011–2012** school year, **29 faculty** taught approximately **5,000** students in **96 sections** involving **37 different courses**.

Post-World War II Economics Education

AFTER THE END OF WWII and within a short six year period, these three pioneer scholars passed away. Devoted and visionary professors, Swenson, Miller, and Pond transformed economics at BYU into a modern department. They pioneered curricula and department programs while teaching horrendous numbers of courses, laden with multiple administrative responsibilities. They stood out from the crowd in their unwavering commitment to Brigham Young University, to their Church, and to intellectual integrity and academic freedom.

Late in his life, John Swenson reflected on the accomplishments of the university:

"To review the achievements of the University since its founding 70 years ago, reads like a fairy tale. It begins with 29 students

the first day...Now we have 4,500. At the beginning there were only 4 teachers. Now this faculty approaches 200. During the first decade the institution was housed in the upper story of a warehouse. Now, the buildings on this hill are so numerous that many of us find it difficult to find our way around.

The curriculum offerings have so broadened and deepened that the University has equal status with many of the leading universities of the land, but with all this change there has remained one constant factor and that is the ethical and religious ideas it began. The future of the University is assured if it continues to maintain freedom of teaching. The courage to accept truth from whatever course it may come and finally to hold to the standards of living which have characterized it from the beginning. 11 28

From 1997-2010 the Department of Economics at BYU ranked 6th in the nation in its placement of students in economics Ph.D.

programs, only slightly behind Harvard, Stanford, Berkeley, MIT, and Cornell; and above Princeton, University of Chicago, University of Michigan, Yale, and University of Texas - no other university between Illinois, Texas, and California makes the list of the top 27.29 Continuing in the progress Swenson witnessed, the Department of Economics is currently a complex array of faculty, students, and courses. During the 2011-2012 school year, 29 faculty members taught approximately 5,000 students in 96 sections involving 37 different courses. Roughly 150 students graduated from the department, and many continue on for further graduate work in business, law, public policy, medicine, as well as economics; others enter directly into the job market with a panoply of offers from major financial and industrial firms.

REFERENCES

- Swenson, J. C. (1956). Unpublished Autobiography of John Canute Swenson (February 4, 1869-August 30, 1953). 50. Harold B. Lee Library Special Collections.
- 2 Ibid., 1.
- 3 Brigham Young University. BYU Academic Catalog 1900-1901. Provo: Harold B. Lee Library.
- 4 Spiegel, H. W. (1971). The Growth of Economic Thought. 617-618. Englewood Cliffs, NJ: Prentice-Hall.
- 5 Bly, M. T. (1898). Descriptive Economics: An Introduction to Economic Science. 214. Chicago: General, 214.
- 6 Ibid., 12
- 7 Ibid., 12.
- 8 Swenson, J. C. (1956). Unpublished Autobiography of John Canute Swenson (February 4, 1869-August 30, 1953). 50. Harold B. Lee Library Special Collections.
- 9 Bullock, C. J. (1897). Introduction to the Study of Economics. New York: Siler, Burdett and Company.

- Sixty years later (1980) the Department of Economics would be transferred from the Commerce College, by then the new School of Management, to the College of Family, Home, and Social Sciences; with a group of Managerial Economists remaining within the Business School.
- 111 Swenson, J. C. Unpublished Personal Papers. 31. Harold B. Lee Library Special Collections. Among the notable speakers making their way to this remote campus, were such national figures as Jacob Riis, Williams Jennings Bryant, and Helen Keller. Education reformer John Dewey made multiple trips to BYU to meet with students and administrators. Swenson also served as a representative on the State Board of Education for Utah from 1926 to 1936. He was among those who led the push for the formation of the Springville Museum of Art and was one of its featured speakers at its opening.
- Brigham Young University. BYU Academic Catalog 1924-1925. 75-78. Provo: Harold B. Lee Library.
- 13 Leamer, L. E. (1950). A Brief History of Economics in General Education American Economic Review, 25.

- Brigham Young University. BYU Academic Catalog 1924-1925. 78. Provo: Harold B. Lee Library.
- 15 Ibid., 78.
- 16 Pond, A. S. Personal Papers. Provo: Harold B. Lee Library Special Collections
- 17 A more detailed article of the department's history can be found on file in the Department of Economics at BYU
- Brigham Young University. BYU Academic Catalog 1950-1951. Provo: Harold B. Lee Library.
- 19 Brigham Young University. BYU Course Catalog 1953-1954. Provo: Harold B. Lee Library.
- 20 Northwestern University. Degrees Granted 1941-1942. Chicago: Northwestern University Special Collections and Archives.
- 21 Pond, A. S. (1953, June 18). Personal Letter to James Washington Bell. Provo, UT: Harold B. Lee Library Special Collections.
- 22 Pond, A. S. Personal Papers. Provo: Harold B. Lee Library Special Collections

- Pond, A. S. Personal Papers. Provo: Harold B. Lee Library Special Collec-
- 24 Becker, J. F. (1956). Review of Essential Economics by A. Smith Pond. American Economic Review, 46(5), 986.
- 25 Ibid., 987.
- Pond, A. S. Personal Papers. Provo: Harold B. Lee Library Special Collections
- 27 Pond, A. S. Personal Papers. Provo: Harold B. Lee Library Special Collec-
- 28 Swenson, J. C. (1956). Unpublished Autobiography of John Canute Swenson (February 4, 1869-August 30, 1953). 50. Harold B. Lee Library Special Collections.
- 29 Fiegener, M. (2012, July 7). Survey of Earned Doctorates. (L. T. Wimmer, Interviewer)

OPTIMIZING *their returns*

Economics students are making their mark throughout the United States and various parts of the world with their internships, jobs, and graduate school placements.

ARIZONA

internships
Office of the Governor
jobs
US Airways

ARKANSAS

jobs Walmart

BOSTON

jobs
Harvard University
Massachusetts General Hospital
Vecna Technologies
graduate schools

Boston University ECONOMICS Harvard University LAW Tufts Medical (Massachusetts Institute of Technology)

CALIFORNIA internships

jobs
Anglepoint
Cornerstone Research
Duff & Phelps
graduate schools
Stanford PH.D. ECONOMICS
Stanford LAW
Loma Linda University

DOCTOR OF DENTAL SURGERY

Cornerstone Research

CONNECTICUT

graduate school
Quinnipiac University law
Yale University ph.d. economics
Yale University masters of religion
in second temple judaism

DELAWARE

jobs
Teach For America
graduate schools
Wilmington MASTERS OF EDUCATION

DENVER

jobs Mitt Romney Presidential Campaign

FLORIDA

internships Citibank jobs Teach For America

ILLINOIS

Sears Holdings
graduate schools
Chicago PH.D. ECONOMICS
Chicago LAW
Midwestern University DOCTOR OF

OSTEOPATHIC MEDICINE

INDIANA

graduate schools

Notre Dame University LAW

LAS VEGAS

jobs Marcus & Millichap

MARYLAND

Greysteel Company

MINNESOTA

jobs
IBM
Property Solutions
graduate schools
University of Minnesota masters of
HEALTHCARE ADMINISTRATION

NEBRASKA

graduate schools
Creighton University Medical

NEW YORK

internships
Credit Suisse Investment Bank
Ernst & Young
iQor
Towers Watson
johs
Ernst & Young
graduate schools
Cornell University ECONOMICS

NORTH CAROLINA

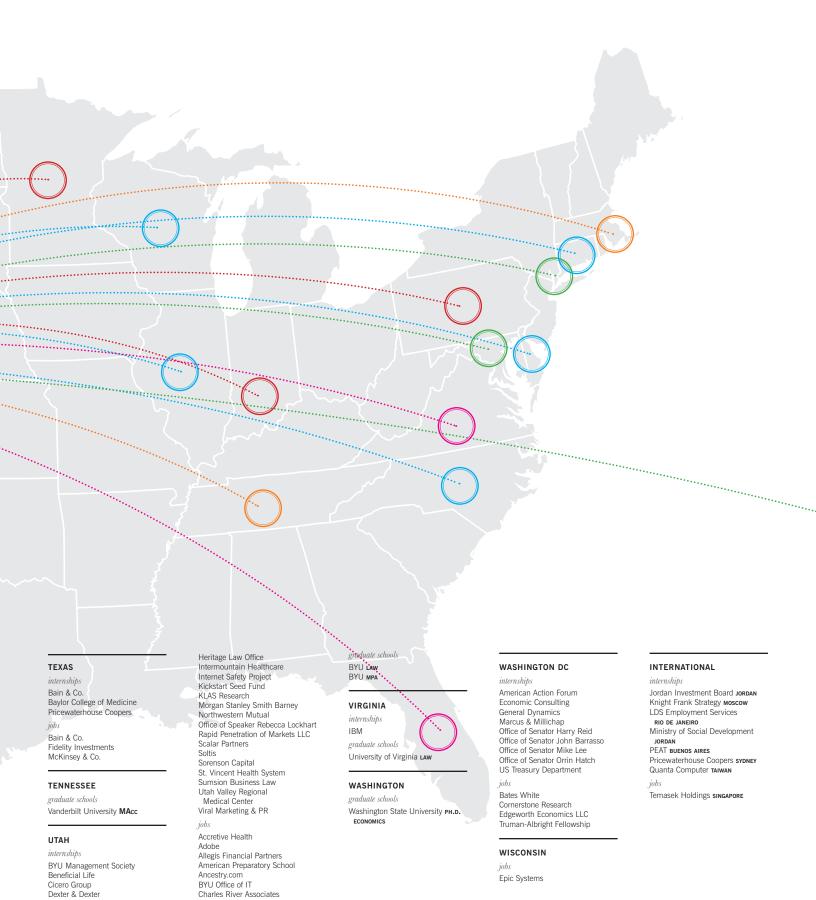
graduate schools

Duke University PH.D. ECONOMICS

Duke University LAW

PENNSYLVANIA

graduate schools
Carnegie Mellon PH.D. ECONOMICS



Cicero Group Dexter & Dexter Enterprise Rent-a-Car

Ernst & Young Goldman Sachs

Fidelity Investments

Vivint Xactware

15



THEMREA

The following is a list of the economic department's professors and their areas of expertise. For more information about the professors, their publications, educational background, and contact information, see the economics department website.



Olga Bogach, Ph.D. Visiting Assistant Professor

EDUCATION University of Hawaii, 2012

EXPERTISE

International economics and experimental economics

HOBBIES/INTERESTS Hiking, tennis, volleyball, and traveling



Scott C. Bradford, Ph.D. Associate Professor

EDUCATION

Harvard University, 1998 RECENTLY PUBLISHED

"Potential Economic Reforms in North Korea: A Dynamic General Equilibrium Model" (with K. L. Phillips & D. Kim). Journal of Economic Policy Reform,

EXPERTISE

Migration, international trade, political economy, and the Japanese economy

HOBBIES/INTERESTS

Family, church, museums, nature (terrestrial and celestial), performing arts, reading, sightseeing, and sports



Richard J. Butler, Ph.D. Professor

EDUCATION

University of Chicago,

RECENTLY PUBLISHED

"Economics of Occupational Safety and Health" (with J. Ruser). Foundations and Trends® in Microeconomics, 2010.

EXPERTISE Worker's compensation and disability

HOBBIES/INTERESTS Tai Chi and backpacking



James H. Cardon, Ph.D. Associate Professor

EDUCATION

Princeton University, 1996

RECENTLY PUBLISHED "Flexible Spending Accounts and Adverse Selection." Journal of Risk and Insurance,

EXPERTISE Health economics and industrial organization

HOBBIES/INTERESTS Hiking and astronomy



Scott S. Condie, Ph.D. Assistant Professor

EDUCATION

Cornell University, 2007

RECENTLY PUBLISHED "Ambiguity and Rational Expectations Equilibria" (with J. Ganguli). Review of Economic Studies,

EXPERTISE Economic theory and financial economics

HOBBIES/INTERESTS Swimming, biking, and running



Eric R. Eide, Ph.D. Department Chair, Professor

EDUCATION University of California, Santa Barbara, 1993

RECENTLY PUBLISHED "Sleep and Student Achievement" (with M.

H. Showalter). Eastern Economic Journal, Forthcoming.

EXPERTISE

Economics of education, health economics, and labor economics

HOBBIES/INTERESTS Trail running, swimming, and cycling



Richard W. Evans, Ph.D. Assistant Professor

EDUCATION University of Texas at Austin, 2008

RECENTLY PUBLISHED "Is Openness Inflationary? Policy Commitment

and Imperfect Competition," Journal of Macroeconomics, Forthcoming. EXPERTISE

International macroeconomics, monetary economics, public economics and computational economics

HOBBIES/INTERESTS Snowboarding, golf, tennis, and rock climbing (anything outdoors)



Brigham Frandsen, Assistant Professor

EDUCATION Massachusetts Institute of Technology, 2010

RECENTLY PUBLISHED "Quantile Treatment Effects in the Regression Discontinuity Design" (with M. Froelich & B. Melly). Journal of Econometrics, 2012.

EXPERTISE Econometrics and labor economics

HOBBIES/INTERESTS Cello, piano, mountain biking, and coaching his kids soccer games



David R. Hansen, Ph.D. Visiting Assistant Professor

EDUCATION Stanford University, 2011

EXPERTISE Development economics, economics of education, and applied microeconomics

HOBBIES/INTERESTS Reading (history, science fiction, and classics), ultimate frisbee, and running



Heather F. Howard, Ph.D. Adjunct Faculty

EDUCATION Cornell University, 2008

EXPERTISE Economic history

HOBBIES/INTERESTS Gardening



James R. Kearl, Ph.D. Professor

EDUCATION

Massachusetts Institute of Technology, 1975

RECENTLY PUBLISHED

"The Economics and Curious Law of Prejudgment Interest" (with M. Glick & C. Sinclair). University of Utah Law Review, Forthcoming.

EXPERTISE

Law & economics, industrial organization and applied microeconomics

HOBBIES/INTERESTS

Cycling, travel, collecting tribal and Middle Eastern and Asian art and artifacts



Val E. Lambson, Ph.D. Professor

EDUCATION

University of Rochester,

RECENTLY PUBLISHED

"Sunk Costs, Depreciation, and Industry Dynamics" (with A. Gschwandnter). Review of Economics and Statistics, Forthcoming.

EXPERTISE

Economic theory, game theory, and industry dynamics

HOBBIES/INTERESTS Chess and Hebrew



Lars J. Lefgren, Ph.D. Associate Professor

EDUCATION

University of Chicago,

RECENTLY PUBLISHED

'Rich Dad, Smart Dad: Decomposing the Intergenerational Transmission of Income" (with M. J. Lindquist & D. Sims). Journal of Political Economy, 2012.

EXPERTISE

Labor economics and empirical economics

HOBBIES/INTERESTS

Running, hiking, biking, and reading



James B. McDonald, Ph.D. Professor

EDUCATION

Purdue University, 1970

RECENTLY PUBLISHED

"Instrumental Variables Estimation with Flexible Distributions" (with C. Hansen & W. Newey). Journal of Economics and Business Statistics, 2010.

EXPERTISE

Econometrics and quantitative economics

HOBBIES/INTERESTS

Family (including grandchildren) church, audible books, travel, research, and various outdoor activities



Joseph C. McMurray, Assistant Professor

EDUCATION

University of Rochester,

RECENTLY PUBLISHED

'Aggregating Information by Voting: The Wisdom of the Experts versus the Wisdom of the Masses. Review of Economic Studies, Forthcoming.

EXPERTISE

Political economics and microeconomic theory

HOBBIES/INTERESTS

Playing the organ and attending theatrical performances



Kerk L. Phillips, Ph.D. Associate Professor

EDUCATION

University of Rochester,

RECENTLY PUBLISHED

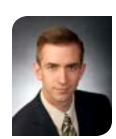
"What is the Shape of Real Exchange Rate Nonlinearity?" (with S. Norman). Applied Financial Economics, Forthcoming.

EXPERTISE

Macroeconomics, international economics, and economic growth

HOBBIES/INTERESTS

Hiking and Native American rock art



Brennan C. Platt, Ph.D. Assistant Professor

EDUCATION

University of Minnesota,

RECENTLY PUBLISHED

"Running Out of Time: Limited Unemployment Benefits and Reservation Wages" (with S. N. Akin). Review of Economic Dynamics, 2012.

EXPERTISE

Search theory, auction theory, mechanism design, and game theory

HOBBIES/INTERESTS

Movies, golf, wood working, sailing, and Legos with his boys



C. Arden Pope, III, Ph.D.

EDUCATION
Iowa State University,

RECENTLY PUBLISHED

"Lung Cancer and Cardiovascular Disease Mortality Associated with Ambient Air Pollution and Cigarette Smoke: Shape of the Exposure-Response Relationships" (with R.T. Burnett, M.C. Turner, A. Cohen, D. Krewski, M. Jerrett, S.M. Gapster, & M.J. Thun). Environmental Health Perspectives, 2011.

EXPERTISE

Environmental economics and environmental epidemiology

HOBBIES/INTERESTS Family, backpacking, mountain-biking, and research



Jaren C. Pope, Ph.D. Assistant Professor

EDUCATION North Carolina State University, 2006

RECENTLY PUBLISHED "A Novel Approach to Identifying Hedonic Demand Parameters."

 $Economics\ Letters, 2012.$ EXPERTISE

Environmental economics and urban economics

HOBBIES/INTERESTS Spending time with my wife and 3 daughters, playing basketball and squash, and eating nachos



Rulon D. Pope, Ph.D. Professor

EDUCATIONUniversity of California,
Berkeley, 1976

RECENTLY PUBLISHED
"Risk Response in
Agriculture." (with J.
T. LeFrance & J. Tack).
Agricultural and
Biofuels Policy in U.S.
Agriculture, 2012.

EXPERTISEAgricultural economics and microeconomic theory

HOBBIES/INTERESTS
Strange motorcycles and cars, fishing, and reading



Joseph P. Price, Ph.D. Assistant Professor

EDUCATION Cornell University, 2007

RECENTLY PUBLISHED "Changing the Price of Marriage" (with K. Buckles & M. Guldi). Journal of Human Resources, 2011.

EXPERTISELabor economics, family economics, and health economics

HOBBIES/INTERESTS
Basketball, hiking, and reading



Michael R. Ransom, Ph.D. Professor

EDUCATION Princeton University, 1983

RECENTLY PUBLISHED
"Pension Plan
Characteristics and
Framing Effects in
Employee Savings
Behavior" (with D.
E. Card). Review
of Economics and

Statistics, 2011.

EXPERTISELabor Economics, applied econometrics, and urban economics

HOBBIES/INTERESTS
Fly fishing and family history



Mark H. Showalter, Ph.D. Professor

EDUCATIONMassachusetts Institute of Technology, 1991

RECENTLY PUBLISHED
"Estimating the
Relationship Between
Health and Education:
What Do We Know and
What Do We Need to
Know?" (with E.R. Eide).
Economics of Education
Review, 2011.

EXPERTISE
Health economics and economics of education

HOBBIES/INTERESTS Spending time with family, hiking, and reading



David P. Sims, Ph.D. Associate Professor

EDUCATION Massachusetts Institute of Technology, 2004

RECENTLY PUBLISHED
"Rich Dad, Smart
Dad: Decomposing
the Intergenerational
Transmission of Income"
(with M. J. Lindquist and
L. J. Lefgren). Journal of

EXPERTISE

Labor economics, economics of education, and public finance

Political Economy, 2012.

HOBBIES/INTERESTS Soccer, baseball, history, and old movies



David E. Spencer, Ph.D. Professor

EDUCATION
Texas A&M University,

RECENTLY PUBLISHED
"Bootstrapping Structural
VARS: Avoiding a
Potential Bias in
Confidence Intervals
for Impulse Response
Functions" (with K. L.

Phillips). Journal of

EXPERTISE

Macroeconomics, monetary economics, and econometrics

Macroeconomics, 2011.

HOBBIES/INTERESTS Opera and hiking



Steven Waters, Ph.D. Adjunct Faculty

EDUCATION

University of California, San Diego, 1993

EXPERTISE

Antitrust, intellectual property, environmental economics, econometrics, and applied microeconomics

HOBBIES/INTERESTS

Drum circles, cycling, road trips, and reading



Carrie J. Scoresby MPA Candidate, Department Administrator

EDUCATIONBrigham Young University, B.S., 2007

HOBBIES/INTERESTS Volleyball, biking, the outdoors, musicals, and BYU sports



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Visiting Scholars + Career Series



To help students better understand how to apply their economics degree, the department offers a Visiting Scholar Series and a Career Series.

IN 1972, THE DEPARTMENT began hosting visiting scholars from various universities and organizations across the country to visit campus and present their research to students and faculty. This past year, scholars came from Stanford, Harvard, Yahoo! Research, MIT, IMF, Duke, RAND Institute for Civil Justice, Citigroup, University of Alabama, and University of California-Berkley. These scholars participate in a student presentation and faculty lecture. Students are given the opportunity to have breakfast with

the scholar to further discuss their research and discover possible graduate school opportunities. The visiting scholars also meet one-on-one with faculty to further discuss research, collaborate, and gain expert advice on problems they are researching. Through the visiting scholar program students and faculty alike have the opportunity to experience new ideas.

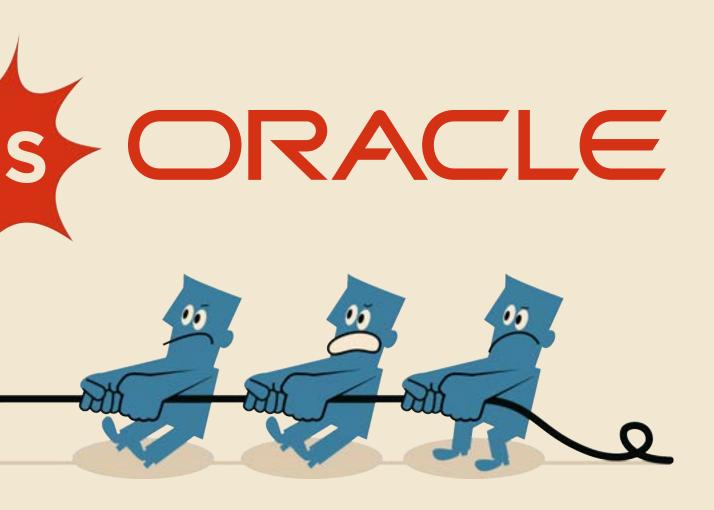
In Fall 2010, with the support of alumni, the department began the Career Series to help students explore possible careers with an economics degree. Alumni are invited to discuss their career path and, specifically, how an economics degree assisted them in their career. A question and answer period is provided for students to inquire about such things as the alumnus's field of work, the educational steps they made to get where they are, or other possible advice the alumnus may have. Alumni from various industries including consulting, finance, law, medicine, real estate, development, and the public sector have participated in past career series.

GOOGLE V

In May of this year, two powerful and wellknown companies-Google and Oracle-met in court to determine whether or not Google had infringed upon their rightful use of Oracle's Java programming language in the creation of their Android phone. Oracle filed the lawsuit against Google in August 2010, claiming Google crossed the line of the legal limit of use for their programming platform without a license, giving Oracle rights to part of the proceeds of the incredibly popular smartphone. The lawsuit went to courts in May of this year. Both companies hired expert analysts to investigate the situation and configure any cost for such an infringement of copyright laws. With both sides presenting equally creditable information, Judge William Alsup called for a third, unbiased expert that would remain unconnected with either party. For this neutral witness he hired BYU's professor Jim Kearl.

UTILIZING A RARELY USED PROVISION of the Federal Rules of Civil Procedure (Section 706), federal court judge William Alsup of the Northern District of California appointed Professor Kearl as the court's "706 expert" in an important lawsuit brought against Google by Oracle. Oracle, which purchased Sun's Java-related intellectual property, sued Google in August 2010 alleging that Google's Android operating system for smart phones and other mobile devices infringed Oracle-owned Java patents and copyrights. Both Oracle and Google retained economists to estimate damages. Oracle's expert filed his initial report in May 2011; Google's experts filed preliminary responses in June 2011. Following this initial duel, Judge Alsup, frustrated with the work of the experts on both sides, directed Oracle and Google to find a neutral expert who would work for the court. More or less out of the blue, Professor Kearl was contacted by the parties in early August 2011, interviewed by Judge Alsup later that month, and appointed a "Rule 706 expert" by Judge Alsup in late August. In an unusual twist, Professor Kearl was appointed to be an independent testifying expert and not just a consultant to the court. His initial assignment was to prepare testimony critiquing the work of the experts retained by Oracle and Google; later his assignment was expanded and he was directed to prepare testimony critiquing the parties' experts and also to provide an independent estimate of damages for the in-suit patents and copyrights. Since he was a courtappointed expert and not retained by the parties, Judge Alsup appointed John Cooper of Farella Braun and Martel, a San Francisco law firm, to be Professor Kearl's attorney.

In preparation for his testimony, Professor Kearl was directed to prepare an expert report and to sit for separate depositions by both parties. In another unusual move, Judge Alsup ordered the parties to provide him access to any witness on an "off the record" basis, meaning Professor Kearl's interviews of these witnesses were not



subject to discovery. He was also given the privilege of questioning the parties' experts and other witnesses in depositions and cross examining the parties' experts and damages-related witnesses at trial. Had there been a damages phase of the trial, Professor Kearl would have been the last witness. He would have put forward his opinions and bases in direct testimony, responded to questions directed to him by Judge Alsup, and then been subject to cross examination by attorneys for both Oracle and Google.

Had Oracle prevailed, Google would have had to pay potentially very large damages for past infringement to Oracle and then, going forward, take a license for the Java patents and copyrights allegedly incorporated in Android or possibly be forced to disable Android. In the end, after a month-long trial on liability, the jury deadlocked on the most important copyright issue and found for Google on the patents, i.e., the jury could not determine liability on copyrights and found that there was no infringement

of Oracle's patents. Judge Alsup then ruled that, as a matter of law, the computer code that Oracle claimed was protected by copyright, was not copyrightable. As a consequence, there was no damages phase to the trial, Professor Kearl did not testify, and the matter is now headed toward the appellate courts for review.

The Oracle-Google dispute over intellectual property is one of several potentially "landmark" intellectual property cases now in the federal courts dealing with smart phones and tablet devices such as the iPhone, iPad, and Android-based or Microsoft-based mobile devices. With technologies that embed hundreds, and in some cases thousands, of patents and copyrights in a single device, there are a number of policy and legal issues of considerable interest now being considered by the federal courts, federal agencies, and the U.S. Congress. Most of these are technical in the sense that they are tied to the technology of the mobile device itself or to the intricacies of patent

and copyright laws as they have come to be applied in a high-tech setting.

Beyond the legal and device-based technical issues, however, the issues associated with determining damages if infringement is found to have occurred are complex and have become central in legal and public policy debates about incentives to innovate, how best to protect intellectual property, and how to determine the appropriate compensation to the owners of intellectual property whose IP has been used without being licensed. For example, there is an ongoing policy debate about whether jury awards in the cases heard to date have been "excessive" and about current appellate court rulings that require experts to apportion revenues or profits based on the incremental contribution of the in-suit patents and, perhaps, copyrights. Doing so is very often an extraordinarily challenging economic problem and an equally challenging econometric or other data-based exercise.

JK



Alumni Spotlight: Nathan Sheets

66 I think the Church, the opportunities we have to serve in the Church, really gives us [as members] a huge advantage in our secular work...



RECESSION. Economic meltdown. How did Alexander Hamilton respond to the financial crisis in the 18th century? How did the United States deal with its debt situation after World War II? These are just a few of the dilemmas economics alumnus Nathan Sheets ('89) considered while searching for answers to improve the financial crises of this century in the U.S. and especially in Europe.

After receiving his Ph.D. from MIT in 1993, Sheets worked at the Federal Reserve Board in Washington, D.C. for 18 years and, in 2011, he made the jump to the private sector working as the Global Head of International Economics at Citigroup. During his last four years with the Federal Reserve, he served as the director of the Board's Division of International Finance, traveling regularly with the chairman of the Fed to Switzerland to interact with senior-level policy makers from central banks around the world. He considers these experiences some of the most significant of his career. At these meetings, Sheets observed the formulation of policy, including the various responses and considerations as monetary policy makers thought about how to respond to the financial crisis. He recalls, "It really, really brought home that this is a global economy."

Sheets misses participating in these debates and efforts and observing the

responses to the financial crisis; however, it was time to seize new opportunities and so he accepted a position with Citigroup last year. Now instead of serving only the Board of Governors—consisting of five individuals—his clientele has expanded to thousands. As he meets with his new clientele, the discussions and analyses include the economic and political developments in the U.S. and abroad—a very similar set of issues to those he worked on at the Fed. One aspect he welcomes in his job at Citigroup is the opportunity to invest more time pursuing issues of personal interest instead of the tight focus on the interests of the Board of Governors. Overall Sheets says the issues which the Fed and private sector face are quite similar: How should the Europeans respond to the ongoing crisis? What are the positive things for the financial system?

Sheets has felt blessed in his career as he has served in various capacities in the Church. "When I became International Director for the Fed and other positions, a lot of the things I learned about leadership were things that I had learned through service in the Church. I think the Church, the opportunities we have to serve in the Church, really gives us [as members] a huge advantage in our secular work in terms of being able to interact with people, to work inside organizations, to lead an organization.

All of these are embedded in the various auxiliaries in wards and stakes....I think all of that gives us a huge advantage relative to others and for me it has given me an additional perspective on issues."

Reflecting on his experiences at BYU, Sheets explained that it was at BYU where the interaction between academics and the gospel evolved for him, something that has been a foundation for faith and perspective and continues to guide him throughout his career and life. He notes, "It's hard when you're in college. It's a time when you're thinking hard about who you are and what you want to be and having both a powerful academic environment at BYU and a powerful spiritual environment." He believes that environment gives students the best of both worlds.

Nathan and his wife, Kim, are the parents of four children: a daughter and three sons. He hopes they, too, will someday have the opportunity to attend BYU. A favorite pastime of the Sheets family is to make an annual trip to Disney World, but most importantly, they simply enjoy spending time together.

unded by an anonymous and generous economics alumnus, the BYU Economics Department conducted a special program during the spring term called "Macroeconomics Computational Boot Camp." The camp, directed by Professors Rick Evans, Kerk Phillips, and David Spencer, provided an intensive experience to the ten students who completed the program. The program included lectures exposing students to a collection of analytical tools useful in cutting-edge economic research and analy-

computation, students were taught principles of economic modeling, model solution techniques, and useful econometric tools that go beyond their typical coursework. The real learning took place in application, with students participating in computer "lab" experiences and completing challenging assignments that forced them to master these tools.

The Macroeconomics Computational Boot Camp was complemented by a Mathematics Boot Camp, under the direction of Professor Jeff Humpherys, which had a similar structure and purpose. No doubt, each student was challenged and stretched as they completed both programs.

"I feel as if Boot Camp has been the single most enriching academic experience in the whole of my scholastic life."

CHRISTIAN BAKER

These rigorous seven-week boot camps are just the beginning of the learning experience, however. The principal purpose is to prepare students to participate more meaningfully in research projects with faculty mentors during the rest of the summer and through the next academic year. With their boot camp preparation and outside fund-

ing, they are expected to "hit the ground running" in these well-identified research projects. The objective is to make their research contributions sufficiently substantial that each student will become a coauthor on publishable research.

Many of these students will go on to

graduate school where, with their undergraduate research experience, they will be uniquely prepared to succeed in the best programs in the country. Others will enter the job market with analytical tools and research experience that will set them apart and make them particularly

attractive to potential employers.

Professors Evans, Phillips and Spencer have been excited to see these outstanding students rise to the boot camp challenge and to observe their excitement as they master powerful research tools and anticipate an enriched research experience.

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FROM PARTICIPANTS:

Chase Coleman

sis. With emphasis on

"Boot camp was a totally new experience. I had never been required to push myself so hard to understand such large quantities of material. The environment in which such an intelligent group of students are able to gather together and understand a high level of material made it some of the most interesting weeks of my year."

Timothy Hills

"The only thing I can say about boot camp is that the six weeks of mental abuse have had the highest returns out of any other class I have taken as an undergraduate. Looking back at conferences I have attended, journal articles I have read, and research I have done, I feel like the shades of ignorance have been removed and that I can finally understand and contribute to the academic and economic research world."

TJ Canann

"Boot camp was a very stressful but also a very enriching experience. I really enjoyed being able to push myself beyond what I thought was possible. The ability to work with other students and learn how to do collaborative research with other students was a priceless experience."

Sara Ehlert

"...the professors were exceptionally helpful and encouraging in pushing us to be our best. I also thoroughly enjoyed working with my fellow students. Working through challenging homework sets, computer programs, and mathematical proofs in this group was an amazing experience because our work was truly collaborative: each student put forth their best efforts, which, when put together, exceeded anything we could have accomplished individually."



Rvan Brunt

"I have never been in a better learning environment than boot camp. The professors work closely with you and help you master the material. The classwork pushed me to my limits and expanded my capacity to solve problems and think analytically. And it is not just busy work. Every assignment helped me become a better problem solver which is important no matter what you study. However, working with fellow students to solve difficult problems was the highlight of boot camp. I learned a lot from my classmates, made friends, and it was a lot of fun."

Ryne Belliston

"Boot camp was a tremendous learning opportunity. It moved quickly and covered a lot of material, but I loved the exposure to so many models and problem solving methods-- most of which I otherwise would not have seen in my undergraduate studies. I'm grateful to have had the opportunity to gain knowledge and ability that will help me make meaningful contributions to research as an undergrad and will open doors in my future."



I'm an **Econ Major**

Student Wins Prestigious Grant

THIS YEAR, a number of our economics students were recognized for their outstanding performance. Among them, 2012 graduate Bryan Perry received the prestigious National Science Foundation (NSF) grant. These grants are awarded each year to fund specific research proposals, which are judged rigorously and awarded competitively, in accordance with the NSF purpose to "promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense." The grants have an average duration of three years to support recipients through their research at graduate school.

Bryan's research focuses on the counterfactual analysis of alternative monetary policy rules in response to the recent economic crisis. He hopes to eventually determine which rules would have performed best through the crisis by using a modified version of a popular macroeconomic model. "My NSF research proposal came directly out of my work with Dr. Spencer and Dr. Phillips," Bryan explained. This past spring, Bryan helped teach the Macroeconomics and Computational Boot Camp with Drs. Spencer, Phillips, and Evans and feels this provided him with a strong foundation for his upcoming graduate level research. He acknowledged that the opportunity to conduct research and coauthor research papers with faculty was valuable. Bryan believes his research will provide better understanding of past recessions and assist economists in being better prepared for future crises. With his NSF grant in hand, Bryan will be able to continue his research at MIT, where he began his graduate work this fall. RR

Achieving His Dream at Stanford Law

DREAMING OF STANFORD LAW SCHOOL

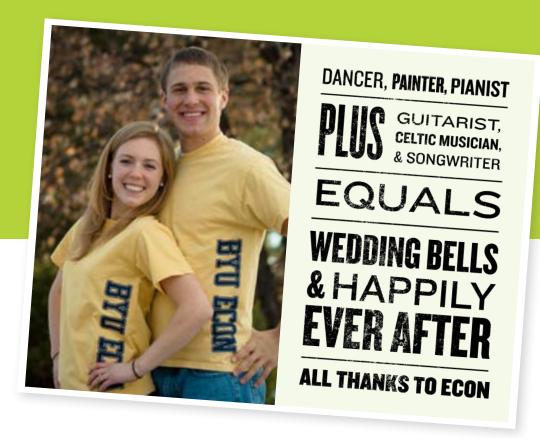
since he was twelve-years-old, one of Brigham Young University's 2012 top graduating students, Stephen Richards, chose Stanford from among other great offers including Harvard, Yale, Columbia, and the University of Chicago. The location, curricular specialties, generous aid system, and "killer weather" drew Stephen, his wife, Heather, and their five-month-old son, Daniel, to Stanford.

With law school in mind, Stephen joined the economics major knowing the program would help him "develop the critical thinking skills that are so important in law." Stephen feels his economics degree and time at BYU prepared him well for his future career. During his schooling, he also took advantage of opportunities to work closely with his professors, including working as a teaching assistant for a few economics courses. Stephen looks forward to combining his economics and law degrees and hopes to study antitrust law. According to Stephen, "Many of the interesting questions that come up in studying economics have answers, or even more interesting questions, rooted in the law. Combining econ and law should be a lot

Ultimately, Stephen will explore his options while in law school, hoping to one day work with a firm on the West Coast. RR

Jumpstart on the Future

THIS PAST SUMMER, several economics students attended and presented their research at professional conferences throughout the country. This is a rare experience for undergraduate students since most presentations are given by professors, graduate students, and other professionals. David Mauler, research assistant for Dr. James McDonald, noted, "As someone considering a career in academia, I feel this [experience] opened my eyes to an important part of the research process which I hadn't experienced before, being the presentation of original research to peers to elicit feedback and promote ideasharing.... I also feel as though the uncomfortable experience of presenting itself was beneficial. There will certainly be times in the future where I will need to present research to individuals much more knowledgeable than I. I feel as though I will be more prepared, having experienced this already at such an early stage in my academic career." The major conferences attended this year were the American Statistical Association and The Western Economic Association International. Grants from the Mary Lou Fulton Chair and Economics Department made attendance to the conferences possible.



Unintended Consequences

LAURA AND BEN TENGELSEN met while they were both majoring in economics at BYU. Neither came to BYU planning to major in economics, but life has a way of leading us in paths very unpredicted, yet much better than expected.

Laura arrived at BYU with plans to graduate in mathematics, but that began to change during her freshman year when she took Math 190 and Econ 110 in the same semester. As she grew to love economics, she began to compare it to her Math 190 course and realized she "didn't love it so much," and decided she needed to explore the economics field. As she did, she said, "The way we think as economists seemed to come naturally to me, and even my most difficult classes were always enjoyable." Though she kept mathematics as her minor, Laura chose to change course and embrace her true passion — economics.

Ben had interest in math as well, and in his consideration of majors he consulted with his mission president, a former professor of economics at Colorado State. His president explained a lot about the field of economics, which got Ben curious enough to take Econ 110 when he returned.

After taking Econ 110, and then later Econ 380, Ben was won over. "It was Econ 380 that hooked me," Ben said. "Dr. Price would regularly mention current research he and other economists were involved in and I was impressed by how economists study much more than just GDP, banking, and unemployment rates." Ben loved the varieties of studies and research available and was soon well on his way to economist status. As both Laura and Ben pursued their newfound life courses, they also found their courses beginning to cross, and it all started in the math lab.

"I was studying linear algebra and Ben was doing differential equations" Laura explained. "I thought he was pretty cute for a math kid....Neither of us would have been in those classes if it weren't for econ." From the math lab to "study dates" Ben and Laura saw more and more of each other. It was in Economics 588, that Ben knew their "relationship was built to last when Laura's test scores were significantly higher than mine and she still wanted to get married," which they did in April 2011.

Aside from meeting each other, both Laura and Ben had many very meaningful experiences while at BYU which have greatly influenced their lives now and for the future.

Two such experiences for Laura were the opportunities she had to do economics research in Namibia, Africa and India, These trips solidified Laura's focus in economics where she discovered she was most interested in the economics of education. When asked, Ben said his most meaningful experience during his studies was being involved in the BYU Macroeconomics and Computational Laboratory. Here he had the opportunity to work closely with both Dr. Kerk Phillips and Dr. Richard Evans. "I was able to take the skills I first learned in class and develop them to a much higher level," he said. Because of this experience, Ben was able to present their research at three different conferences and in the process learned that he really enjoys research-

Their extraordinary experiences during their undergraduate programs continue as Ben begins his Ph.D. program at Carnegie Mellon University in Pittsburgh—one of only two students accepted into the economics program this year. Laura is also preparing to return to school for a year-long graphic design program and is considering joining Ben at Carnegie next fall for a master's program in public policy and administration. Best of all, they won't be doing it alone, as Baby Tengelsen prepares to make his grand debut in November.

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OLGA BOGACH

Olga Bogach was born and raised in Khabarovsk, Russia and joined The Church of Jesus Christ of Latter-day Saints when she was sixteen-years-old. Approximately a year later, she left home to attend BYU-Hawaii, graduating in 2005 as a valedictorian with a B.S. in international business and a minor in economics. Having developed a passion for economics, she pursued her Ph.D. in economics at the University of Hawaii (UH). While completing her Ph.D., she taught economics courses at University of Hawaii and worked as a research associate for the UH Economic Research Organization.

Dr. Bogach's research focuses primarily on the evolution of foreign direct investment (FDI) around financial crises. She uses a variety of tools to examine the impact of crises on various types of FDI. She also employs experimental methodology to study issues of inter-cultural coordination and bargaining.

DAVID HANSEN

Dr. David Hansen joined the BYU faculty as a visiting assistant professor to teach intermediate macroeconomics and development economics shortly after completing his doctorate at Stanford in 2011. While at Stanford, he met his wife, Laura, who was studying for her master's in civil engineering. Having grown up in Utah, the couple is happy to be back home along with their new daughter Ila, born last December.

Dr. Hansen's research focuses on development and crime. Currently, he is working with his research assistant studying prison data from Arizona and the effects peers have on the chances prisoners will commit other crimes and what types of crimes they will commit. He has also studied crime in Mexico. Developing his own theoretical model, Dr. Hansen applied data from Mexico to explore how promoting education through subsidies would reduce crime. Unfortunately, according to the model, it would not heavily affect the crime rate but would improve education. In addition, Dr. Hansen researches gender gaps in math test scores across different countries, with the hope that he may identify the source of the gap and how to narrow it.

BRIGHAM FRANDSEN

Brigham Frandsen returns to his alma mater (Physics/Econ B.S. '04) after completing a Ph.D. in economics at Massachusetts Institute of Technology, where his dissertation focused on econometric methodology and labor economics. After his Ph.D., Dr. Frandsen was selected as a Robert Wood Johnson Scholar in Health Policy Research at Harvard University where he spent two years in residence furthering his research in econometrics and labor economics, as well as adding health policy to his research agenda. Dr. Frandsen's methodological research focuses on causal inference on distributional effects. He applies these methodologies to questions about the impact of labor market institutions and interventions on education and earnings outcomes. His health policy research deals with the consequences of fragmentation in the U.S. health care system. In addition to research, Dr. Frandsen enjoys hiking and mountain biking with his wife, Christine, and their four children.



In the News

SLEEP STUDY

Professor Eric Eide and Professor Mark Showalter's study on the relation between sleep and academic achievement was picked up this winter by several news sources, including MSNBC, Time, and U.S. News & World Report. The study is the first in a series to examine sleep and its impact on health and education, and this article focuses on the optimal number of hours of sleep for test score performance. Federal guidelines prescribe nine hours of sleep each night for adolescents and teens; however, Eide and Showalter find the optimal amount of sleep decreases with age. They found a strong relationship between the amount of sleep youths got and how they performed on standardized tests. According to their study, the optimal amount of sleep for a 10-yearold is nine to nine and a half hours, for a 12-year-old, it is eight to eight and a half hours and for a 16-year-old, it is about seven hours of sleep. The study was published in the Eastern Economic Journal.

To access the full article, visit http://www.palgrave-journals.com/eej/journal/vaop/ncurrent/full/eej201133a.html

TAX REFORM AND THE AMERICAN DREAM

This summer, Dr. Lars Lefgren was invited to testify as an expert witness in a hearing held by the United States Senate Committee on Finance. This hearing was held to discuss how the country can better provide equal opportunities for all children to achieve the "American Dream," and provide sufficient educational opportunities to all, independent of economic status. Dr. Lefgren emphasized the importance of appropriate education policy for ensuring that youth have the opportunity to develop the skills

to be successful in the workforce. He also discussed how policies designed to increase economic equality at a point in time and across generations may have distortionary impacts on the labor market that reduce incomes overall.

Visit http://www.finance.senate.gov/hearings/ and then click "Boosting Opportunities and Growth Through Tax Reform: Helping More Young People Achieve the American Dream" to watch the full hearing.

TITHING AND TAXES

With the press's increased interest in The Church of Jesus Christ of Latter-day Saints, NPR's Robert Smith recently ran an article entitled, "What the IRS Could Learn from Mormons." It was inspired by an article written by Dr. Michael Ransom (Brigham Young University) and Dr. Gordon Dahl (University of California at San Diego), "The Ten Percent Flat Tax: Tithing and the Definition of Income," published in Economic Inquiry in January of 2002. Ransom and Dahl used the study to better understand how people define income. Dahl explained that with this understanding, "you can craft the tax laws to better match people's motivations." Ransom and Dahl surveyed 1,200 members and in their research they discovered that many Mormons "tend to adopt the most simple and generous definition." While the Church never specifically defines income, it is clear that each member should pay ten percent of his or her income, leaving it to members to determine what "income" entails. For example, while most members said they would pay a full tithe on the profit when they sold stock, they would not use the loss of sold stock to offset and lower the income they tithed on. According to Smith, "Many religious traditions stress the importance of charity. But Mormons are remarkable for the amount and the precision with which they give to their church."

For Citations: http://www.npr.org/blogs/moncy/2012/03/02/147749784/what-the-irs-couldlearn-from-mormons

POLITICAL CARTOONS

In October 2011, the Salt Lake Tribune launched a new weekly online feature entitled, "Behind the Lines" with BYU economist and professor Val Lambson and Salt Lake Tribune cartoonist Pat Bagley. Lambson and

Bagley have known each other since their childhood days in California. From their opposing political views, they discuss current political debates and hot issues based on one of Bagley's cartoons.

To read these articles, visit http://www.sltrib.com/cat/BTL.

BUSINESS SECTION

For the past year, Professor Kerk Phillips has written opinion editorials for the business section for the Deseret News, a Salt Lake City-based newspaper. His articles discuss the market and macroeconomic policy.

To read Dr. Phillip's articles, visit http://www.descretnews.com/author/22971/Kerk-Phillips.html

WHEN WALMART COMES TO TOWN: ALWAYS LOW HOUSING PRICES? ALWAYS??

Jaren Pope (assistant professor at BYU) and his brother, Devin Pope (associate professor at the University of Chicago) caught the interest of prominent news outlets such as ABC News, CNN, The Chicago Tribune, and popular economics blogs such as Marginal Revolution with their recently published research in the National Bureau of Economic Research. Their research focused on Walmart and its effect on neighborhood housing prices. While many argue that living near a Walmart is undesirable, and would therefore lower the price of housing in the area, the Popes discovered that the opposite appears to be true. In fact, their research that analyzed the openings of 159 Walmarts all across the U.S. estimates that a new Walmart store increases housing prices by between two and three percent for houses located within 0.5 miles of the store and by one to two percent for houses located between 0.5 and 1 mile.

To access the full article visit: http://www.nber.org/papers/w18111.pdf?new_window=1.



RECOMMENDED

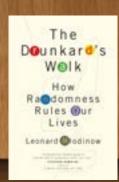
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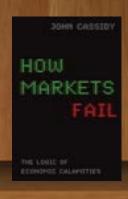
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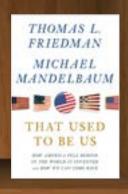




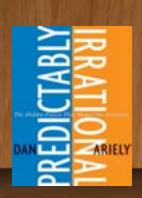


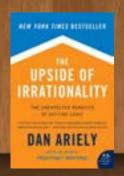


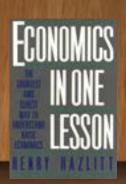


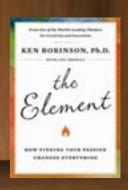


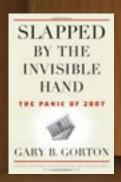


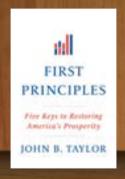






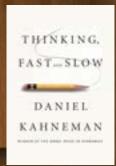












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