As every year, this is a brief account of departmental activities, as viewed by the Chair. The academic year 2011-12 has been marked by the implementation of some of the recommendations that the Department received from the external review committee in 2011.

As a follow up to the external review, the graduate program was reviewed by the Graduate Council this year. The Administration and the Department are working together to solve two pressing issues for the graduate program, and I am happy to report good news on both fronts. One concerns the working space for our graduate students, given the sub-standard conditions of the Robinson Hall basement. After many conversations on the subject, the Administration has agreed to allocate to our department the lower level of Corliss-Brackett, the building in back of Robinson that currently houses the Admissions Office. This is a great space, and our graduate students are excited about it (they won’t have any more excuses not to write great papers). We will be able to move in next summer. The second issue is the size of the program, which has been too small in recent years. On this, I am happy to report that the new financial plan that the Graduate School has put in place is really helping. In addition, we had a great yield in our admissions this year, and we will have an entering class of 21 students, which represents a 40% increase with respect to last year’s class. I take it as a very good sign that the improvement in the performance of our program seems to be noted by more applicants to PhD programs in economics.

Another follow up piece to last year’s external committee visit was a review of our undergraduate program, conducted by the Office of the Dean of the College last semester. The Department used this opportunity to introduce some changes in the economics concentration, including the increase in math and econometrics requirements. These changes will complement the recent creation of senior seminars and the institution of a generalized enrollment cap in all advanced economics courses. The Department as a whole got engaged in great discussions about these changes, aiming to improve the learning environment for our undergraduates and to provide the best up-to-date economics education. Our joint concentration with sociology and engineering, now renamed as BEO (Business, Entrepreneurship and Organizations) was also reviewed this year, leading to several changes in its business economics track, including the introduction of a capstone course, intended to provide a “real world” experience related to the concentration. Booming enrollments in our concentrations and courses continue to present an important challenge to the Department, as our student/faculty ratios remain extremely high. We continue to be the department with the highest overall number of concentrators, and understandably, the Administration remains strongly supportive of our faculty hiring efforts.
Speaking of these, we have had another terrific year. I would like to close by welcoming to the department our four new faculty colleagues:

Joaquin Blaum is joining us as an Assistant Professor of Economics, effective July 1 2012. He has received his PhD in economics from the Massachusetts Institute of Technology, and his fields are macroeconomics and international economics.

Gauti Eggertsson will be joining us as a tenured Associate Professor of Economics, effective January 1 2013. He holds a 2004 Ph.D. in economics from Princeton, and since then, he has been an economist at the Federal Reserve Bank of New York. He has held short visiting appointments at Princeton and Yale. He works on short-run macro, where the analysis and effects of both monetary and fiscal policies feature prominently.

Adam McCloskey is joining us as an Assistant Professor of Economics, effective July 1 2012. He received his Ph.D. in economics from Boston University in 2011, and he was teaching for us as a visiting Assistant Professor during the academic year 2011-12. His fields of interest are econometrics, time series analysis and mathematical finance.

Christina Paxson is joining us as a Professor of Economics and Public Policy, effective July 1 2012. She is Brown’s incoming president and a prominent economist, with important contributions to health economics, development economics and demography. She holds a 1986 Ph.D. in economics from Columbia, and her previous titles were Hughes-Rogers Professor of Economics and Public Affairs, and Dean of the Woodrow Wilson School of Public and International Affairs, at Princeton University.

Roberto Serrano
Chair and Harrison S. Kravis University Professor of Economics
Joaquin Blaum joined the faculty at the Economics Department of Brown University as an Assistant Professor in July of 2012. He got his PhD in Economics from the Massachusetts Institute of Technology in 2012. His work lies at the intersection of macroeconomics and development economics. He is also interested in international economics.

Joaquin’s research deals with one of the oldest questions in economics: what drives the large differences in income per capita that are observed across countries? A recent literature in macroeconomics has argued that a large fraction of these differences can be attributed to differences in productivity across nations, i.e. the efficiency with which the existing factors of production are employed. Various authors have further argued that the observed low productivity of some countries can result from problems in the functioning of financial markets. In the first chapter of his PhD dissertation, Joaquin argues that inequality in the distribution of wealth can also account for a substantial fraction of the differences in productivity across countries, as long as financial markets fail to function perfectly.

He starts by presenting novel empirical evidence that inequality has a differential effect on sectors that rely more heavily on external finance. The existing empirical literature on inequality and macroeconomic performance typically tries to estimate the aggregate effect of inequality on the economy (say, the effect on real per capita GDP or its rate of growth). Several authors argue that this approach faces problems of identification (namely, country-specific omitted variable bias), which could explain why the different studies often find contradicting results. To achieve a better standard of identification, Joaquin shifts the analysis to the cross-sectoral effects of inequality and employs a difference-in-difference technique.

To further uncover the effects of inequality, Joaquin builds a theoretical model that incorporates standard elements from the literature on financial frictions and economic development. He chooses the model’s parameters to make the model exactly match some important moments of the US economy. Joaquin then shows that the model is able to come to terms with the cross-sectoral facts he documented on inequality and macroeconomic performance. Having shown that the model passes this test, Joaquin uses the model to quantitatively assess the aggregate effects of wealth inequality. At the calibrated parameters, wealth inequality decreases production efficiency by shifting resources towards agents that have a lower marginal productivity and/or agents who have reached their optimal scale of production.

In a related project, Joaquin studies the effects of financial market imperfections on the pattern of growth rates across sectors. Using a panel dataset with a large number of countries, sectors and years, Joaquin starts by showing that the typical process of development, as measured by growth in real per capita income, is characterized by faster output growth in externally dependent sectors. He then argues that financial frictions can account for this pattern of non-balanced growth. He builds a dynamic two-sector model in which sectors differ in their liquidity requirements and agents face collateral constraints. When financial markets function perfectly, the economy exhibits balanced growth along the transition to its steady state. Financial frictions, by contrast, distort the distribution of firm size and generate faster growth in the sector with high liquidity requirements.

Joaquin has also worked in the field of international trade. In a paper co-authored with Claire Lelarge (CREST-INSEE) and Michael Peters (MIT), he studies the behavior of French manufacturing importers. In particular, he investigates the components that a model of import behavior should have in order to be consistent with the firm-level evidence.

Joaquin looks forward to teaching graduate courses in macroeconomics in the 2012-2013 academic year.
Gauti B. Eggertsson will join us as an Associate Professor in Economics, effective the 1st of January 2012. He received his Ph.D. from Princeton in 2004, and has since worked at the Research Departments of the IMF and the Federal Reserve Bank of NY, as well being visiting faculty at Princeton and Yale where he taught both undergraduate and graduate students macroeconomics and international finance. His main fields of interest are macroeconomics, with special focus on monetary and fiscal policy.

Gauti is best known for his work on the liquidity trap, i.e. how the economy functions once the central bank has lowered the short-term nominal interest rate all the way to zero. His most influential work is probably the first paper he wrote (co-authored with Michael Woodford) on optimal monetary policy at zero interest rate. This work is sometimes cited by policymakers and the popular press as having influenced the implementation of “forward guidance” by several central banks during the crisis of 2008, aimed at influencing expectations about the future short-term nominal interest rates. The Federal Reserve and the Bank of Canada, for example, have announced on several occasions some forms of commitment to keep the policy rate low for considerable time. His interest in this topic dates back to graduate school, and his dissertation committee included several individuals that are influential experts on monetary policy, including Lars Svensson, now deputy governor of the Bank of Sweden, and Ben Bernanke, now Chairman of the Federal Reserve. While he was writing his dissertation at Princeton, Japan's economic problems were high on the agenda, since the Bank of Japan had lowered interest rate to zero during that time.

Following up on his Ph.D. dissertation Gauti applied the theoretical framework developed during graduate school to studying the Great Depression in the United States. The result of this was a series of papers, such as “Great Expectation and the End of the Depression”, and “Was the New Deal Contractionary?” both later published in the American Economics Review. Another paper called “The Mistake of 1937?” focuses on policies that triggered the second phase of the Great Depression and a fourth one explores monetary and fiscal coordination during the Great Depression. Currently Gauti is collecting these papers in a short book on the Great Depression.

More recently, following the economic crisis of 2008, Gauti has written a series of papers examining the origin of the crisis and the effect of the various policy interventions. A joint paper with Paul Krugman of Princeton University published in the Quarterly Journal of Economics, for example, suggests that imbalances in borrowing and lending triggered the crisis, building on work by the late Irving Fisher and Hyman Mynski. Another recent work in the NBER Macroeconomic Annual explores the effect of fiscal policy once the nominal interest rate hits zero. A third one, “The Great Escape?,” joint with Marco Del Negro and Andrea Ferrero of the NY Fed and Nobhiro Kiyotaki of Princeton, explores the effect of the non-standard policy interventions (i.e. various “liquidity facilities”) of the Federal Reserve on the US economy. It suggests that these measures may very well have staved off the second coming of the Great Depression. His most recent paper, inspired by the debt crisis in Europe and forthcoming in Economic Journal, explores the effects excessive public debt can have on the management of fiscal policy.
Adam McCloskey joined the Economics Department of Brown University in July of 2012 as an assistant professor after visiting for one year. He received his PhD in economics from Boston University in 2011 and Bachelor’s degrees in mathematics and economics from the University of Colorado at Boulder in 2006. Adam’s research lies broadly within the field of econometric theory. Much of his recent work has focused upon hypothesis testing problems in environments under which size, the probability of concluding a true hypothesis is false, is difficult to control. In order for a hypothesis test to provide informative results when taken to the data, an econometrician must be able to limit the probability he incorrectly concludes a hypothesis is false. That is, must be able to control the size of the test. There are many examples of tests used by applied economists that exhibit size-distortions, or lack of size control, when standard methods are used. These include testing after selecting a regression model, testing after a pretest, testing in autoregressive models that may contain a unit root, testing when a parameter may be on a boundary, testing after using an instrumental variable, testing when identification may be weak and testing after taking averages across different models. Most existing methods that successfully control size in these environments can be very conservative in the sense that they rarely tell the applied economist that a false hypothesis is indeed false. Adam has developed new econometric techniques that both control size and “reject” false hypotheses with high probability. He has also developed a new mathematical framework for analyzing some of these problems. Adam continues to work on improving size-controlled tests in order to make them more informative to the user. He is especially interested in addressing unresolved issues arising from commonly used tests after model selection and pretests. Model selection and pretests are procedures that help the empirical economist decide how to model the data before subsequently testing a hypothesis.

Adam also has conducted and continues to conduct research in time series econometrics. His research as a graduate student focused on developing robust estimation methods for time series models frequently employed in finance and macroeconomics such as GARCH, ARMA, long-memory and stochastic volatility models. These models are often applied to market volatility and inflation data, for example. When the mean of a time series changes within an observed time span, standard estimation methods for popular models are largely biased, making the time series look more persistent than it is in reality. In a variety of contexts, Adam has developed new methods that overcome this problem, allowing one to precisely obtain the persistence properties of a time series without needing to specify if and/or how the mean of the time series is changing. When these procedures are taken to economic data, the results are often striking, decreasing classic persistence measures by 80-90% when compared with standard estimation methods. Using methods they developed in one study, Adam and Pierre Perron (of Boston University) provide evidence that the common finding of “long-memory” in certain stock market volatility series is, at least in part, spurious.

Adam looks forward to teaching advanced courses in econometrics for undergraduates in the 2012-2013 academic year.
Christina Paxson, President

I am an applied economist who works on health and economic development. Before coming to Brown University as its 19th President, I spent 26 years at Princeton University, where I served as associate chair and chair of economics, and then as dean of the Woodrow Wilson School of Public and International Affairs.

I enjoy working in multidisciplinary environments, and in 2000 I founded a health research center called the Center for Health and Wellbeing, that brings together economists, sociologists, demographers, psychologists, natural scientists and others who work on health-related issues. My interest in multidisciplinary approaches to health extends to teaching as well as research. While at Princeton, I worked with colleagues from a number of departments to establish certificate programs for undergraduates and graduate students with interests in health and health policy.

In recent years, my research has centered on the relationship between socioeconomic status and health, with a focus on the mechanisms through which early life health influences later life economic outcomes. I have conducted research on this broad topic in both developed and developing countries. I have worked on the Fragile Families and Child Wellbeing Study, a longitudinal study of approximately 5,000 children from 20 US cities. I have conducted research in Ecuador, in which I examined how cash transfer programs influenced children’s health and intellectual development. Other research interests include the effects of the HIV/AIDS pandemic on health care and education in Africa, and the long-run consequences of Hurricane Katrina for the health and mental health of low-income families.

I am excited to be at Brown University, and to be a member of its economics department and well as the Taubman Center. Although my teaching and research must take a back seat to my duties as president, I hope to stay engaged in the field through interactions with my new colleagues and students in Brown’s Department of Economics.
Executive compensation frequently draws controversy, and the past few years have been no exception. Headlines often focus on high pay levels, but recently a profound shift in the composition of pay has also occurred, towards more stock and stock options. Firms say that this shift justifies the high pay levels --- executives are more likely to make smart decisions with their own money on the line, so it is in shareholders' best interests to grant lots of equity pay. However, executives also face few restrictions on selling equity granted by the firm. An executive can typically begin to sell equity one year after receiving it, and can sell all of his equity after three or four years. It seems puzzling for firms to allow such sales, given that the stated purpose of equity pay is to focus executives on long-term value creation. Do shareholders want executives to own stock which can be sold in a few years? Or does equity pay really serve some other purpose?

My paper, entitled “Do Firms Replenish Executives' Incentives Following Equity Sales?”, examines how firms respond after executives sell large amounts of their company stock. I find that such sales are quite common --- 60 percent of executives sell stock at least once, and the median sale equals 10 percent of their total holdings in the firm. The paper's main result is that firms do not restore executives' equity holdings after such sales. Executives who sell a large amount of stock have less money at stake than executives who sell nothing, but firms respond by granting both the same amount of equity pay. Executives who sell a large amount of stock may not want to reward selling executives with a pay increase, but my results show that firms also do not adjust pay composition (for example, granting selling executives stock instead of a cash bonus). Although sales may cause executives to own less equity than shareholders prefer, firms do not adjust pay to replenish the executives' holdings.

One concern with interpreting this result is that firms in which executives sell may differ from those in which executives do not. For example, an executive may sell stock as the firm transitions from high growth to stable business. Shareholders may allow this sale because the executive no longer needs to focus as much on long-term projects. My paper therefore compares executives who sell equity to other high-level executives at the same firm who do not sell. The experiment is as follows: Suppose the firm grants $1 million in stock to both its chief executive and chief operating officers. The CEO then sells his stock, while the COO does not. My results show that although the CEO owns less equity, the firm responds by again granting both $1 million stock. This experiment is innovative because it focuses not only on the CEO’s pay, but also the pay of other key decision makers at the firm.

My paper does not claim that firms should only respond to equity sales in one particular way. However, I argue that if the purpose of equity pay is in fact to provide long-term incentives, then firms should not just grant the same pay to selling and non-selling executives. If one year shareholders want their CEO and COO to own the same amount of stock, why should the firm suddenly let the CEO own less stock in the next year? My result seems difficult to reconcile with economic theory, which predicts that firms maintain executives' holdings of company stock at a level which is optimal for shareholders.

So does equity pay serve some other purpose? Additional research is needed to fully answer this question. In particular, more work should examine compensation benchmarking, in which firms grant executives pay levels that are similar to those at rival firms. Most firms hire consultants to help with this process, and often say that benchmarking is an important concern. Perhaps then firms primarily focus on setting executives' annual pay at competitive levels, instead of maintaining their total holdings of company stock.
No form of human trafficking is as insidious as Child Laundering. Feeding off of the benevolence of adopting parents, it turns the humanitarian system of International Adoption into a front. Adoption is expensive, and when money changes many hands and across national borders, it’s sometimes hard to account for where it goes. In the case of International Adoption, sometimes that money goes into the buying or stealing of children who are then put on the market—to be adopted by parents in another country who are usually none the wiser.

It all starts with adopting parents (usually from the US or Europe) who look to the developing world. The motivation to adopt can be complicated (indeed, not all parents can give birth naturally), but it is often mixed with the desire to better the lives of the world’s children without families. The other side—laundering—is motivated by something else entirely. To understand it, one need only consider that this is a problem in parts of the world where the typical yearly income is less than the cost of a single adoption. Under these conditions, the decision to launder a child could make a lot of economic sense.

Adoption can save lives, but laundering can destroy them. If we could have the former without the latter, we’d be done. But in practice, it seems that as long as huge profits can be made, Laundering will be a feature of any adoption system. This makes designing policies to combat the issue of laundering exceptionally difficult. If we could not accept any amount of laundering, the solution is simple: shut down the adoption industry altogether. Otherwise, optimal policy is a balancing act. And for that, we need to understand all the incentives at play as well as who gets hurt and who benefits.

But laundering is by its very nature covert. Once they make it into orphanages, laundered children are usually indistinguishable from those naturally orphaned, and the launderers go to great lengths to hide their activities. This poses a difficulty for the data-driven economist who wishes to analyze this issue. In my thesis, I get around this problem by constructing a series of theoretical models that explore the relationship between market forces and laundering. And though it may be hard to convince people without data, I believe my work has very real implications for policy.

In writing my thesis, I received tremendous support from the Department—especially from my advisor, Professor Foster. I was also fortunate enough to be able to present my work at the Carroll Round, an undergraduate conference at Georgetown University. There, I had the chance to communicate with young minds from all over the world. Their perspectives made me think critically about my own work, and I was thoroughly impressed by the quality of the research I saw. If what I was told is true—that the events of that weekend resembled a professional conference—I’m very excited to pursue a life of research. Between this and my experience with my home department, I’m optimistic about the future of my field—and I’m very proud to call it my field.
Behavioral economics, or the intersection of psychology and economics, has been seen in recent years as a source of juicy trading tidbits and a way to gain insights about how choices can be better structured by tweaking small details, like whether you need to opt in or to opt out of participating in an insurance plan or an organ donation program.

But the economics/psychology intersection is also crucial for addressing the most profound questions of social philosophy, ethics, and human betterment. Whether bounds can be placed on the gap between rich and poor, whether societies can reduce the economic insecurity their members face, whether the influence of money on politics can be constrained, how much meaningful work can be made available, and whether the ethos of the marketplace crowds out other values, all come down to questions about human nature that lie at the intersection of psychology and economics.

Economists see the heart of economic analysis as the concept of “constrained optimization,” which means making the best possible choices given one’s objectives and the relevant constraints. Creating an ideal a society as possible can likewise be viewed as a problem of constrained optimization, where the goals are ideals like justice, equality of opportunity, and fulfillment of human potential. But if those are the goals, what are the relevant constraints? One possibility is that they’re “the usual suspects”—scarce resources and limited know-how. We suffer from rising gasoline prices and international conflicts over access to known and potential petroleum reserves, for instance, because a world population increasing in numbers and incomes is vying for limited sources of supply. Money will inevitably influence politics because disseminating one’s political message requires costly, scarce resources like TV air time.

But an alternative view emphasizes human nature, rather than physical resources, as the main constraint. One of modern economics’ founders, Alfred Marshall, seemed to take such a view when he penned the following warning against utopianism. “[I]n a world in which all men were perfectly virtuous,” he wrote, “[m]en would think only of their duties; and no one would desire to have a larger share of the comforts and luxuries of life than his neighbors. Strong producers could easily bear a touch of hardship; so they would wish that their weaker neighbors, while producing less should consume more. Happy in this thought, they would work for the general good with all the energy, the inventiveness, and the eager initiative that belonged to them; and mankind would be victorious in contests with nature at every turn. … Such is the Golden Age to which poets and dreamers may look forward. But in the responsible conduct of affairs, it is worse than folly to ignore the imperfections which still cling to human nature.”

In The Good, The Bad and The Economy (Langdon Street Press, 2012), long-time Brown economics professor Louis Putterman tries to convince readers that what makes people tick is at least as important as physical and technological factors for understanding the constraints within which people should approach their hopes of bettering society. Putterman takes a less pessimistic view than the one the Marshall quote seems to imply. Evidence that acquisitiveness and avoidance of effort are powerful aspects of human nature coexists with indications of a more complex picture, one that includes powerful needs to be part of groups or causes greater than ourselves, drives to weave meaningful narratives out of our seemingly random lives, and strong desires for both the respect of others and for self-respect that can partly but rarely be satisfied by the amassing of wealth only. The roots of this “human social nature” can be uncovered by studying human evolution, and its parameters can be better understood by conducting laboratory experiments of the sort Putterman has been carrying out during the past decade and a half.

If economists urge business managers and policymakers to treat people exclusively as selfish materialists and to design incentives to elicit desired actions from them based on that motive alone, Putterman argues,
they fail to tap into motivations that account for much that’s good about our society. Even economists need to understand those motives for such practical purposes as to understand why alumni give gifts that support the institutions of learning that are our professional homes, why many people voluntarily pay taxes, why people bother to vote when their likelihood of influencing election outcomes is infinitesimally small, and why some incentive schemes are remarkably successful in eliciting teamwork and identification with a corporate or organizational mission.

Moreover, a growing body of research suggests that the economic success or failure of nations is due at least as much to intangibles like trustworthiness and trust, lack of tolerance of corruption, respect for property rights, a strong work ethic, and the according of esteem to learning, as it is to accumulated skills, physical capital, or natural resources. Understanding how good societies and economies are possible, and what the limits of their betterment are, likewise requires an appreciation of human nature in all of its contradictory and multifaceted complexity. Alfred Marshall was himself drawn to the study of economics by deep interests in ethics, social improvement, and philosophy, and wrote that “No doubt men, even now, are capable of much more unselfish service than they generally render: and the supreme aim of the economist is to discover how this latent social asset can be developed most quickly, and turned to account most wisely.”

In addition to its arguments for a synthesis of social and self-interested views of human behavior, Putterman’s book also introduces his recent research into the causes of the present gaps in the global distribution of income. Unlike past articles and books with university presses, he wrote The Good, The Bad, and The Economy with general readers in mind. The book’s description at Amazon.com includes several reviews by former Brown undergraduates, and ebook versions can be purchased at a book website, betterworldeconomy.com.

_A version of this article appeared in Putterman’s blog The Good, The Bad, and The Economy at PsychologyToday.com._
**What Else is New**

**Professor Loury** is one of two Brown faculty recently appointed to the National Academy of Sciences' Causes and Consequences of High Rates of Incarceration committee.

**Professor Renault** is elected President of the Society for Financial Econometrics.

Economics and history double concentrator **Stephen Hebson ’12** and mechanical engineering concentrator **Parker Wells ’12** take top honors in the student track of the 2012 Rhode Island Business Plan Competition, for their proposed business Overhead.fm. Their plan is to produce an affordable web app that will provide a customizable stream of music for in-store use, licensing music directly from artists/labels. They received $15,000 in cash and services valued at $24,000 for winning the competition.

Ph.D. candidate, **Michael Suher**, participates in a research project measuring the effects that a dirty bomb would have on Los Angeles’ financial district.

Economics concentrator **Qian Yin ’14** was one of eleven Brown students selected to attend the Clinton Global Initiative University conference, which took place March 30-April 1, 2012, in Washington, D.C.

Economics concentrator **Nikilesh Eswarapu ’12** is the founder of the nonprofit organization, the Milana Foundation which focuses on improving health care in India.

Economics concentrator, **Eunseo Jo ’13** is one of 16 undergraduates who were chosen as 2012 Brown International Scholars Program (BISP) fellows. The students, who each received awards of up to $5,000, spent the summer pursuing independent projects linking their academic interest with international experiences. Jo’s project is titled Korea’s Forgotten War. The program is managed by the Howard R. Swearer Center for Public Service and funded by the Office of International Affairs.

Economics concentrators **Anshu Vaish ’12** and **Nehal Doshi ’12** along with two other Brown students and a RISD student created WaterWalla, a socially responsible not-for-profit business venture that sells water filters and Aqua Tabs to provide clean drinking water for slum residents in India.

**Professor Serrano** is one of 5 Brown faculty listed in the Princeton Review’s “The Best 300 Professors”.

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ECONOMICS AT BROWN UNIVERSITY 2012

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