Defining Moments
What the Obama Administration has done, and has yet to do
by Timothy Yoon, T’12

When Franklin Roosevelt became president in 1932, he was placed as leader over a nation suffering under the Great Depression. His immediate and strong resolve during the first hundred days of service led to Congress passing 15 major bills in order to combat the crisis. Since then, a president has been largely evaluated on how well he has utilized those first hundred days.

President Barack Obama has started his hundred days facing a dark economic time as well - although his battle started two months before he was even officially inaugurated as president.

Back in November President-elect Obama swiftly picked a skillful economic team in a move to reassure the American public that he would be dedicated to tackle an impending economic crisis. Some notable members that he nominated were:

- Lawrence Summers, who served as the Treasury Secretary for two years during the Clinton administration, as the director of the National Economic Council
- Christina Romer, a professor of economics at University of California, Berkeley and a member of National Bureau of Economic Research, as the director of the Council of Economic Advisors
- Melody Barnes, who served as the executive vice president for policy at the Center for American Progress, as the director of the Domestic Policy Council; she was picked especially for her focus on healthcare reform

Perhaps his most important appointee, though, was Tim Geithner to the Treasury Secretary position. The Federal Reserve President in New York, Geithner has been seen as the other authoritative voice besides President Obama on how the new administration is to handle the coming months. Although Geithner faces controversy over a failure to pay $34,023 in self-employment taxes between 2001 and 2004, many politicians have praised him for the experience and skills he can bring to the position. “I believe that markets are central to innovation and to growth, but that markets alone cannot solve all problems,” explained Geithner in an opening statement to the Senate late January. “Well designed, strongly enforced financial regulations are absolutely essential to protecting the integrity of our economy.”

Such a heavyweight team will face an extraordinary challenge in leading America out of a recession that started last year. Economists estimate $1 trillion in bank looses alone. Unemployment, already at 7.2%, is predicted to increase by at least another point. The United States lost 2.6 million jobs last year, the most in any single year since World War II. Reuters conducted a poll of economists, and found that they believe that GDP contracted at a 5.4 percent annualized rate in the fourth quarter, which would be the worst performance since 1982.

A stern Obama put it blunt: “In short, if we do not act boldly and swiftly, a bad situation could become dramatically worse.”

The new administration has responded with appropriate haste. President Obama in early January released a 14-page report detailing how his estimated $825 billion American Recovery and Reinvestment Plan would create 3-4.1 million jobs by the end of 2010. The report, which provided a general overview of the proposal, did emphasize a focus on investing heavily in infrastructure, education, health, and energy; on state fiscal relief; on business investment incentives; and on a middle class tax cut (as proposed during Obama’s campaign). Other key statistics were that the package, by the end of the fourth quarter in 2010, would have increased the GDP by

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Microfinance: The Other Side of the Spectrum
by Max Tabachnik, T'11

Who ever said finance couldn’t be charitable? Microfinance provides a counterpoint to those who believe that banking business is only about long hours and fat pay checks. But what is microfinance exactly? The fundamental goal of the microfinance industry is to bring basic financial and banking services to people living in poverty. The broader scope involves stimulating regional economies in poor communities around the world by establishing financial institutions and creating a supportive environment for small businesses to prosper.

I discovered this burgeoning industry last year thanks to the growth of the Duke Microfinance Leadership Initiative, an organization aimed at raising awareness about the role of microfinance in fighting poverty and stimulating economic growth. The initiative was founded in 2006 by three graduate students at the Terry Sanford Institute of Public Policy and currently includes faculty, graduate students, and undergraduate students in its ranks. Not only does the DMLI try to raise awareness about microfinance, it also provides Duke students with opportunities to directly engage the industry through various internships, research positions, and full time offerings.

While it might not be as lucrative as investment banking or consulting, microfinance provides great meaning as a profession, allowing students to make a significant impact and improve the well being of those less fortunate. This initiative goes far beyond mere philanthropy, as micro-financiers actually seek to develop new businesses and employment opportunities from the ground up, until these communities can function effectively on their own. This philosophy correlates more with the proverbial “teaching a man to fish” as opposed to simply “giving the man a fish” and hoping he somehow figures it out.

So what’s the big secret to reviving destitute economies? It’s the same answer to our own economic woes: credit. The ability to borrow and lend money, or liquidity, is what makes an economy grow and function smoothly. Financial institutions that provide liquidity for people essentially increase the money supply and allow for poor families to responsibly borrow money to climb out of poverty. These microfinance institutions (MFIs) provide loans, savings, insurance, and other services to people whom other banks would deem as having too high of a default risk. But even “microcredit” is not always the answer, as some people are too poor to repay any loans without a stable income. In such cases other policies need to be put in place in order to allow these individuals to participate in the community banking model, a powerful method of combating poverty.

While there is little data available about the microfinance business, reports spanning the last few decades have showed a 90% repayment rate on loans issued by MFIs, indicating the success of the initiative. MFIs are able to make these loans thanks to donors and investment funds created for the sole purpose of helping poor communities. Since most small business owners repay their loans at set interest rates, these funds grow as well, allowing for greater expansion of the microfinance effort.

MFIs vary greatly by structure, scope, and function within the industry. Some consist of informal providers that include savings and credit associations, as well as member-based organizations that depend on the members’ own savings for funding. The overwhelming majority of MFIs are nongovernmental organizations (NGOs), such as the Foundation for International Community Assistance (FINCA), which work through member-based and informal providers. Nevertheless, numerous government-owned and private banks also participate in microfinance efforts, including such familiar names as J.P. Morgan and more microfinance-specialized banks such as ACCION.

The wide variety of MFIs involved in these initiatives provides students with many different internship and career opportunities. These opportunities heavily revolve around field work and research, since there is very little data currently available on the microfinance industry. Microfinance seems like an ideal initiative for those students interested in using their knowledge of finance and economics to fight poverty and improve social welfare around the globe. The DMLI has helped shed light on a great alternative to the usual banking/consulting route most Duke students end up taking. For those still pondering whether or not they can do anything meaningful with their lives and/or major, microfinance wouldn’t be the worst place to start.

Works Cited

Economics Course Highlight
Urban Economics - Econ 148
by David Kelly, T'09

Urban Economics is an interesting elective in the Economics Department that focuses on Durham as the basis for research and is taught by Professor Charles Becker. It gives students an excellent arena to get out in Durham, outside of the Duke “bubble,” and see places that the average Duke Student would not usually see. The course starts with a three hour tour in which students are given street address and intersection to observe that show both high income and low income housing, rural and urban, and also where they merge. This exploration is time consuming but provides a solid foundation for the rest of the course.

The material covered in Urban Economics prepares students with the necessary tools and knowledge to create and carry out their own research project in economics. The course is demanding in math and econometrics but students can tailor their personal projects to their own capacities. Urban Economics has no mid-term exams and the final exam is often excused if students regularly show up for classes, actively participate, and produce quality work. However, there are short papers throughout the course and a final research paper. As the syllabus states, the course’s focus is to “analyze issues of spatial economics, including why cities are formed, patterns of residential and business location, models of housing market segregation, business location, and urban population ‘explosions’ in developing countries.”

The end of semester research paper is a substantial part of the overall grade and I personally decided to analyze Durham. I used real estate as a proxy for wealth distribution and growth and wanted to test if this could be adding to the historical racial gap in net worth between blacks and whites. Using 2000...
Defining Moments
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3.7% and decreased unemployment to 7.0% (1.8% lower than without any plan in place).

By the end of January, the Obama administration provided an additional update dealing more specifically with relevant numbers. Some detailed benchmarks were to:

- Weatherize at least two million homes to save low-income families on average $350 per year
- Provide healthcare for approximately 8.5 million Americans
- Invest in the modernization of 10,000 schools to improve learning for 5 million students
- Provide funds to support 1,300 new wastewater projects, 380 new drinking water projects, and the construction of 1000 rural water and sewer systems to ensure that 1.5 million people would have new or improved service
- Increase food stamp benefits for over 30 million Americans

Analysts expect more detailed updates to be released, as the Obama administration is working to convince more politicians by mid-February, the approximate time of the vote on the proposal.

Such actions come at a crucial moment, especially as the Troubled Asset Relief Program (TARP), introduced by former U.S. Treasury Secretary Henry Paulson and signed into law last October, has become increasingly unpopular among both legislators and the public alike. CNN reported on January 21st how one major criticism is that there is still no set plan for how the first $350 billion of the plan will be used to boost lending to consumers and businesses. This is not new news. The Associated Press back in December asked 21 banks that had received at least $1 billion in aid on how they were handling the money. None were able to provide specifics, and some admitted that they had no idea.

This is not to say that the aforementioned have led legislators to wholeheartedly accept Obama’s expected recovery plan. Congressional Republicans voice two major complaints: first, they were not adequately involved during the initial stages of the recovery plan’s creation; and second, they argue that only $275 billion out of the $825 billion will actually be used to encourage job growth and help the economy, with the other $550 billion solely focused on government spending.

Despite such skepticism, the bill is expected to pass in mid-February. President Obama in his first weekly address as president also appeared not to be shaken. “[T]he American Recovery and Reinvestment Plan won’t just throw money at our problems,” Obama assured. “We’ll invest in what works.” Furthermore, Obama emphasized the importance of clairvoyance throughout the recovery process so that “instead of politicians doling out money behind a veil of secrecy,” the government’s actions would be made public and politicians would be held accountable. To bolster this claim, the government will launch recovery.gov to track exactly where taxpayers’ money is going.

“We’re still the nation that has overcome great fears and improbable odds,” asserted Obama. “If we act with the urgency and seriousness that this moment requires, I know that we can do it again.”

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Interview with Aaron Hedlund, T’06
with Dong-Jae Chung, T’09

Aaron Hedlund is currently pursuing his PhD in economics at the University of Pennsylvania.

What experiences and influences shaped your decision to pursue a PhD in economics? Also, what factors lead you to the University of Pennsylvania?

I took my first economics class at Duke not because I had any particular interest in economics, but because I thought it was an important subject to be familiar with for someone interested in current events, as I am. After my first class, I was sold. I saw in economics the chance to analyze and hopefully understand the forces that shape societies, that bring about great leaps in standards of living, and that can either help people realize their dreams or throw them into situations of dire uncertainty. Furthermore, I could study these questions by using the analytical tools that I appreciated from mathematics, which adds a level of structure and rigor that I like.

I chose the University of Pennsylvania for a number of reasons, personal and professional, but I can say that I find myself attracted to the methodological philosophy that most professors there espouse. In particular, professors there deeply believe in serious economic modeling, always starting from the microfoundations—characterizations of how individual people behave in various settings—to construct models of whatever phenomena they are investigating.

What are your career goals?

In the short to medium term, I would like to become a professor at a respected economics department in some university. I have many questions that I want to study, and I want to contribute what I can toward understanding them.

What sort of research are you interested in?

I am interested in studying how the complex forces that we encounter everyday—symmetric and incomplete information, the need to actively search for jobs and goods, the fact that we often make decisions and bargain with other people or on behalf of them, etc.—impact macroeconomic outcomes, and vice-versa. For instance, I am interested in studying how one can integrate a realistic model of the financial market—one which deals with issues of long-term relationships and reputations, asymmetric information, moral hazard, adverse selection, imperfect enforcement and monitoring, and search frictions—into a general equilibrium macroeconomic model to see if I can gain a better understanding of the current crisis.

How has the Duke Economics Department prepared you for a PhD program?

Duke is a place which can prepare you very well for a PhD program in economics, provided you take advantage of the available resources. I took many courses in the economics department, including some graduate level courses. The faculty was very accommodating, including Dr. Nechba in particular, in helping me make these choices. Beyond the economics department, I also have to emphasize the importance of substantial math preparation, which I was able to get by taking several upper level courses in the math department.

How is a graduate program in economics different than majoring in economics during undergraduate?

In short, the difference between an undergraduate program and a graduate program in economics is like night and day, at least until the point where you take more advanced courses as an undergraduate. The graduate program at Penn, and at many schools, is very rigorous mathematically and the modeling is much more sophisticated. The biggest benefit to undergraduate economics courses, in my opinion, is to gain exposure to some of the most important basic economic concepts and to gain the motivation for deeper analysis.

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Interview with Aaron Hedlund, T’06
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What advice would you give to current Duke undergrads thinking about pursuing a graduate program in economics?

I have two big pieces of advice. First, if you are looking into PhD programs, make sure that you take some advanced math courses, particularly real analysis. Second, do a lot of introspection and determine if you are truly excited by the kinds of questions that economists try to answer. If you do not, your first year as a PhD student will reveal to you pretty clearly if doing research in economics is what you want to do. While pure grit may be sufficient for some people to get through the first year, I can assure you that having a strong interest and motivation in economics is the key to making the experience enjoyable.

As a PhD candidate studying macroeconomic theory, what three issues do you feel are the most pressing during this economic downturn?

In my opinion, the most pressing issue is restoring confidence in our financial markets. Borrowers and lenders need to believe in the soundness of the system and in the accuracy of the information they receive about each other. Second, I believe it is urgent that however we respond to the crisis, that we do so in a responsible manner that does not hurt the long-term health of the economy. Getting out of a recession a couple quarters earlier only to saddle ourselves with larger, longer-term problems does not seem to me to be a good trade-off. Thirdly, as in any recession and perhaps this one even more, I am concerned about the unemployment rate continuing to escalate. The macroeconomic effects of higher unemployment are surely negative, but increased unemployment also can have a severe impact on those who are laid off and desperately need the income.

Any predictions for the U.S. economy as the new administration settles in?

I think economic forecasting is overrated, and I find it a bit unfortunate that when most people hear that you are an economist, that they assume that you are some sort of fortune teller. That being said, my crystal ball is a bit murky, but I believe that by this time next year the economy will be in much better place. All of this is subject to the new administration and Congress pursuing at least marginally good economic policies, but we have learned a lot of lessons since the Great Depression, and I have little fear that this recession will compare either in its depth or length to that trying period.

So what’s the next step for you?

The next step for me is to continue taking courses, adding to my toolbox and honing my exact research interests, and then to take the next step and begin laying the foundations for a thesis. When I am not being distracted by economics, I will just enjoy being a husband and a new Dad.

### Insight into China’s Economic Stimulus
**by Aditya Desai, T’12**

As President Barack Obama and the United States Congress craft an economic stimulus package to pull the US economy out of recession, China is almost three months into the execution of its own massive stimulus. On November 9th, 2008, China announced the creation of a 4 trillion yuan, or $586 billion, package to boost Chinese growth.

The package is focused on improving infrastructure, social welfare, and tax reform. Major spending areas include housing for the poor; infrastructure projects including railways, roads, airports and the power grid; accelerating reconstruction in areas devastated by the May earthquake; and health and education. China was rushed to make its plans public because of the deteriorating economic situation, so the exact numbers are uncertain. It is also not known how much of the spending is new spending. China has already allocated funds for some projects now included in the stimulus, and the government has provided less than one third of the funding. The rest will be raised from local and provincial governments, or borrowed from banks or insurers. One advantage China has here is that the banks are state-owned, so there is no shortage of lending.

Before the stimulus was announced, some analysts predicted that China’s economic growth would fall to 6% next year. This would be detrimental, because it is widely believed that China needs annual growth of roughly 8% to provide work for millions of people moving from rural areas to urban ones. If the 8% economic growth is not achieved, social unrest is likely, which is a major concern of the Chinese government. In addition, the plan works towards bringing the huge economic gains on coastal areas to inland China, using the railway creations among other projects. The rail project is also meant to slow China’s dependence on personal cars and oil imports, and reduce air pollution. Because of the stimulus package, the Chinese are likely to have a larger say in future world economic meetings. The Chinese package is being relied upon to jump-start the world economy.

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### Economics Course Highlight
Continued from page 2

Census Data, I found tracts that were predominantly (at least 90%) white or black and then used Durham tax records to track both average house price and also property appreciation or depreciation during the recent housing bubble. The results suggested that property values in white neighborhoods appreciate faster than black neighborhoods regardless of median income.

I would personally recommend Professor Becker’s class because it not only gives a practical application to Economics but it also forces one to get out in Durham and explore the city. Also, it is especially relevant now because it helps to explain the subprime mortgage crisis that our country is currently facing.
A Focus on Research: Notable recent work from Duke economists
Compiled by Luke Medhus, T’10

Data Exclusivity Periods for Biologies: Updating Prior Analyses and Responding to Critiques
Henry Grabowski, Genia Long, Richard Morlimer

Addresses recent critiques of earlier work on the question of the appropriate duration of data protection for innovative biologies. The key parameters in their earlier model are the cost of capital, expected profit margins, and other financial parameters such as required pre-marketing and post-marketing R&D investments. They found that a representative portfolio of biologies would “break even” or just cover its costs of development, manufacturing and sales, together with the industry’s cost of capital, in 12.9 to 16.2 years, thereby providing support for a substantial data exclusivity period.

Ranking Mutual Fund Families: Minimum Expenses and Maximum Loads as Markets for Moral Turpitude
Edward Tower, Wei Zheng

Evaluates the performance of 51 mutual fund families based on a study of their diversified US managed mutual funds over an 11 year period, and explores the determinants of performance gross of published expenses. They find that mutual fund families which have high turnover and charge loads (high expenses to their most favored investors) tend to perform badly, even gross of these fees. However, gross of published expenses, managed mutual fund portfolios of those families without loads, with low expenses in their least expensive class, and with low average turnover beat the corresponding indexes.

Forecast Comparisons in Unstable Environments
Raffaella Giacomini and Barbara Rossi

Proposes new methods for comparing the out-of-sample forecasting performance of two competing models in the presence of possible instabilities. The main idea is to develop a measure of the relative local forecasting performance for the two models, and to investigate its stability over time by means of statistical tests. They propose two tests that analyze the evolution of the models’ relative performance over historical samples. In contrast to previous approaches to forecast comparison, which are based on measures of global performance, they focus on the entire time path of the models’ relative performance, which may contain useful information that is lost when looking for the model that forecasts best on average. They apply our tests to the analysis of the time variation in the out-of-sample forecasting performance of monetary models of exchange rate determination relative to the random walk.

Can exchange rates forecast commodity prices?
Yu-Chin Chen, Kenneth Rogoff, Barbara Rossi

Demonstrates that “commodity currency” exchange rates have remarkably robust power in predicting future global commodity prices. Our forecasting results provide the most convincing evidence to date that the exchange rate depends on the present value of identifiable exogenous fundamentals. They argue that it is quite plausible that exchange rates will be better predictors of exogenous commodity prices than vice-versa, because the exchange rate is fundamentally forward looking. Therefore, the exchange rate is likely to embody important information about future commodity price movements well beyond what econometricians can capture with simple time series models. In contrast, prices for most commodities are extremely sensitive to small shocks to current demand and supply, and are therefore likely to be less forward looking.

Gasoline Prices, Government Support, and the Demand for Hybrid Vehicles in the U.S.
Arin Beresteanu, Shanjun Li

Using a rich data set of new vehicle registrations in 22 U.S. Metropolitan Statistical Areas from 1999 to 2006, they analyze the determinants in the demand for hybrid vehicles and examine government programs that aim to promote their adoption. They find that both the recent run-up in gasoline prices from 1999 and federal income tax incentives are important in the diffusion of hybrid vehicles, explaining about 14% and 27% hybrid vehicle sales in 2006, respectively. They compare the current income tax credit program with a rebate program and find that the rebate program needs less government revenue to achieve the same level of average fuel-efficiency of new vehicles. The cost advantage of such a rebate program is bigger with larger incentives.

Index Volatility Futures in Asset Allocation: A Hedging Framework
Emma Rastel, Jai Jacob

In March 2004, the Chicago Board Options Exchange introduced futures contracts on the S&P 500 Volatility Index (VIX Index), offering investors, for the first time, the opportunity to make pure play trades on the direction of implied volatility. They examine the contribution of futures on the VIX Index (VX Futures) as an additional asset in both passive and actively managed portfolios containing a diversified U.S. equity index and U.S. Treasury bonds.

Senior Spotlight

Adam Nelson
by Max Tabachnik, T’11

As a senior in the Pratt School of Engineering, Adam Nelson does not fit the typical mold of an economics major at Duke. For one, he has not read and/or memorized Liu’s Poker or Monkey Business, and does not subscribe to www.leveragedsellout.com, a popular investment banking blog. Amidst the pre-banking and pre-consulting craze that has gripped many Dukies, Adam has forged his own academic path within the study of economics.

Adam’s case is indeed unique: an economics student who doesn’t exploit his studies as a presupposed launch-pad to the riches of finance. Now there’s a rare find. Adam initially enrolled in Pratt as a mechanical engineering major and did not plan on adding a second major until the middle of his sophomore year. With the encouragement of his father, Adam decided to go for a minor in economics because he had plenty of room in his schedule, uncommon for a Pratt student. After a few semesters, Adam discovered a genuine interest in his classes and declared a major in economics.

Nevertheless, Nelson refers to himself first and foremost as an engineer, with the goal of eventually moving up into a management role. Adam finds special interest in the aerospace and defense industries, “where big things happen.” When asked whether he ever considered a career in finance or consulting, Adam responded, “I never really considered a career outside of engineering. I thought about doing engineering consulting, since the problem-solving aspect really appealed to me. However, I didn’t like the idea of jumping from project to project, trying to clean up someone else’s mess. I want to stay in one place and do something that no one’s ever done before. I want to create.”

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Senior Spotlight: Adam Nelson
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Though his career goals lie in engineering and eventually management, Adam values his studies in economics as “practical knowledge and good preparation for a graduate degree, such as an MBA.” Upon delving further into the economics department curriculum, Adam studied topics ranging from corporate finance to the economic history of the last 150 years. Nelson believes his classes have helped him better understand current events in the economy, as well as provided a foundation for making informed decisions as a citizen and a future leader.

Based on Nelson’s involvement in student groups at Duke, you’d be hard-pressed to find anyone who questions his leadership skills. Adam currently serves as an assistant VP of recruitment for IFC and was a former VP of programming for Sigma Phi Epsilon fraternity. In addition, Nelson has been a seasoned member of the club rugby team, which has been highly successful on the NCAA Division 2 level. When asked how he manages to balance these commitments along with overloading in classes for two years straight, Adam responded, “I’ve sacrificed a lot…mostly sleep. I’ve had to miss some classes because of rugby, but I am a generally fast learner and have managed to keep up by self-studying from textbooks.”

Adam mentioned that the favorite aspect of his Duke experience has been the multitude of extracurricular opportunities available to students. “You always get emails to join this or join that,” Adam reflects, “but you got to make sure you don’t stretch yourself too thin. It’s easy to do that at Duke, but I’ve picked a few activities I’m really passionate about and have been heavily involved in those things.”

In addition to making the most of his semesters at Duke, Adam has also made the most of his summers in between, participating in several rewarding internships. The summer after his sophomore year, Nelson worked in the engineering department of JetBlue airways. Last summer, Adam worked on the Duke Project Management team, allowing him to assist in the few quad renovation, health center parking garage, and Wallace Wade improvements among many other projects.

If I had to describe Adam in one word, it would probably be “unconventional.” An economics major pursuing a career in engineering, possessing a rare entrepreneurial spirit not found in most engineering or economics majors. Nelson provides an uncommon perspective on life at and beyond Duke and demonstrates that sometimes it might be more interesting and rewarding to stray from the herd and actually follow one’s passions. As someone currently considering a potential career in finance, I can say that Adam’s advice and experience speaks volumes.