

Self-Study

Department of Economics

University of Notre Dame

March 18, 2013

I. Introduction and History of the Department

In preparation for our external review, the Department of Economics has written this self-study to describe the current state of the department, progress since the last external review of Economics in 1997, and our future goals. We discuss how the department has addressed specific issues and recommendations proposed in the 1997 external review. We also highlight the current strengths and weaknesses of the department with regards to undergraduate teaching, the graduate program, and research.

The current Department of Economics was created in July 2003. While there is a long history of efforts to improve economics at Notre Dame, the more recent origin of this new department lies in the 1997 external review. That review (and the three-year follow up) recommended, among other things, that the department overhaul the graduate program, make the undergraduate major more rigorous, and recruit faculty with research programs that routinely publish articles in the most elite economic journals. Over the next several years, little progress was made toward implementing the recommendations from the 1997 review. Consequently, in 2002, the provost appointed the Blue Ribbon Committee on the Department of Economics, which was charged with “making a recommendation to the Provost for the solution of existing problems and tensions in the Department of Economics.”

The Blue Ribbon Committee’s recommendation resulted in a split of the old department into two independent departments, which came to be called the Department of Economics and Policy Studies (ECOP) and the Department of Economics and Econometrics (ECOE). The two departments together supervised and provided courses for the undergraduate major in Economics. The charge for ECOE was to build “a strong department in the mainstream of the field of Economics.” In 2010, ECOP was dissolved. Only one of the remaining members of ECOP was integrated into ECOE, and the others were moved to other units on campus. ECOE was renamed the Department of Economics and assumed sole control of the undergraduate major.

At its creation in 2003, six members from the old Department of Economics were appointed to the ECOE: one endowed chair, one full professor, three associates and one assistant. In addition, a second endowed chair was hired into the ECOE in its inaugural year. Between 2004 and 2008, the department hired five assistant professors, one associate, and one endowed chair, and a full professor transferred into the department from the College of Business. Since 2008, the department has hired fourteen more tenured or tenure-track faculty, predominantly at the junior level. Several high profile hires have helped to improve the research reputation of the department, including the University’s first Keough-Hesburgh Chair (Bill Evans) and a recent winner of the Frisch Medal (Joe Kaboski), one of the more prestigious research awards in the profession. At the start of the start of 2013-2014 academic year, the Department of Economics will have twenty-four tenured or tenure-track family members, plus an additional junior faculty member who will officially join us in January 2014 (Miller), and one full professor on indefinite leave (Waller).

The creation of a new Economics department led to significant changes in both the graduate and undergraduate Economics programs. The old graduate program was shut down in 2002. A new, mainstream graduate program was launched in 2006. The first three cohorts of graduate students have finished their Ph.Ds within five years of entering, and their initial placements have been strong, with a combination of tenure-track faculty appointments and positions with nongovernmental organizations, government agencies, and consulting firms.

At the undergraduate level, the Economics major was revised and made considerably more rigorous. Among other changes, two semesters of Calculus and Econometrics were added as requirements and an honors program was created. As a direct consequence of these changes, our majors have become much more competitive for jobs after graduation, and we are sending many more students to the very top Ph.D. programs in economics. Over the past ten years, the major has added more electives and created more research opportunities for undergraduates. In 2012, the International Economics major and the Business and Economics minor were launched. These changes have attracted considerably more majors—between 2003 and 2013 majors grew by seventy percent from 247 to 422.

In 2012, two faculty members from the department launched the Lab for Economic Opportunities (LEO), which is the centerpiece of a new University-wide partnership with Catholic Charities USA. LEO, the first research center to reside in the department, will collaborate with Catholic Charities to generate research aimed at identifying effective anti-poverty programs in the U.S.

In the following section we discuss the undergraduate economics program, explaining how the major has been significantly revamped since the past review. We present a number of indicators of success including a sharp rise in majors, more students going to graduate school, and evidence of intellectually challenging courses. We then describe the new graduate program which started in 2006, highlighting recent success in placing our students in jobs. Next, we discuss the research productivity of the department, comparing our number and quality of publications to other reputable departments. We then describe our current faculty and their outreach activities and provide additional information on other activities of the department, including our support of the University's mission. Next, we consider how we compare to peer departments along many dimensions ranging from faculty size to seminar series budgets. Finally, we turn to the future of the department, describing our key goals and the resources needed to obtain these goals.

II. Current State of the Department

A. Internal Activities

Undergraduate Education

The 1997 Report of the External Review Committee identified faculty dedication and accessibility as a strength of the department, and that commitment continues today. However, the External Review also identified a number of concerns with the Undergraduate Program in Economics, particularly regarding the lack of student preparation in quantitative skills. It recommended changes to the substance and rigor of the major's requirements. The committee noted that there was a dramatic decline in majors and that very few students went on to do graduate work in economics. Their specific recommendations to the department were the following:

1. More students should be encouraged through the advising system to take Econometrics. The course was not offered every year and in the review year only six students were enrolled in the course.
2. The department should consider offering an honors sequence with advanced sections of micro and macro theory, a required econometrics course, and a required senior thesis.
3. The teaching of principles should be revised. At the time of the review, the first course for majors was a one-semester combined micro/macro course and there was a two-semester sequence for business students. The one-semester course led to a lack of preparation for majors as they attempted the Intermediate Theory classes and led to a low starting point for those courses. The committee recommended doing away with the one-semester class and teaching all principles as a two-semester sequence.
4. The committee had substantial concerns about the variety and number of course offerings. One issue was the level of the elective courses. There seemed to be little distinction between 300- and 400-level courses and the committee recommended raising the level at which the 400-level courses were taught. The committee also recommended that a wider variety of electives be offered.

This section is divided into four subsections. First, we describe the current state of the Undergraduate Program. Second, we explain the key changes in the Program since the last review. Third, we present several indicators of our progress including the number of majors, the number of theses written, employment outcomes, the number of placements in graduate programs, course evaluations, and GPA. Finally, we summarize the current strengths and weaknesses of the program.

Current Situation of Undergraduate Program

The Economics Department currently serves approximately 420 majors, making it one of the larger majors on campus. The Department provides Principles of Microeconomics and Macroeconomics courses to our majors as well as to students in other majors and colleges, most notably the Mendoza College of Business. We also offer a rigorous set of core requirements, which includes Intermediate Microeconomics and Macroeconomics, Statistics for Economists, and Econometrics. These courses provide students with a strong foundation for further study in both theory and applied economics. Our upper division courses allow students to hone their skills and prepare them for the job market, as well as graduate school in economics or other fields. Our

standards have become increasingly rigorous and thus we are providing a first-tier undergraduate experience for our students.

The staff that oversees the undergraduate program includes three Ph.D. economists: the Director of Undergraduate Studies (Mogavero) and two faculty advisors (Flannery and Leahy). The undergraduate program also has one full-time administrative assistant (Carter). This staff assists students with choice of major and curriculum-planning, makes students aware of various opportunities for research experience and career preparation, and works to provide a challenging experience for our majors.

The department has recently expanded beyond the traditional Economics major, launching two additional programs in the 2012-2013 academic year: the major in International Economics and the Business Economics minor. The International Economics major was instituted in response to the need, expressed by both students and employers, for specialized preparation for an increasingly global economy. Students combine rigorous coursework in the Department of Economics with advanced training in languages. In the 2012-2013 academic year, the partner languages were limited to French, Italian and Spanish. In the fall 2013 semester, Arabic, Chinese, Japanese, German and Russian will be added to the major. The current number of International Economics majors is twenty-seven and is expected to grow substantially with the addition of the new languages and the development of the program. The Business Economics minor was developed to take full advantage of a liberal arts education while becoming literate in basic business economics principles. It is a collaborative effort between Arts and Letters and the Mendoza College of Business. There are currently 116 students declaring this minor. The requirements for the Economics major, International Economics major and the Business Economics minor are included in Appendix A.

Developments in the Undergraduate Program since the last Review

One of the most significant changes to the Undergraduate Program since the last review is the change in faculty. Since 1997, the old Department of Economics was split into two (in 2003) and one of the resulting departments was dissolved (in 2010). Consequently, only three current faculty members were part of the department in 1997. In addition to a complete overhaul of the teaching faculty, the department has implemented a number of significant changes to the major. Many of these changes directly address issues highlighted by the 1997 external review. The most substantive changes include: i) increased emphasis on developing the quantitative skills of the major; ii) a revised curriculum; and iii) increased support for student preparation for graduate school and the job market.

Increasing the quantitative skills of our graduates has been a major focus of the department. Indeed, the separation of the Department of Economics into two departments, Economics and Econometrics (ECO) and Economics and Policy Studies (ECOP) arose largely from a desire to provide a more mainstream approach to economics, combined with training in the important analytical and quantitative skills necessary to be competitive in the job market and prepared for graduate work in economics. In the fall 2006, the department instituted two changes that increased the level of quantitative rigor in the program. First, two semesters of calculus were required for all Economics majors and became a prerequisite for Intermediate Microeconomics and Intermediate Macroeconomics. Second, the department began requiring Econometrics as part of the core for the Economics major. The addition of Econometrics has allowed us to offer more rigorous 400- (now 40000) level courses that rely on these skills. In the 2012-2013 academic year, 180 students were

enrolled in Econometrics, up from six at the time of the external review. Many of our upper division courses list Econometrics as a prerequisite and require students to perform original research, including data gathering and econometric analysis. Some examples of recently offered courses designed to build on the Econometrics foundation are: Health Economics, Economics of the Family, and Advanced Labor Economics.

The department has pursued other efforts to raise the level of quantitative skills for our students, including the increased rigor of our program in general and greater attention to advising students about the importance of a good quantitative foundation. Students interested in pursuing graduate work in economics are encouraged to complement the major with challenging math classes.

The increased emphasis on quantitative analysis permeates the Economics undergraduate experience. For example, with the support of an anonymous donor, the department began awarding Bernoulli Awards in 2008—cash prizes made to undergraduates for original research using statistical analysis. Students are encouraged and rewarded for high quality quantitative research. A first prize Bernoulli award is granted only to papers that have a genuine chance of publication in a peer-reviewed outlet of the relevant discipline. In fact, a recent Bernoulli winner published his article in *Economic Inquiry*, a very reputable journal. Bernoulli award winners and competition participants have found this experience to be very helpful in their post-graduation plans, both going on to graduate school and seeking employment.

The next major area of reform was revamping the Economics major curriculum. In the fall of 2003, the one-semester Principles class was replaced by a two-semester sequence of Principles of Microeconomics and Principles of Macroeconomics. This change immediately enhanced the entire curriculum by allowing the intermediate courses to begin at a higher level. The end result for students was a richer, deeper understanding of the major. The most substantive changes occurred in the fall 2006 semester when the curriculum was revised to include the same rigorous analytical and quantitative content offered at peer institutions. Econometrics became a requirement for the major and the structure of the upper division electives was designed to make a clear distinction between 30000 courses and 40000 courses. The 40000 level courses are more rigorous and require Intermediate Microeconomics, Intermediate Macroeconomics, and/or Econometrics. The increased rigor of the 40000 level courses allows students the opportunity to apply the theory and tools that they learn in their core courses with increasing sophistication as they move from 30000-level to 40000-level courses.

Another significant change to the curriculum was the addition of the Undergraduate Economics Honors Program. Honors students must satisfy minimum grade point requirements in core Economics courses as well as overall grade point average requirements. Once accepted to the Honors program, students must complete an “enriching experience” and a “capstone experience.” Enriching experiences include taking an advanced methods course, a core course in the graduate program, or an out-of-classroom activity related to the study of economics, such as a research assistantship or presentation of original research at a conference. The final requirement for the Honors program is the capstone experience of which the primary requirement is completion of a yearlong writing and research effort culminating in a senior honors essay.

Finally, we have begun to expand the number and breadth of the electives offered to our majors. In recent years, we have provided new courses in a wide range of subject areas. Some recently added electives include Forecasting for Economics and Business, Economics of the Family,

Health Economics, Advanced Labor Economics, and the Economics of China. This small sample represents the department's efforts to increase the variety of electives available to our students. This is an area where resource constraints have limited our progress. Although we have been able to increase our elective offerings, the size of our major means that this has come at the expense of larger classes in the Principles sequence as well as in some of the required core courses. In the short run, this is a reasonable tradeoff, although ideally—with sufficient faculty—we could offer a greater variety of upper level classes without having to resort to larger class sizes in other courses.

The current curriculum requirements and course offerings are provided in Appendix B. This appendix includes a list of courses with descriptions obtained from the Academic Bulletin. We have also constructed a matrix of elective courses to indicate which are currently offered, but also to illustrate how the number and type of electives have changed over time.

Another area of marked change in the Department of Economics is support for students in planning and preparing for their post-graduation placements. The 1997 external review noted that few students were going on to elite graduate programs in economics and there was persistent concern that the lack of rigor in the program inadequately prepared students for graduate school and the job market.

The Department has successfully initiated significant efforts to address these limitations. First, the increased rigor of our course offerings has provided our students with a much better foundation for graduate study. Students interested in graduate work in economics are advised from the beginning of their coursework to pursue mathematical training well beyond that required for the major. In 2009, the department established the Marc and Mary Ellen Baker endowment, which was funded in gratitude for the department's mentorship of their son who went on to Yale's economics doctoral program. The funds from the endowment are used to stage events for majors and prospective majors, at which faculty and alumni will explain the variety of career options available to those who attend graduate school in economics, and to recognize those who attend graduate school. It is also used to fund a presentation in the fall for students considering graduate school to help with curriculum planning and the application process.

The department is also undertaking efforts to encourage and support undergraduate research, which naturally builds interest in graduate school. These efforts include the course changes and Bernoulli competition discussed above. Other recent initiatives include a new fund (donated by the BonAnno family) that will allow faculty to hire undergraduates as research assistants, so students can gain research experience. Also, the Lab for Economic Opportunities, which is a research center housed in the department that evaluates the effectiveness of anti-poverty programs in the U.S., regularly hires Economics majors to work as research assistants. LEO research assistants have the opportunity to apply the analytical techniques that they learned in their Econometrics classes to real research questions.

The support for students thinking about graduate school extends to those looking for jobs upon graduation. The research and analytical skills important for graduate school are also valuable on the job market. The Department has taken some additional steps to improve our job placement record. The department works closely with the Career center to identify employers who are a good match for our students. The Department, together with the Economics Club and the Career Center, has organized a number of events where our majors can meet with employers. In addition, the

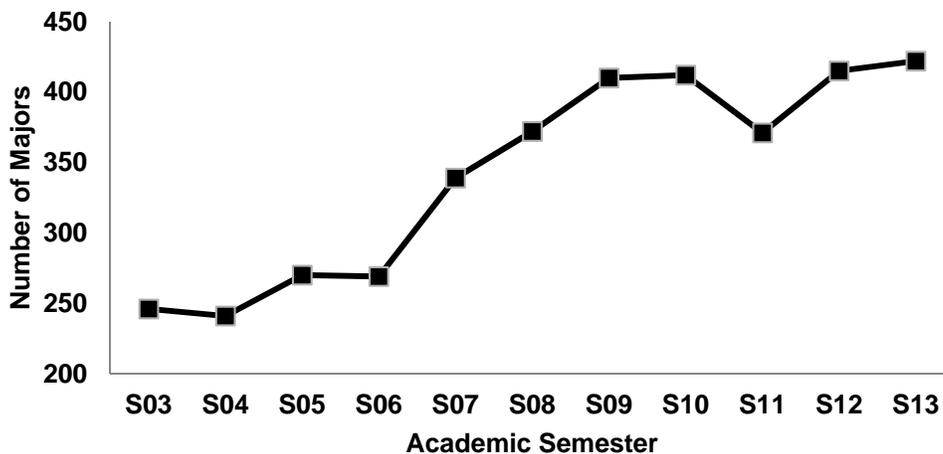
Economics Club brings to campus speakers who have successful careers with an Arts and Letters undergraduate degree.

Indicators of Success

To assess the impact of the reforms described above, we examine a number of different indicators, including the total number of Economics majors and the number of students who participate in the Honors Program or write a thesis. We also look at job placements and enrollments in graduate programs, particularly the elite programs, to determine the impact of our efforts to better prepare our majors for the job market and graduate school. Finally, we examine course evaluation information and data on class sizes. In general, these indicators suggest a vastly improved Undergraduate Program, but these metrics also highlight important weaknesses.

Perhaps the strongest indicator of success is the sharp rise in majors over the past decade. As shown in Figure 1, the number of majors grew more than seventy percent between 2003 and 2013. The sharpest rise starts in 2007, shortly after the most substantive changes to the major were implemented. The dip in majors in the spring 2011 semester reflects a general trend among students in the University away from Arts and Letters toward the Mendoza College of Business (MCOB). In that same semester, majors in MCOB rose by approximately 130 students. The 2012 data show a return to the previous upward trend.

Figure 1
Growth in Economics Majors



Source: Notre Dame Registrar's Office

The participation rate in the Honors Program has not kept pace with the growth in majors and in many years is below desired levels. Table 1 reports the number of Honors Theses and other research between 2007 and 2012. The number of honors students has varied from year to year from a high of thirteen in 2009-10 to a low of three in 2012-2013. This number is clearly unsatisfactory. Many students write a thesis outside of the honors program, and the total number of theses written is well above the number at the time of the last external review. But our current production is still too low. In 2011, we had forty-eight students write major research papers for a variety of programs

and this number is closer to the steady state number of research papers that we would like to see from our undergraduates on an annual basis. The number of regular senior theses in 2011 stands out, relative to recent years. That number reflected that fact that Bill Evans volunteered to teach an extra “research class” that guided students writing a theses, and he was able to encourage many students in his econometrics course to participate. This success indicates that if we have the resources to dedicate to thesis writing, we can increase our performance on this dimension.

Table 1
Measures of Undergraduate Research, 2007-2012

Year	Honors Theses	Senior Theses	Other research
2007	6	n/a	n/a
2008	7	6	9
2009	6	8	19
2010	13	8	4
2011	8	25	15
2012	7	6	12

Source: Internal Economics Department data

One important barrier is that the department’s standards for what counts as a thesis is very high. We do not intend to lower these standards, but we are working to encourage our undergraduates to acquire econometric training and other important research expertise well before their senior year so more of our majors have the prerequisite skills necessary to write a thesis. We are also planning a more focused outreach effort to identify our best students and contact them early in their studies about the possibility of participating in the Honors Program and/or writing a senior thesis. One other option we might explore is offering an honors sequence whereby our best students could take more advanced versions of the core requirements: Intermediate Microeconomics, Intermediate Macroeconomics, and Econometrics. Additional faculty are needed before such a sequence could be offered.

The Department has clearly turned around the perception that our students lack important quantitative skills and are ill prepared for the job market or graduate school. In fact, many MCOB students now double-major in Economics precisely to gain more in-depth quantitative skills. In the spring 2013 semester, there are approximately 150 MCOB students who are double majoring with Economics. The largest group of double majors is with Finance and Economics.

The Department has also taken a number of steps to improve our job placement record. The Department works closely with the Career center to identify employers who are a good match for our students. In addition, the department supports the Economics Club, which is involved in bringing to campus speakers who have successful careers with an Arts and Letters undergraduate degree. In Table 2, we report the average salary for Economics and MCOB students over the past three years and the distribution of where new graduates report that they are employed six months after graduation. In 2011, the average salary of an Economics major surpassed the average MCOB graduate. Table 2 also shows that the employment outcomes of Economics majors are strong. The percentage of graduates employed is rising rapidly and in 2011, no students who responded to the survey were without definite post-graduation plans.

Table 2
Salary and Employment Outcomes for Economics Majors, 2009-2011

Year	Econ Avg Salary	Business Avg Salary	Source of employment for economics majors 6 months after graduation				
			% Employed	%Grad School	% Service	%Military	%Other
2009	50,881	54,874	54	23	16	2	5
2010	54,901	55,585	62	24	9	1	4
2011	58,836	56,682	75	15	7	3	0

Source: Career Center Annual Reports

Additional information on the job placements of our majors is available in Appendix C. These data show that, as a result of the increased rigor of our major, our students are well prepared for jobs in economic research, consulting, finance, and so on.

Another consequence of the recent changes to the Undergraduate Program is that we are having much more success in placing our majors in Ph.D. programs. We are not aware of any students that entered a top-40 Ph.D. program in economics in the five years prior to 2003, when ECOE started. In Table 3 below, we report the results for the past five years. Not only are many more students going on to pursue a Ph.D. than in the past, but we are now regularly placing students into the most elite graduate programs (one to two students per year)—something that rarely happened prior to the reforms to our major. Table 3 does not include results for 2013; we have one student who has been admitted to Harvard and Princeton among other programs. In 2012, one of our students, who now attends MIT, received a very prestigious NSF fellowship to support his graduate studies. In the past, applicants to Economics Ph.D. programs from Notre Dame were hurt by the general reputation of the department. According to conversations with graduate admissions directors at top programs, this is no longer the case. Our best majors are now competitive with those coming out of the elite economics departments.

Table 3
Undergraduates Pursuing Graduate Study in Economics, 2008-2012

Year	# of students Entering Ph.D programs in economics	Institutions
2008	7	Brown, Case Western Reserve, Northwestern, Ohio State University, Oxford, Yale
2009	2	Duke
2010	2	Brown, Stanford
2011	2	Harvard, University of Wisconsin
2012	6	MIT, Cornell, University of Minnesota, Columbia, Duke, University of Wisconsin

Source: Annual Report to the College of Arts and Letters, 2008-2012

Despite this notable progress, the number of students admitted to Ph.D. programs remains small. Given the size of our major, we would like to see an average of more than five students per

year enrolling into a Ph.D. program. As we create more opportunities for undergraduates to get involved in research, we expect our majors to have a greater interest in graduate school.

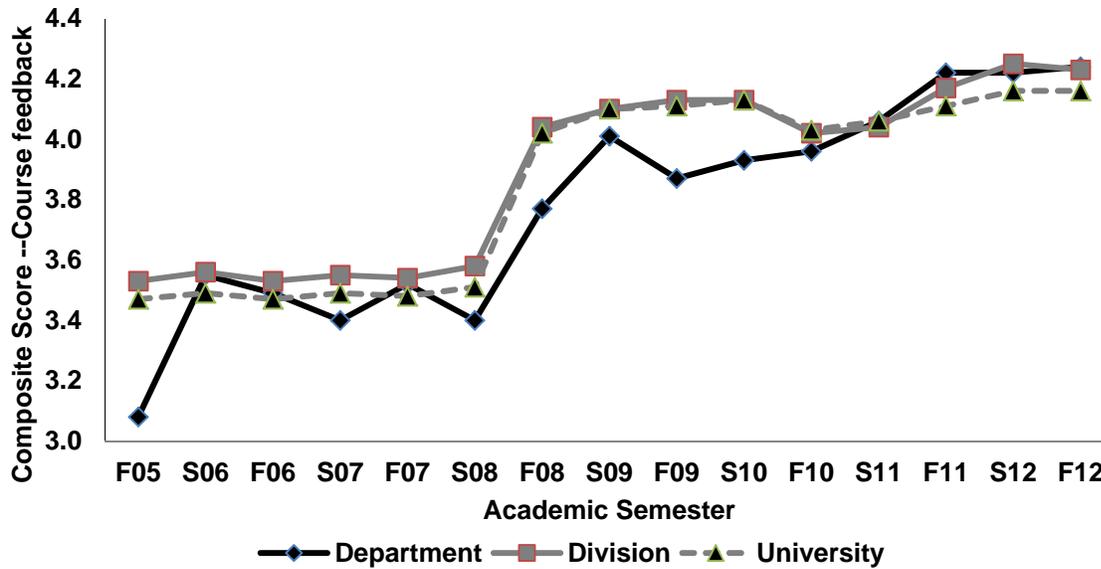
Our program is structured to provide those students with Ph.D. aspirations the necessary training to get into the best graduate programs in our discipline. This will also provide valuable returns in the future as we strive to enhance the Catholic mission of the department. As we note in the subsection on “Catholic Mission” below, a key component of our growth strategy is to use the distinct Catholic mission of the University to recruit talented scholars to our Department. Since nearly eighty percent of our undergraduate student body is Catholic, the more we encourage our undergraduates to attend the best graduate programs, the greater pool of available mission candidates that we will have in the future.

In addition to Ph.D. programs, many of our majors enroll in other graduate programs, such as a Master’s in Public Policy or a Master’s in Public Health, or in professional programs, such as law school or a MBA. Recent placements in such programs are available in Appendix C.

The last set of indicators that we examine is related to course evaluations and class sizes for undergraduate courses. We look at the trends in these indicators for our Department and compare them to those for broader groups across campus. We should note that these indicators capture only a part of the quality of instruction provided by the department. We have taken steps towards a more detailed assessment of the Undergraduate Program, and have adopted comprehensive learning goals and an assessment plan to gather more data on the effectiveness of our programs. The learning goals and assessment plan are included in Appendix D.

Despite or perhaps because of the more rigorous curriculum discussed above, the Course Information Feedback data on teacher evaluations of Economics faculty indicates modest improvement, particularly after 2009. In Figure 2, we report the average composite score from the fall 2005 through fall 2012 for the Department of Economics (ECOEF for 2003 to 2010). In the fall of 2008, the University changed course evaluations from the Teacher and Course Evaluation (TCE) system, which was based on a four-point scale to the Course Information Feedback system, which is based on a five-point scale. The large increase in the fall 2008 numbers reflects this change. The overall composite score for the department rose from 3.87 in fall 2009 to 4.24 in fall 2012 (the data behind Figures 2-6 are available in Appendix E). Our recent numbers are on par with the social sciences Division within the College of Arts and Letters and have surpassed University averages.

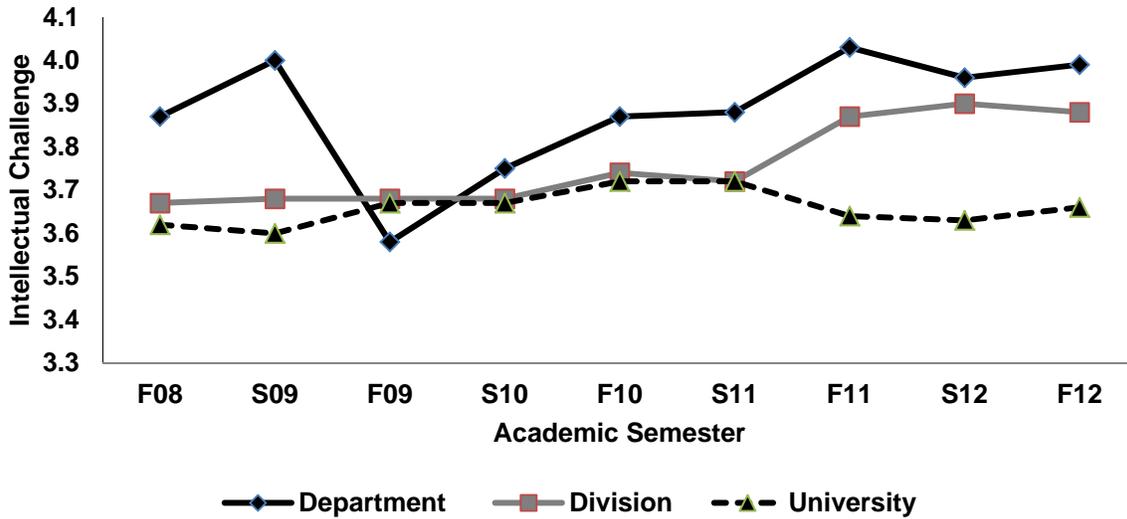
Figure 2
Course Information Feedback
Overall Composite Score



Source: Notre Dame Institutional Research

The reasonably high teaching scores within our department are even more compelling when one considers the degree of difficulty of our program. Since the fall of 2008, student evaluations have asked a question about the overall intellectual challenge of the course. Possible answers on a six-point (0-5) scale range from “Very low” to “Extremely high.” In Figure 3, we compare the average scores on this question for the department, the social sciences Division, and the University. The department has been able to maintain an overall composite score that is comparable to other groups across campus, while at the same time offering courses that are more intellectually challenging than the average course within the Division or the University. The average across all classes is above both comparison groups in every semester except one between the fall 2008 semester and the fall 2012 semester.

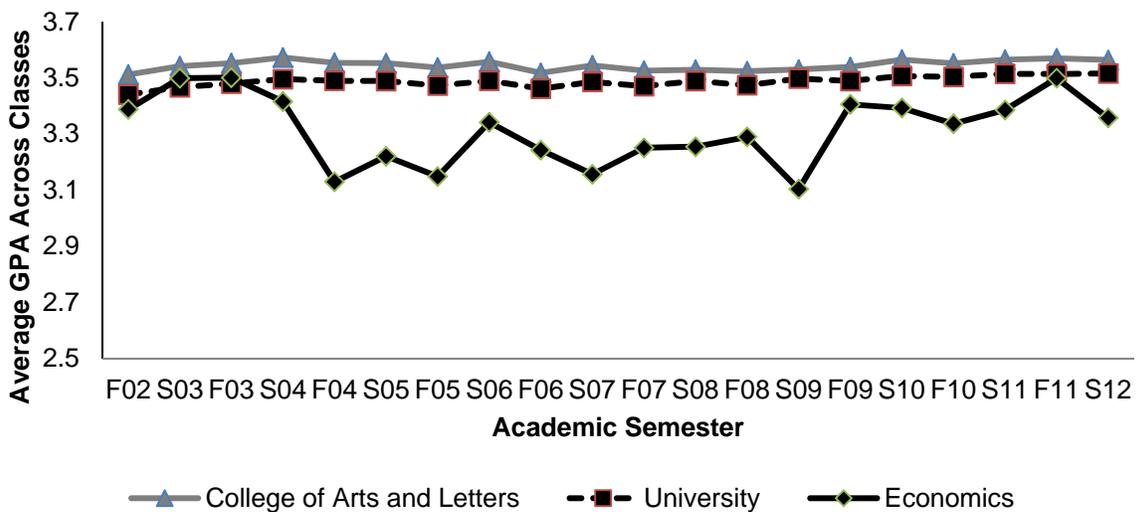
Figure 3
Degree of Intellectual Challenge



Source: Notre Dame Institutional Research

Relatedly, the department has also maintained a stricter grading policy than many other departments. Figure 4 reports average class GPAs for Economics, the College, and the University from 2002 through 2012. Note that for Economics, the data for 2003 to 2010 includes classes taught by the Economics and Policy Studies faculty. Our grades are consistently below these other aggregates.

Figure 4
GPA Comparison

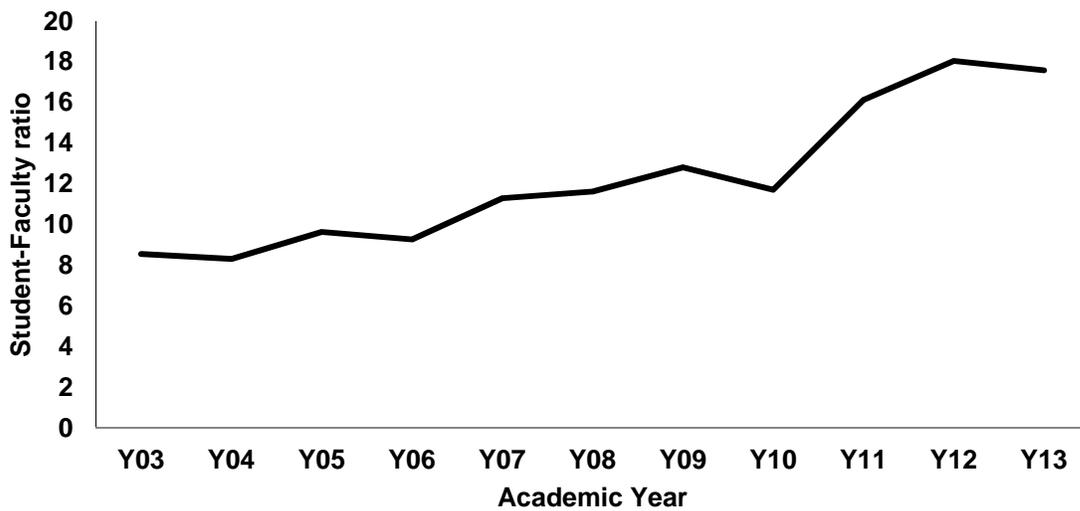


Source: Notre Dame Institutional Research

Teaching awards are another indicator of the quality of instruction. Since most of the faculty in the department has only been with the University for a short time, we report teaching awards over the entire careers for current faculty. This list is reported in Appendix F. Eleven current faculty members have received faculty-teaching awards either at Notre Dame or at another university. Only four of these individuals (Hungerman, Leahy, Mogavero, and Sullivan) have received teaching awards here at Notre Dame.

As the number of majors has increased, our student/faculty ratios have increased. Figure 5 shows the change in the ratio from the 2002-2003 academic year to the present. The faculty includes both Economics and Econometrics and Economics and Policy Studies (ECOP) during the years that the department was split (2003-2010). The big increase in 2010- 2011 is due to the formation of one department and the departure of a number of the ECOP faculty. The increase in the student/faculty ratios is also due to a plan to increase the class sizes of the required classes to allow for more small classes in the upper division.

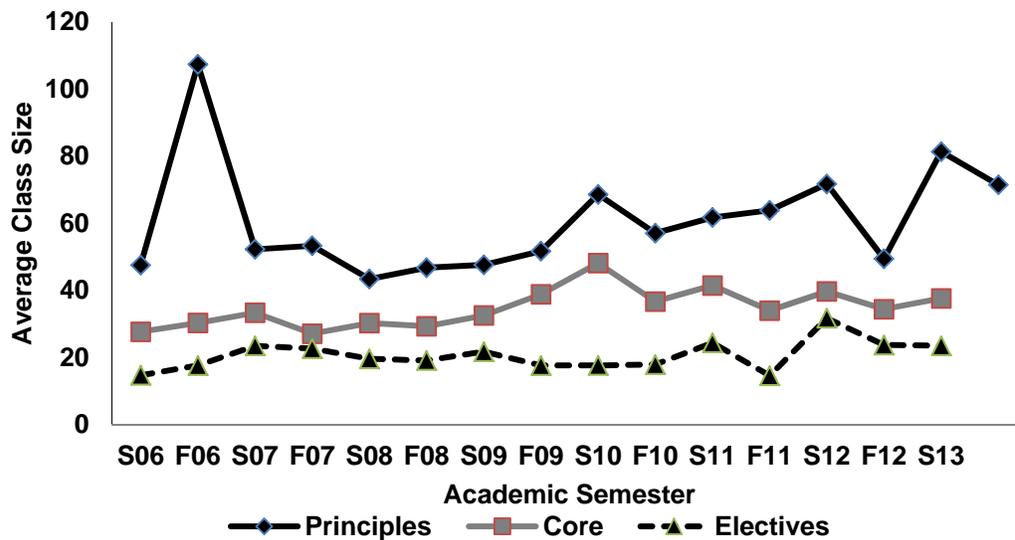
Figure 5
Student/Faculty Ratios in Economics



Source: Registrar’s Bulletin of Information and Majors data

A more detailed breakdown of class size over time is provided in Figure 6, which reports average class sizes for three separate groups: principles classes, core requirements for the major, and electives. It is clear that principles classes have the largest class sizes over this time period and that they are increasing, although not dramatically. The spike in the spring of 2006 is due to a different principles configuration that semester, with two large sections of approximately 220 students each and discussion sections led by graduate students. A breakdown of class sizes by number—less than twenty and greater than fifty—is contained in Appendix E. Taken generally, this breakdown also shows that class sizes have been increasing. Counting classes with greater than fifty students does not portray the real picture, however, because in the earlier years many of the classes over fifty were in the fifty to seventy range, whereas in recent years those classes generally exceed 100 students.

Figure 6
Average Class Sizes in Department by Level



Source:

Registrar Schedule of Classes

Assessment of Strengths and Weaknesses

The Notre Dame Economics Undergraduate Program has undergone significant changes since the last external review in 1997. These changes have led to a much-improved program in a number of ways, although there remain opportunities for improvement. The strengths of the current program are largely derived from the reformulated curriculum, which provides a strong quantitative foundation with rigorous and challenging core courses and electives. We have also encouraged undergraduates to engage in independent research (through the Bernoulli competition, for example) and created more opportunities for students to work with faculty on research (through the Lab for Economic Opportunities, for example). These changes have led to greater success post-graduation for our majors in terms of better job prospects and admission to increasingly competitive graduate schools. Another strength is our faculty, who take seriously the goal of providing a rich, intellectually challenging course of study for our students, as evidenced by our teaching evaluations and the increasing number of students attracted to the major.

We still have areas in which to improve. Some of these weaknesses can be resolved with additional resources, while others will require additional effort. For example, our class sizes are too large to provide the optimal environment for learning some of the complex, challenging aspects of a rigorous economics curriculum. Also, we would like to offer more electives, which would serve the dual purpose of lowering class sizes and providing a greater variety of subject areas for our students. These areas can be greatly improved with the addition of new faculty. Other weaknesses will require not only more resources, but also a rethinking of current practices. For example, we are not satisfied with the number of theses produced by our undergraduates. This can be helped with the addition of new faculty, but the department also needs to improve its information dissemination on the benefits of writing a thesis. A workshop to provide information on thesis writing would be beneficial both to inform and encourage students. Another area for improvement is student-faculty

interaction. Again, more faculty members would free up time for this type of activity, but the department also needs to think more broadly about sponsoring events that would facilitate faculty-student interaction. In other words, just adding faculty will not address these weaknesses in their entirety. Additional thought and planning will be required to gather ideas and create new programs or events to address these issues.

Graduate Education

Overview

The graduate program consists of a Ph.D. that is administered by a five-member Graduate Studies Committee (GSC), which is headed by the Director of Graduate Studies (DGS). Students are not admitted for Master's degrees, although students can depart from the program with a Master's degree if the requirements are met.

The Ph.D. program was re-instituted in 2006, following a five-year period during which admissions were suspended as part of the overhaul of the Department of Economics. The 1997 External Review Committee was highly critical of the old Ph.D. program. Several of the criticisms related to the structure of the curriculum: the Microeconomics and Macroeconomics sequences began in the second semester, and thus the comprehensive exams in Microeconomics and Macroeconomics occurred after only one semester of coursework; students were allowed to take field courses before taking the core theory classes; the field structure and the course offerings were problematic; and the mathematical and statistical training received by the students was insufficient. The External Review Committee also assessed that the program was too small to allow for a reasonable set of course offerings and judged that the teaching opportunities offered to graduate students were too limited.

The five-year suspension of the program allowed for a clean break from the old Ph.D. program, and the new Ph.D. program was re-designed from scratch. The recommendations of the 1997 External Review Committee provided important input into the design of the new program. In particular, the first year sequence of courses in the new program, with two semesters each of Microeconomic Theory, Macroeconomic Theory, and Econometrics, was in line with the recommendations of the Committee. Two recommendations that the Committee thought would improve the job prospects of students upon graduation were also incorporated into the new program: almost all graduate students teach at least one semester of their own course, and all graduate students are required to attend the external speaker seminar series on a consistent basis.

The size of the program during the first seven years has been relatively small, with an average stock of about twenty-five graduate students in the last three years. A small initial size was considered appropriate until we could establish a consistent placement record and develop a reputation for training and placing students, which would allow us to attract a stronger applicant pool. The Prioritized List of Resources section of this self-study discusses the merits of increasing the size of the program in the future.

The rest of this section provides (1) a summary of the structure of the Ph.D. curriculum, (2) statistics on admissions and time to completion, along with a summary of the recruitment process, (3) the financial and non-financial resources available to graduate students, (4) a summary of key indicators of success, such as placement, and (5) a discussion of key strengths and weaknesses of the current graduate program.

Program Description

The overall design of the program is extremely similar to the structure that is common to nearly all the top twenty programs. The first year of studies consists of two semesters each of Microeconomic Theory, Macroeconomic Theory, and Econometrics. An additional two semester sequence in mathematical and programming skills was required until 2010, but that material has since been integrated into the Micro, Macro, and Econometrics sequences. As a result, each of these core courses counts for 4.5 credit hours. Table 4 outlines the typical sequence of course requirements.

Table 4
Course Sequence for the Economics Ph.D. Program

Year	Semester 1	Semester 2
One	Micro theory I Macro theory I Econometrics I	Micro theory II Macro theory II Econometrics II
Two	Field course Field course Research seminar	Field course Field course Research seminar
Three	Field course Research seminar	Field course Research seminar
Four	Research seminar	Research seminar
Five	Research seminar	Research seminar

Comprehensive written exams in Microeconomic Theory and Macroeconomic Theory are administered in June, about one month after the spring semester examinations. Each is a four-hour exam written and evaluated by a committee of three. Possible outcomes are: Ph.D. pass, M.A. pass, and Fail. Those who do not pass at the Ph.D. level are eligible for one retake that is administered about a month later. Students who have not obtained a Ph.D. pass in both exams at this point must leave the program. Those who cannot achieve the Ph.D. pass but have passed both exams at the M.A. level leave with a Master's degree as long as the other university requirements for an M.A. are satisfied. No degree is conferred upon those who fail to attain the M.A. pass in both exams.

Students who achieve the Ph.D. pass and continue in the program must then complete the course offerings in two fields, with each field consisting of two courses. Students must also complete two additional courses outside of the chosen fields. The department offers fields in Labor, Public, Macro, International, Industrial Organization, and Development (for a few years, a field in Environmental Economics was also offered, but it is currently not offered due to an inability to staff those courses). For a complete list of graduate classes see Appendix A. Due to the small size of the program, field offerings must be spread across years. At least one course in each field is offered every year, but often the field sequence must be spread across academic years (e.g., Labor I may be offered in one year and Labor II offered in the next year). Between 2006 and 2010, the program was organized so that both classes of particular fields were taught in the same year, but each field was

only offered every other year. The disadvantage of that ordering was that a student might not be exposed to his or her desired field until the third year, which is clearly an obstacle to developing a second year research topic in the desired field.

Beginning in their second year, students also enroll in one of three research seminars—Applied Microeconomics, Microeconomic Theory, or Macroeconomics—in which advanced students present their research and the faculty provide guidance on students’ dissertations and job market preparations.

In addition to the course requirements, students must write a “second year paper,” which is required in lieu of written field exams that are a common part of many programs. This is the first exposure of a student to the process of carrying out original research. This paper, often developed from a term paper of a second year field course, is intended to be a potential chapter of the dissertation. Students work on the project throughout the second year and continue to work on it over the summer. Early in the fall of the third year, students submit, present, and defend the second year paper before the entire faculty. Faculty members evaluate the written paper as well as the presentation and defense. If students do not pass this evaluation, the faculty can outline what must be done to receive a passing mark and a timeframe in which it must be completed. Students who do not pass the second year paper requirement must leave the program.

In the third year, students complete their field courses and begin to devote more time to developing their dissertation. In addition, beginning in the third year they must present their research every semester in one of the research seminars. There is also a strong expectation that students will attend most of the external speaker seminars, and they are also encouraged to have an office meeting with an external speaker from time to time.

Admissions, Attrition, and Time to Completion

Table 5 reports the record of admissions, enrollments, attritions, and job placements of graduates since the program was re-started in 2006. Our yield rate for admitted students has typically been about fifty percent. The rate of attrition among students who enroll has varied quite a bit from year to year—the 2010 cohort has had no attrition, while the 2011 cohort lost four out of five students after the comprehensive exams. It is our impression that our attrition rate is higher than at top 10 Ph.D. programs, but we do not think that it is out of step with programs in the 10-40 range. Whereas the very top departments are able to consistently attract students who can survive the rigors of the first year of studies (where students’ math skills are seriously challenged), for programs such as ours the selection of applicants is a more noisy process. To reduce our attrition rate currently would require that we compromise our standards—a tactic we wish to eschew. Over time, as we are able to increase the depth of quality in our applicant pool, which we discuss in the Goals section of this document (III.A), we hope be able to reduce the attrition rate.

Table 5
Admissions, Enrollments, Attritions, and Job Placements of
Economics Graduate Students, 2006-2012

Year	Admitted	Enrolled	Attrition at comps	Attrition after comps	Completion of Ph.D. (years to degree)	Initially placed
2006	16	7	1	2	4 (5)	4
2007	14	7	1	0	6 (5)	6
2008	16	10	4***	0	2 (4), 4 (5)	6****
2009	14	8	3			
2010	12	6*	0			
2011	15	5	4			
2012	18	8**				

Notes: *Does not include a student who took leave due to health related issues and was readmitted in 2011. **Includes a student who switched to another program after one semester. ***Includes a student who was asked to leave after a semester. ****The remaining four students from this class are expected to graduate this spring/summer (in five years). All have found placements.

In terms of the demographic composition of our graduate students, we have achieved a certain level of diversity in the program, both in terms of gender and international composition. Among the current stock of students, ten of twenty-three are female. In terms of geographic region, thirteen percent are from Europe, twenty-six percent from Asia, nine percent from Latin America, five percent from Africa, and forty-eight percent from the U.S.

A large fraction (over half) of our applicants currently is from Asia. In contrast, a very small fraction is from Europe and Latin America (two from Europe and five from Latin America this year). We believe that we could strengthen our applicant pool considerably by finding ways to attract more applicants from Europe and Latin America.

Due to the timing of the awarding of internal university-wide supplemental fellowships (typically in late February), we must make offers of admissions in mid-February so that we can nominate our strongest applicants for the University-wide supplemental fellowships. Accordingly, the deadline for applications is typically set around January 1. In January, the DGS examines all the applications (140 in the current recruitment cycle) and prepares a shorter list of the more attractive applications for evaluation by each member of the GSC. The committee meets in early February to discuss the strengths and weaknesses of these applicants, who are then sorted into three categories: admit, waitlist, or reject. The applicants are notified accordingly. The DGS then proceeds with nominations of suitable candidates for various university supplemental fellowships and with other logistics of the admissions process.

The department hosts a visitation day on a Friday in late March for the admitted applicants (and a small group of waitlisted students) who are in the U.S. The schedule for the 2013 visitation day is included in Appendix G. The department pays all travel, lodging, and food costs associated with the prospects' visit. Typically about two thirds of the admitted students choose to attend. During the Visitation Day events, students are informed of the department's relative strengths—such

as small class sizes that foster closer interaction with faculty and our strong job placement record. Members of the GSC also hold one-on-one meetings with each of the prospects, which allow us to do some additional “screening” of the waitlisted students and to assess the likelihood of acceptance among the students with offers.

Financial Support for Graduate Students

By university rule, all students admitted to a Ph.D. program are guaranteed five years of funding, subject to satisfactory progress. Until now, the Graduate School has been the source of all university stipends. Currently, the responsibility for allocating funding is being moved to the colleges. Our current allocation of university-funded stipends is twenty-eight, which reflects a modest increase since the inception of the program in 2006. In years when we have had fewer than twenty-eight students on university-funded stipends, the surplus is deposited into a “stipend bank” that can be utilized in future years when more than twenty-eight students are on stipend.

The baseline stipend level for the coming academic year will be \$18,450. We believe that this is low relative to our peers. While we do not have a comprehensive list of the stipend amounts for other programs, one recent undergraduate who was admitted to six top-twenty economics Ph.D. programs received baseline stipend offers ranging from \$22,000 (Northwestern) to \$31,000 (Princeton).

Graduate students who receive University stipends have obligations to the department that vary by seniority. Until this year, graduate students have primarily done grading in year one, served as Research Assistants in years two and three, and taught their own courses in years four and five. Next year, we will transition to a new arrangement whereby first-year students serve as Teaching Assistants, which will give them the opportunity to observe a faculty member teaching a course before they have to teach their own course in the fourth year. Students will continue to work as Research Assistants in years two and three. In the fifth year, students will again work as Teaching Assistants, unless they are hired as a Research Assistant on a faculty grant. Not having to teach a course in the fifth year will facilitate their job market process.

Each year, the department competes in a University-wide competition for Presidential and Notebaert fellowships that supplement the baseline stipend. The Presidential fellowships provide an additional \$8,000 stipend per year to the recipient, while the Notebaert fellowships provide an additional \$12,000. These fellowships also relieve students from some of their obligations to the department. Nominations and award decisions for these fellowships are made after admissions decisions, but before students accept or reject admissions offers. Among our admitted students, six have been offered Presidential or Notebaert fellowships, and three of those students have enrolled (one of whom switched programs inside the University after joining the department).

Beyond the Graduate School fellowships, the department tries to leverage several additional sources. Three of our students have received supplemental funding from the GLOBES program, a federally-sponsored initiative to encourage interdisciplinary research related to environmental issues. However, this funding source is no longer available. The Kellogg Institute for International Studies makes competitive awards of an extra \$5,000 per year to students who intend to devote their dissertation research to international study of the Institute’s research themes in democracy and human development. So far, we have secured this supplemental funding for four students. Their

respective governments have funded two other students and we currently have a student who is on active duty in the U.S. Army, whose tuition and stipend is paid by the Department of Defense.

The faculty has provided a total of eighteen semesters of funding from grants during the seven years since the Ph.D. program was re-started.

In addition to the standard nine-month stipend, the department also receives a sum of money (\$48,000 this year) that can be granted to graduate students as summer support. The Graduate Studies Committee allocates this across continuing graduate students after taking into account a variety of factors. For example, some students already receive summer funding from other sources (faculty have been able to support ten students with grant money; Presidential fellowships already include summer support).

Non-financial Support for Students

We are currently able to provide shared office space to all graduate students in the building (typically three to four students per office). However, if the number of graduate students grows in the future, additional space will be needed. Students also have access to a computer lab and printing facilities in the building.

Initial Job Placements

Placements are a key barometer of the success of the Ph.D. program. The program is set up to quickly get students involved in research and to constantly nurture and develop professionalism. The faculty spends considerable time and effort to prepare the students for the job market. Job market preparation activities include internal seminar presentations starting from the second year and multiple mock interviews with different faculty members in the final year. As an indicator of the level of priority placed on this type of preparation, one of the students from the first cohort (on the market in 2011) remarked that he did not face a single question during his interviews for which he was not prepared.

When the new Ph.D. program was designed, a key goal was to require that all students finish in five years. Because our students understand that they will not receive funding after their fifth year, all have succeeded in finishing in five years (and two have finished in four years). Moreover, every graduate has been placed. Initial placement by year of graduation is detailed in Table 6.

Table 6
Initial Placement of Ph.D. Students, 2011-2013

Year	Initial placement
2011	U.S. Census Bureau ABT Associates Fairfield University (tenure-track) Benedictine College (tenure-track)
2012	DePaul University (tenure-track) University of Georgia, Terry College of Business (tenure-track) University of Richmond (tenure-track) University of the West Indies (tenure-track) University of Cincinnati International Monetary Fund Analysis Group Independent Project Analysis
2013	University of Louisville (tenure-track) Bowling Green State University (tenure-track) Centre College (KY) (tenure-track) Policy and Economic Research Council

This is an impressive list of placements for a newly instituted Ph.D. program. They compare favorably to those in several long-established and reputable departments (Appendix H shows placements in 2011 and 2012 from selected departments for comparison). It is noteworthy that all but one of the academic appointments have been tenure-track positions. Moreover, our three strongest placements—Terry School of Business (University of Georgia), University of Richmond, and the IMF—are roughly on par with the best placements of the departments listed in Appendix H.

Despite being a very new Ph.D. program, we are succeeding in getting recruiters to take note of our students. All of our students on the market this year had at least ten interviews at the American Economic Association meetings. Our strongest student this year had over thirty interviews at the American Economic Association meetings, and was subsequently invited for sixteen job talks, including talks at the Cornell Department of Policy Analysis and Management, the University of Minnesota Carlson School of Management, and the Indiana University School of Public and Environmental Affairs (a tight deadline forced her to accept the offer at the University of Louisville before hearing back from all of those departments).

Awards and Honors by Graduate Students

The new Ph.D. program has only had seven cohorts of students, with the third one finishing this year. Nevertheless, our students have already earned a variety of awards and honors. Among them they received a total of three semesters of dissertation year support from the Kellogg Institute in 2011-2012 (the first year that we received these awards, and the second year in which we had dissertation year students). These dissertation year fellowships release the students from teaching or RA obligations. One student has obtained a dissertation year fellowship from the Kauffman Foundation. A current fourth-year student was awarded a dissertation fellowship by the Board of

Governors of the Federal Reserve System, which funds a three-month visit to the Board in Washington D.C.

In 2010, a student attended an expenses-paid summer workshop (conducted by Kenneth Judd) at the Institute for Computational Economics, University of Chicago. In 2011, a student obtained a RAND Summer Institute Scholarship. RAND took care of all the expenses for the student to attend the workshop. The same year, the same student also obtained an Alice S. Hersh Scholarship to attend the Academy Health Annual Research Meeting. Another student was awarded a summer internship at the IMF in 2011.

Each year, the Graduate Student Union (GSU) sponsors a poster symposium. For the Social Sciences Division, two of our students were first place co-winners in 2011 and another student took first place in 2012.

In a University-wide competition, the Kaneb Center for Teaching and Learning grants several teaching awards to graduate students who have excelled in the classroom. Our students have earned such awards on a regular basis. Internally, the department also has two annual teaching awards for graduate students: the Outstanding Teaching Award and the Distinguished Teaching Award. This year we are also implementing an internal prize for best Second Year Paper.

Conference Presentations and Publications by Graduate Students

The department strongly encourages conference and other outside presentations by graduate students. Conference participation plays an essential role in job market preparation and in the professionalization process more generally. Between 2009 and 2012, there have been 52 external presentations by seventeen students. All students who have graduated have made at least one conference presentation. The most common presentations have been at the Midwest Economics Association (MEA) Meetings (seventeen presentations). Some other venues include the Eastern Economic Association Meetings, the Western Economic Association Meetings, FRBSL, American Society of Health Economics Biannual Meetings, Society of Labor Economists Annual Meetings (Vancouver, Canada), Searle Center Conference on Entrepreneurship and Innovation, and the International Industrial Organization Conference. In addition, three students have presented at conferences abroad (Denmark, Spain and the West Indies). In 2011, a student attended the NBER Summer Institute Methods Lecture on Computational Tools & Macroeconomic Applications.

We are pleased with our students' record of presentations so far, but we hope to see an even greater level of external exposure of our graduate students in the future. While funding for these professionalization experiences are available from a variety of sources on campus—the Graduate School, ISLA, the Kellogg Institute, and the Graduate Student Union—that funding is limited. The department receives \$4,000 in additional funding for professional development, but that amount will be insufficient as our program continues to develop.

In addition to the large number of conference presentations, the list of publications by our students—including current students and the two cohorts who have graduated—is fairly impressive. Appendix I lists those publications, which are a mix of papers co-authored with our faculty and solo-authored papers.

Assessment of Strengths and Weaknesses

Three strengths stand out when assessing the current state of the graduate program. First, the faculty collectively shows a high level of commitment to the program, which manifests itself in the form of significant investment of time into advising and mentoring, and in a friendly and collegial environment for faculty/student interaction. Second, we have been able to place all of our graduating students into relatively attractive jobs despite lacking the kind of track record or reputation that more established programs could take advantage of when placing their students. Third, all of our students have finished within five years or less, which means that the department, and the University, does not waste unnecessary time and resources on students whose dissertation drags into a sixth or seventh year.

In terms of current weaknesses, we identify four that stand out. First, the course offerings available to students in their second year are quite limited. Given the small number of students in each cohort, if more than three or four courses per semester were offered, there would be too few students in each class to satisfy the requirement that all classes have at least five students. The downside of this, of course, is that students typically have to wait until their third year to complete the coursework in their chosen fields of specialization.

A second weakness relates to our applicant pool, which is still somewhat lacking both in terms of quantity and quality. At present, we would struggle to expand further the number of students in each cohort without admitting students with considerably lower chances of surviving the comprehensive exams. The limited applicant pool is understandable given the short track record of the Ph.D. program, and the situation should improve as we strengthen our reputation. In the meantime we must find creative ways of attracting more applications, particularly from Europe and Latin America. One tactic that we implemented this year was to have our faculty members email their friends at universities that are likely to have students applying to Ph.D. programs to inform them of the changes to our department and program and to ask them to encourage their students to consider applying to Notre Dame. This tactic did seem to yield a few additional strong applicants, and we hope that over time it will yield even more. In the Goals section of this document, we discuss other potential strategies for improving our applicant pool.

The level of our stipend support for graduate students represents a third weakness. As discussed above, the base stipend—currently \$18,000 and increasing to \$18,450 next year—is low relative to many of our competitors. Although it is difficult to identify the number of students who we lose to other schools due to an inferior stipend, even if it is one high quality student per year it is a significant fraction of each incoming class.

The fourth weakness relates to the rather limited non-stipend resources that the department receives from the University. The department currently receives \$8,000 to cover expenses related to our Visitation Day—visitors' travel and lodging expenses, meals, etc. The department also receives \$4,000 from the Graduate School for “professionalization and development,” which allows us to cover students' expenses when they attend conferences. The department receives no other funding for the graduate program.

Research

In the 1997 external review of the Department of Economics at the University of Notre Dame, the reviewers found "... the scholarly environment to be less rich than it should be, in light of resources available." The reviewers noted that: "...the department's research output is, on the whole, modest. With few exceptions, faculty members are not producing enough research of publishable quality." To rectify the situation, the committee recommended a series of external hires of scholars "...well known for their research skills, who publish in top field journals and who are active in domestic policy debate." The required three-year review after this evaluation affirmed the importance of improving the quality of research as a strategic priority of the department, noting that: "[i]mproving the department's scholarly reputation will require increasing the quantity and especially the quality of faculty research."

The new Department of Economics has taken the challenge to improve the quality of research seriously. This is reflected in numerous aspects of departmental operation. In our departmental document outlining the duties of the Committee on Appointments and Promotions (CAP, see Appendix N for our department CAP document), we note that at the promotion to the associate professor level with tenure, successful candidates must demonstrate that "...their research is beginning to have an impact on both their own area of specialization and the broader discipline." At the promotion to full professor level, the CAP document establishes a similar criterion when it notes that successful candidates "are expected to demonstrate that their research has had an impact on both their own area of specialization and the broader discipline." At all levels, the CAP document notes that when demonstrating the impact of research, "[q]uality, not quantity, is of primary importance."

In this section, we provide metrics of the quantity and the quality of research output in the department. The text is broken up into three sections. First, we focus on scholarly writings. Economics is a discipline that is primarily driven by journal articles. As such, much of the discussion below will consider the department's output within this context. Second, we discuss the department's role with research centers throughout the University. In the final section, we provide some data on grant activity by the faculty.

Output Metrics for Scholarly Writings

In Table 7, we report basic measures of output for current faculty members of the department. We have received a number of sample self-studies from other departments in the university. Most of these reports produce metrics over the past decade or since the last external review. Since the current Department of Economics did not exist ten years ago, or at the time of our last external review, we instead report output for all faculty members over their entire career.

The faculty are grouped by rank and listed alphabetically. In the first three columns of output we list the year that the faculty member received his/her Ph.D, the year he/she joined the faculty at Notre Dame, and the years since receiving his/her Ph.D, respectively. Just to note, the previous external review was in 1997 and the departments were split starting with the 2003 academic year.

**Table 7: Scholarly Output of Current Departmental Faculty
(As of February 1, 2013)**

Rank/name	Year of Ph.D (1)	Year joined faculty (2)	Years since receiving Ph.D (3)	# peer-reviewed articles (4)	# peer reviewed in top 10% journals (5)	# other articles (6)	# books (7)	# articles with Google Scholar Citations:				Total Google Scholar citations (12)	Google Scholar H index (13)	
								≥ 50 (8)	≥100 (9)	≥250 (10)	≥500 (11)			
Professor														
William Evans	1987	2007	25	54	31	18	1	35	22	6	3	7216	38	
Robert Flood	1977	2008	35	41	27	31	2	31	23	7	2	7647	35	
Timothy Fuerst	1990	2012	22	35	30	29	0	11	4	2	2	2939	23	
Thomas Gresik	1987	2004	25	18	14	2	0	3	2	0	0	628	12	
Richard Jensen	1980	2000	32	32	14	5	0	9	3	3	1	2856	21	
William Leahy	1966	1966	46	26	0	18	6	0	0	0	0	120	4	
Nelson Mark	1983	2003	29	31	20	5	1	26	17	6	1	5497	30	
Totals				237	136	108	10	115	71	24	9	26909		
Average per faculty				30.6	33.9	19.4	1.4	16.4	10.1	3.4	1.3	3844.1		
Associate Professors														
Dan Hungerman	2005	2005	7	9	7	1	0	4	2	0	0	489	11	
Joseph Kaboski	2001	2010	11	14	12	5	0	5	2	0	0	816	12	
Michael Pries	1999	2007	13	5	5	1	0	2	1	0	0	288	7	
Byung-Joo Lee	1988	1999	24	18	3	0	0	2	0	0	0	237	8	
Kali Rath	1992	1991	13	20	6	1	0	2	0	0	0	309	9	
James Sullivan	2002	2002	10	10	7	3	0	4	2	0	0	796	13	
Totals				76	40	11	0	19	7	0	0	2935		
Average per faculty				14.2	12.7	6.7	1.8	0.0	3.2	1.2	0.0	0.0	489.2	
Assistant Professors														
Simeon Alder	2009	2009	3	0	0	0	0	0	0	0	0	9	1	
Wyatt Brooks	2012	2012	0	0	0	0	0	0	0	0	0	4	2	
Kasey Buckles	2005	2005	7	7	4	1	0	2	0	0	0	232	5	
Kirk Doran	2008	2007	4	3	2	0	0	0	0	0	0	33	3	
Antoine Gervais	2009	2010	3	0	0	0	0	0	0	0	0	24	1	
Andreas Hagemann	2012	2012	0	1	1	0	0	0	0	0	0	6	2	
Terrence Johnson	2011	2011	1	2	1	0	0	0	0	0	0	1	3	
Steven Lugauer	2008	2008	4	5	2	0	0	0	0	0	0	38	3	
Sarah Miller	2012	2012	0	2	1	1	0	0	0	0	0	22	2	
Eric Sims	2009	2009	3	6	4	0	0	2	0	0	0	295	9	
Jeff Thurk	2010	2010	2	0	0	0	0	0	0	0	0	6	1	
Abigail Wozniak	2005	2005	7	8	6	0	0	1	0	0	0	152	5	
Totals				34	21	2	0	5	0	0	0	822		
Average per faculty				2.8	2.8	1.8	0.2	0.0	0.4	0.0	0.0	0.0	68.5	

In columns (4), (6), and (7) we report the number of articles in peer-reviewed journals, the number of other articles,¹ and the number of books, respectively. The numbers increase on average with rank and time since Ph.D. The numbers indicate that the average full, associate and assistant professor in the department has published 33.9, 12.7 and 2.8 articles, respectively. The average years since they earned their degree across these three ranks is 30.6, 14.2, and 2.8, respectively, so the average papers per year for these three groups are 1.1, 0.9, and 1.0. As such, the output per year per faculty is pretty consistent across all three groups.

Given our stated emphasis on quality of research, we need a metric to measure the quality of this output. One way to measure impact is to consider the quality of journals in which articles appear. There are obvious limitations with this metric. There are Type I errors (bad papers that appear in good journals) and Type II errors (good papers that appear in less selective outlets) in the publishing process, and hence, for a scholar at the beginning of his/her career with few publications, focusing solely on this metric may severely misjudge quality. However, over the course of a long career, we suspect some Type I and II errors will cancel each other out and therefore, the number and frequency with which professors publish in the best journals is a useful gauge of quality.

There are over 400 titles that can be roughly classified as economics journals and because our discipline is so quantitative, it is no surprise that there are a number of authors that attempt to rank the quality of journals. We took a simple average of the descending ranks across four of these rankings² to construct a list of the top forty journals in our profession.³ This list is reported in Appendix J. There will certainly be arguments about whether particular journals should be added or subtracted from this list and this is by no means authoritative. It is, however, a defensible list of the top 10 percent of the most prestigious journals in our profession.

Looking at the vitas of our faculty, we count the number of peer-reviewed articles that appear in the top 10 percent most cited journals. This number is reported in column (5) of Table 7 and the number is relatively high for all ranks in our department, sitting at 55.4%, 52.6%, and 61.7% for full, associate and assistant professors, respectively. We view the fact that nearly sixty percent of the journal articles written by our faculty appear in the top ten percent most selective journals as an excellent indication of quality.

¹ In this category, we include articles that are not in peer-reviewed outlets such as conference proceedings, edited book chapters, publications written for organizations such as the World Bank, International Monetary Fund, the Federal Reserve Board of Governors, etc. We also include papers in the *American Economic Review Papers and Proceedings* as not peer reviewed.

² The four rankings we used are as follows. 1. Total citations to a journal from 2007 – 2011 from Journal Citation Reports, Thompson Scientific ISI Web of Science. 2. Pantelis Kalaitzidakus et al., “An Updated Ranking of Academic Journals in Economics.” *Canadian Journal of Economics* 2011, 44(4), 1525-1538. 3. Yolanda Kodrzycki and Pingshan David Yu, “New Approaches to Ranking Economics Journals,” September 2005, Working Paper 05-12. Federal Reserve Bank of Boston. 4. Kristie M. Endemann and Howard Wall, “A Journal Ranking for the Ambitious Economist,” *Federal Reserve Bank of St. Louis Review*, May/June 2009, 127-140.

³ We made two ad hoc interventions into this ranking procedure. First, we added the four *American Economic Journals* to this list. It is clear from impact factors from the Journal Citation Reports produced by Thompson Scientific ISI Web of Science that these four journals are now part of the top forty most prestigious journals. However, the three other rankings that we use were constructed before these new journals were listed. Second, though it is one of the forty most cited journals in our profession, we did not include *Economic Letters* in the list. This journal is for short, three-to-four page papers and hence, is not a publication that our department considers as a goal for most papers.

To provide some objective measure about the productivity of colleagues at aspirational departments, we downloaded vitas for full professors from economics departments at five private universities ranked in the range of twenty to thirty-five according to the 2009 US News and World Report (USNWR) rankings of graduate programs in economics.⁴ These departments (USNWR Rank) are from the University of Rochester (22), Boston University (24), Johns Hopkins University (25), Boston College (31), and Vanderbilt University (34). In Table 8, for full professors at Notre Dame and these five departments, we report the per capita number of articles published in peer reviewed journals, and the number and the fraction of these articles that appear in the top ten percent most selective journals.⁵ The results from this exercise are reported in Table 8.

Table 8
Per Capita Articles in Refereed Journals among Full Professors at 6 Private Universities

School (USNWR Economics Rank 2009)	# Full professors	Per Capita # Articles in Refereed Journals	Per Capita # articles that appear in the top 10% most cited journals	% that appear in the top 10 most cited
Notre Dame	7	33.9	19.4	57.2
University of Rochester (22)	8	52.5	20.0	38.1
Boston University (24)	21	41.8	20.9	50.0
Johns Hopkins University (25)	12	43.8	25.4	58.0
Boston College (31)	18	37.5	18.1	48.1
Vanderbilt (34)	22	56.8	17.1	30.1

The numbers in the table are instructive. First, the size of the full professor rank for some of these departments dwarfs that of Notre Dame. Boston University and Vanderbilt have three times as many faculty members at that rank than Notre Dame, Boston College is 2.5 times as large and Johns Hopkins is 1.7 times as large. Second, our senior faculty output of 33.9 articles per capita is lower than these other departments. However, the per capita number of articles that appear in the best journals is greater than that at Vanderbilt and Boston College, comparable to that at Boston University and Rochester but below that at Johns Hopkins. It is not a stretch to say that on a per capita basis, the number of quality publications by our senior faculty is comparable to departments in the top twenty-five. Third, given our lower output but high number of articles that appear in the top ten percent of the most prestigious journals, it is no surprise that among senior faculty at Notre Dame, our department has the second highest fraction of articles published in the most prestigious journals.

As another marker of quality, we utilize citation counts to articles as a measure of article quality. There are a number of citation services available (ISI Web of Science, JSTOR, ECONLit) but for ease of use, we utilize Google Scholar citations. Every faculty member in our department

⁴ <http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-humanities-schools/economics-rankings>.

⁵ We should point out at the start that for Notre Dame we have a census of all faculty vitas. In contrast, for some faculty at each of these other departments, we could not find online vitas for some faculty. Our cursory inspection of sources such as Google Scholar leads us to believe that faculty members with missing vitas tend to be the least productive scholars, meaning that the per capita numbers in the comparison set will be inflated.

constructed a Google Scholar page allowing us to quickly count citations to journal articles. In columns (12) and (13) of Table 7, we report total Google Scholar citations and the H index.⁶ The H index is a number “H” that indicates the author has H papers with at least H citations. The total citations measure has the advantage that it is a summary metric of total impact but the number can be skewed by a small number of papers with big cite counts. The H index is a metric that identifies sustained output and is considered a way to measure the broad impact of an individual’s work. The H index is useful in economics because it appears to closely mirror salary in the profession. In a recent working paper, Hilmer et al.⁷ examine the determinants of salaries for 1009 economics professors at fifty-three large state universities. In their analysis, fifty percent of the variation in annual salary for this group can be explained solely by the H index.

The encouraging numbers for our department are that we have three faculty members with an excess of 5,000 citations in total and five with more than 2,500 (Table 7, column 12). What is most encouraging about the future of the department is that we have three young associate professors with high citations counts (Hungerman, Kaboski and Sullivan) and three assistant professors with citations in excess of 150 (Buckles, Sims, and Wozniak). Both total citations and the H index should rise with time since degree completion, and a suggested way to scale the numbers is to consider the ratio of the H index divided by time since degree completion. This number ideally should be above one, and we have three full professors, three associate professors, and one assistant professor that meet this standard.

Another way to consider the impact of papers via citations is to count the number of citations with more than a given number of counts. In columns 7–10 of Table 7, we report the number of papers that produce a high number of citations according to Google Scholar, categorizing them in four overlapping bins: ≥ 50 , ≥ 100 , ≥ 250 and ≥ 500 . These numbers are selected to reflect papers that have increasing importance in the profession. To give some frame of reference, in the Hilmer et al. working paper,⁸ the authors note that according to ISI Web of Science, among papers published for the sample they consider, a third of the papers have no citations, five percent have more than fifty-two citations and only one percent have more than 137 citations. In economics, citation counts tend to be much larger in Google Scholar than in ISI Web of Science, but the fact remains that a small fraction of all papers in our profession will meet these standards and hence, counts of articles in these bins will be counts of papers with impact. Among our full professors, there are 115 papers with 100 or more citations and nine papers with 500 or more. We are quite pleased that among our associate professors there are six articles with 100 or more cites, and among assistant professors there are five papers with fifty or more.

⁶ J.E. Hirsch, “An Index to Quantify an Individual’s Scientific Research Output.” *Proceedings of the National Academy of Sciences* 2005, 102(46), 16569-16572.

⁷ Christiana Hilmer, Michael Hilmer and Michael Ransom, “Fame and Fortune of Academic Economists: How the Market Rewards Influential Research in Economics.” Working Paper, Department of Economics, Brigham Young University, 2011.

⁸ *Ibid.*

Table 9
Total Number of Articles by Google Scholar Count and Articles per Faculty Compared to other Private Schools

School (USNWR Economics Rank in 2009)	# faculty	Total # of articles with Google Scholar citation counts in excess of			Per capita # of articles with Google Scholar citations in excess of		
		≥100 citations	≥250 citations	≥500 citations	≥100 citations	≥250 citations	≥500 citations
Full professors							
Notre Dame	7	71	24	9	10.1	3.4	1.3
University of Rochester (22)	8	59	25	14	7.4	3.1	1.8
Boston University (24)	21	247	104	50	11.7	5.0	2.4
Johns Hopkins University (25)	12	150	51	21	12.5	4.3	1.8
Boston College (31)	18	143	48	21	7.9	2.7	1.2
Vanderbilt (34)	22	147	40	11	6.7	1.8	0.5
Associate Professors							
Notre Dame	6	7	0	0	1.2	0.0	0.0
University of Rochester (22)	5	2	0	0	0.4	0.0	0.0
Boston University (24)	9	21	4	0	2.3	0.4	0.0
Johns Hopkins University (25)	2	2	0	0	1.0	0.0	0.0
Boston College (31)	9	11	4	3	1.2	0.4	0.3
Vanderbilt (34)	4	2	0	0	0.5	0.0	0.0
Assistant Professors							
Notre Dame (24)	12	0	0	0	0.0	0.0	0.0
University of Rochester (22)	12	2	0	0	0.2	0.0	0.0
Boston University (31)	14	6	1	0	0.4	0.1	0.0
Johns Hopkins University (25)	4	0	0	0	0.0	0.0	0.0
Boston College (31)	10	0	0	0	0.0	0.0	0.0
Vanderbilt (34)	4	4	0	0	0.7	0.0	0.0

How do these counts compare to faculty at our aspirational peers? In Table 9, we report the counts of papers with more than 100, 250, and 500 citations for faculty from Notre Dame and the five comparison schools at all ranks. In the final three columns, we report the counts on a per capita basis to take out the vastly different scales of the departments at some ranks.

Among full professors, on a per capita basis, the counts of papers with more than 100, 250 and 500 citations at Notre Dame always exceed the schools ranked thirty-one and thirty-four on USNWR. On these three metrics our output is comparable to that of Rochester for papers with 250 or more cites and we are trailing the output of Johns Hopkins and Boston University. We should note that these departments do have two to three times the senior faculty as Notre Dame. Among associate professors, the output of our faculty in quality publications with 100 or more citations is comparable to all schools except Boston University.

The results in Tables 8 and 9 are instructive. Although we are very small compared to most top twenty-five departments (see Table 11 in section II.B), the external hiring at Notre Dame since the last external review thirteen years ago has produced a group of tenured faculty that are producing quality papers at a rate that is better than departments ranked in the thirties and comparable to departments ranked near twenty-five in the USNWR rankings. As the department grows and we continue to make hires that produce at comparable rates to existing faculty, we will have a department that has quality output that rivals departments in the top twenty-five.

Relations with Research Centers on Campus

As with any major university, many research endeavors on campus are attached to academic centers. These centers are designed to produce synergies in research around focused topics with the goal being that the sum is greater than the parts. In this section, we discuss our relationship with some centers on campus and discuss how these might change over time.

To date, it is fair to say that faculty members in Economics have had, on average, little more than cursory interaction with most academic centers on campus. For example, four faculty members from Economics are faculty affiliates at the Center for Children and Families (CCF) and four are faculty fellows at the Institute for Education Initiatives (IEI). In both of these cases, there does not seem to be much in the way of overlap in research beyond attending some joint seminars and presentations. Part of this may be that the centers offer little overlap with Economics research. Although the overall mission of the CCF is broad, it is primarily composed of psychologists who run research programs on child development and parenting skills for members of the local community. This research method is pretty far removed from what economists do on a day-to-day basis. Likewise, the mission statement for IEI is fairly broad (it is designed to be the intellectual home for academics with "...a shared interest in K-12 education."). However, our impression is that IEI has had a particularly narrow focus (Catholic K-12 education), and it has had a much bigger role in advocacy and education practice than research to date. This may change as IEI has recently established a Center for Education Policy, which may prove to have more overlap with economic research.

There are two centers that seem to have natural partnerships with Economics: the Kroc Institute for Peace Studies and the Eck Center for Global Health. Kroc is an interdisciplinary program that seeks to study "...the causes of violent conflict and strategies for sustainable peace."

As economists, we suspect that research on the economic causes and consequences of conflict would be an important topic, but to date there are no economists from the department that are part of Kroc. In 2008, we did have a joint faculty search with Kroc, but that did not produce a hire and Kroc has not been willing to sponsor any hires in our department since that time. Eck's research program is in global health with a particular emphasis on developing countries. This is a large research program in economics in general but we currently have no faculty members with this as a research interest. Without additional hires in our department in this field, it is not clear we will have much overlap with Eck.

We are pleased that our colleague Nelson Mark has been named acting director of the University's fledgling Institute for Asia and Asian Studies. Going forward, this may be a good opportunity for our department to interact with other experts on Asia, which will be particularly important given the growing interest in research on international economics among our faculty.

The center with the greatest participation from Economics is the Kellogg Institute for International Studies. Economics currently has eleven faculty members who are Fellows in the Institute. Our past experience collaborating with the Kellogg Institute has been checkered. On the positive side, Kellogg has sponsored three economics conferences and a visitor's course, provided multiple internal seed grants for research projects, funded doctoral grants for graduate students, and contributed to the research accounts of our faculty.

Our existing Memorandum of Understanding (MOU) with Kellogg involves the hiring of three persons in economic development, which falls under Kellogg's goal of building an interdisciplinary program in "Human Development". Kellogg has agreed to pay half of the first and half of the third positions. The first position of our MOU is currently filled by Simeon Alder, an assistant professor. Another position was filled for three years by another assistant professor (Molly Lipscomb), who left last year, and it will be filled next year by an incoming assistant professor (Kevin Donovan). They have also approved several other people who did not ultimately accept our offers.

On the negative side, there have been other important cases where Economics regarded candidates as a clear fit with our MOU and the previous Kellogg leadership did not. Two primary examples are:

- Timothy Conley, an applied spatial econometrician then at Chicago, teaches economic development at the graduate level, has published important development papers in the top journals, and currently has two separate projects involving field research in developing countries. He was not deemed satisfactory for fulfilling our MOU with Kellogg, and he was not hired.
- Joe Kaboski has field work in Africa with Catholic Relief Services, an NIH and Kellogg grant for a second field project in Uganda, and was the 2012 recipient of the Frisch Medal for his work in economic development (this award is one of the more prestigious honors in the profession). Kaboski has been strongly involved with Kellogg during his three years at Notre Dame, but when we were recruiting him, Kellogg's Ford Program did not approve him for a funded position.

More broadly, we have had difficulty in the past agreeing on how Economics fits into Kellogg's goals of building their Program in Human Development. Relative to other departments, whose natural relationship to this program is less obvious, our current MOU is rather modest. For example, Kellogg provides one funded position (two half positions) matching a commitment of two positions (one full and two half positions) from Economics. Sociology, Anthropology, and Political Science each have one funded position (without matches). Political Science has an additional 3 positions in Latin American studies and History has two positions.

We are nonetheless hopeful about our future relationship with Kellogg. The current leadership has actively solicited input from key Economics faculty and has viewed our candidates in a more positive light. Kellogg's current Advancing Our Vision/Strategic Hiring Initiative has been designed in collaboration with the Economics faculty. It calls for multiple fully-funded positions in economic development and growth and is therefore viewed as an important part of our future hiring.

The Department of Economics does have one research center—The Lab for Economic Opportunities (LEO), which explores outcome-driven poverty solutions through rigorous impact evaluations. The unique aspect of LEO is that Notre Dame has partnered with Catholic Charities, the largest private provider of services to the poor in the U.S. The partnership combines the rigor of a large network of academic researchers anchored at the University of Notre Dame with Catholic Charities national network of social services providers. Faculty from the University of Notre Dame, as well as scholars from across the country with expertise in designing and evaluating anti-poverty programs, conducts the Lab's research. LEO is a new center that was co-founded by Professors James Sullivan and William Evans and was officially launched in September 2012. To date, the Lab has raised private funds and pledges of roughly \$400,000, and has received about \$200,000 in start-up funds from the University. The Lab has also received a suite of four offices in Flanner Hall. Moving forward, the business model for the Lab will be to use grants and external funds to pay for direct costs of research and use endowed funds to pay for center infrastructure to support research. The goal of the Lab is to become self-financing in very short order. We expect LEO to be a strong source of high quality research output and to become a center of intellectual activity for the department.

Given the collaborative process of much research and the spillovers from colleagues, aggregate productivity should increase as the number of economists on campus rises. We learn from others, and thus, the greater the number of interactions between faculty members, the more scope there is for better research. In this section and elsewhere (see Table 11 of section II.B), we document that our department is small relative to programs at elite universities. This disparity in size is an understatement given how few economists there are throughout the other departments at the University, a fact that again sets us apart from other aspirational programs. At most universities, economists have a presence in a variety of academic units, including policy schools, schools of the environment, medical schools, public health programs, departments of political science, law schools, and especially business schools. At many top schools, the number of economists outside of traditional economics departments tends to rival the size of the departments. We give two examples. Duke University lists on their departmental web page forty-three faculty members whose primary appointment is in the economics department at the rank of assistant, associate or full professor. They list another thirty-four faculty members that have secondary appointments in economics from such programs as the Fuqua School of Business, the Sanford School of Public

Policy, and the Nicholas School of the Environment. The University of Michigan lists on their web page forty-four assistant, associate and full professors as having their primary appointment in economics. We count at least another thirty-one economists in similar ranks throughout the university including ten economists in the Ford School of Public Policy, nine in the Ross School of Business, four in the Michigan Law School, seven in the School of Public Health, and one in the School of Education.

At Notre Dame, there are few economists outside of our department that produce the potential for collaboration and academic spillovers. There are economists associated with the former Department of Economics and Policy Studies in various departments throughout campus, but history has clearly shown that this group is neither interested in working with, nor interested in the same type of research as members of our department. Peg Brining in the Law School has a Ph.D. in economics and a number of people from our department have contributed to her Law and Economics seminar. Her school's growing interest in law and economics may offer the potential for collaboration in the future.

The most notable discrepancy between the way Notre Dame operates and many other institutions is the small number of economists in the Mendoza College of Business (MCOB). We count only four faculty members in the MCOB with a Ph.D in economics (Jeffrey Bergstrand, Thomas Cosimano, Barry Keating and Richard Sheehan). The first two in this list have been active participants in departmental activities including attending seminars, co-authoring papers with graduate students, co-authoring papers with faculty, assisting with recruiting, etc. Professors Bergstrand and Cosimano have been exemplary colleagues to us and for these efforts, we are very grateful. Despite these positives, we feel a lack of economists at the MCOB is a factor limiting economics as a discipline on campus, which may be hard to rectify without a greater number of economists in our department.

Summary of Relations with Research Centers on Campus

As we move forward, a few facts are evident. The current research interests of institutes such as Kroc and Eck do not seem to harmonize with what we are trying to accomplish in Economics so it is not clear how we can move forward with these centers. Given the large applied micro group and the number of scholars in our department with interests in education, we see some hope in working with IEI in the future as it attempts to become a more research-oriented institute. Given its size and its current focus on expanding the research portfolio in Human Development, it is clear that the department needs to work more closely with Kellogg in the future. We are cautiously optimistic that the current Kellogg leadership sees a much larger role for Economics. However, we have little idea of where our existing and minimal relationship with Mendoza can evolve from here.

Grant Activity

In Appendix K we report grant activity by current faculty members since 2003, when the new department was formed. The information is arranged alphabetically and we provide the source of the funds and the size of the grant (direct plus indirect costs).

External grant activity in the department to date can only be described as modest. Only eight faculty members list having successfully raised grant money from external sources. In comparison to research output, which was much broader based across ranks and fields, success at raising external grant money has been heavily concentrated among faculty in the Applied Microeconomics fields. This is due to a number of factors. Applied Microeconomics fields such as Labor Economics, Public Economics, Health Economics, and the Economics of Education have traditional outlets such as the NSF, plus other sources of funds such as foundations (Russell Sage, Smith-Richardson, Russell Sage, WT Grant, Spencer, Kresgee, etc.), the National Institutes of Health, and various federal agencies (Housing, Education, Health and Human Services). For researchers in certain fields such as Microeconomic Theory, Econometrics, and Macroeconomics, a pool of research dollars is available through the National Science Foundation (NSF), but this outlet is very competitive. For some of these fields, there are few other outlets.

To provide some basis of comparison, we provide for the five private schools examined above the fraction of faculty within each rank that has had an external grant since 2009. We obtained the data from other departments by viewing the online vitas of faculty members and we assume that faculty would list external grant success. In some cases, we could not find online vitas for certain faculty members, and hence, they were not included in the fraction. This is an admittedly coarse measure in that it does not count the number of grants or the size of awards. It treats a \$2 million center grant the same as a \$5,000 planning grant, but without better data on vitas about the size of awards, this is the best we can do.

The results of this exercise are reported in Table 10. There is considerable variation in funding levels across departments. Among full professors, the fraction with funding stretches from a low of 0 to a high of thirty-five percent, and among associate professors, this number ranges anywhere from 0 to 62.5 percent. At all ranks, the fraction of our faculty with external funding is in the middle of the distribution, being the third highest amongst full and assistant professors and second highest among associate professors. On a per capita basis, we can say that the fraction of faculty with external grants is comparable to fractions that one would see among departments from private schools ranked near twenty-five.

Although the numbers in Table 10 are encouraging, it is clear that the department has to do a better job of raising external funds. We need increased representation across fields and across ranks in externally funded projects. These funds will give us greater flexibility in funding graduate students and release time from teaching, which will enhance academic output. Although some faculty members have submitted to outlets like NSF and NIH in the past, there has to be greater effort from the department to encourage younger scholars in particular to seek out these funds.

A factor the department will have to deal with as it attempts to raise grant money is how to staff projects. One benefit of having externally raised funds is the ability to hire research assistants on projects. However, the small size of our graduate program limits our ability to employ research assistants. Given the way that the program is structured, few first years will be eligible to work and more advanced graduate students are used as instructors, leaving faculty with few options in selecting appropriate research assistants. Moving forward, if the graduate program does not expand in size, we will have to think about other staffing models, such as using post-docs.

Table 10
Percent of Faculty by Rank that Received External Funding at Any Time 2009-2012
at Notre Dame and Other Institutions

School (USNWR Economics Rank in 2009)	# faculty	% with External funding 2009-12 ^a
Full professors		
Notre Dame	7	28.6%
University of Rochester (22)	8	12.5%
Boston University (24)	21	35.0%
Johns Hopkins University (25)	12	0.0%
Boston College (31)	18	35.3%
Vanderbilt (34)	22	27.3%
Associate Professors		
Notre Dame	6	50.0%
University of Rochester (22)	5	12.5%
Boston University (24)	9	62.5%
Johns Hopkins University (25)	2	0.0%
Boston College (31)	9	29.7%
Vanderbilt (34)	4	25.0%
Assistant Professors		
Notre Dame (24)	12	25.0%
University of Rochester (22)	12	9.1%
Boston University (31)	14	36.4%
Johns Hopkins University (25)	4	25.0%
Boston College (31)	10	0.0%
Vanderbilt (34)	4	0.0%

^a Percentages in this column are based on the subset of faculty for which we could find vitas.

One hope for greater external funding is LEO. As a research center, a primary activity of LEO will be to apply for external support for research projects. These external grants will provide direct support to faculty, graduate students, and undergraduate majors within the Department of Economics.

Summary of Strengths and Weaknesses

Strengths

- Our department's goal to focus on the quality of research seems to have paid off. Nearly sixty percent of the papers by faculty in our department appear in the top ten percent most cited journals in our profession. This is consistent across all ranks.
- On a per capita basis, our faculty is producing at a pace in quality that rivals departments in the top twenty-five.

- The aforementioned suggests that if we keep hiring and imposing tenure standards that are consistent with this rising productivity, our reputation will continue to improve as we as a faculty grow.
- Our grant activity is representative on a per capita basis of what occurs at top twenty-five departments.
- We are hopeful that LEO will help to enhance even further the research reputation of the department and to increase the extent of successful grant activity.

Weaknesses

- Our faculty members have generated little in overlap with research centers and departments on campus.
- The most discouraging aspect of this limited interaction has been the poor relationship with MCOB. This contrasts with other elite universities where economics and the business school typically have much stronger ties.
- Although our largest partner has been the Kellogg Institute, our impression is that the relationship has not been particularly rewarding. We are, however, hopeful that new leadership at Kellogg may mean greater engagement by our faculty with the Institute.
- We feel that our department has to be more aggressive at raising grant money in the future.

Faculty

In this section, we describe the current faculty in the Department of Economics along several dimensions including research fields, diversity, and teaching responsibilities. We also discuss how we arrived at our current composition, highlighting key features of our new hires and our development and mentoring of faculty.

Description of Current Faculty

The Department currently has twenty-seven tenured or tenure-track faculty members: seven full professors, six associate professors, and fourteen assistants (including three junior hires committed to join us during the 2013-2014 academic year). The research interests of the faculty are spread across the primary fields in economics that comprise the bulk of research in our discipline:

Development: Alder, Kaboski, Donovan

Econometrics: Hagemann, Lee

Economic Demography: Buckles

Economic Theory: Gresik, Jensen, Johnson, Rath

Environmental: Jensen

Health: Buckles, Evans, Lieber, Miller

Industrial Organization: Gresik, Jensen, Johnson, Thurk

International Finance: Flood, Mark

International Trade: Brooks, Gervais, Thurk

Labor: Buckles, Doran, Evans, Leahy, Sullivan, Wozniak

Macroeconomics and Monetary Economics: Alder, Brooks, Flood, Fuerst, Kaboski, Lugauer, Mark, Pries, Sims

Public: Evans, Gresik, Hungerman, Miller, Sullivan

As we discuss in section III.E, our growth strategy is to continue to build these primary fields. A strong foundation in these fields will create an environment where other fields can evolve organically and thrive over time.

Counting new hires, the department (including special professional faculty) consists of four women and twenty-five men. Two faculty members are Asian or Asian American. One faculty member is Indian. This composition speaks to the challenge of recruiting high quality female and minority economists to Notre Dame (for example, only about a quarter of applicants for our junior

positions are female). We have made a concerted effort to improve our diversity along both of these dimensions with only modest success. This year, six of the fourteen junior candidates invited to campus were female and three of fourteen were minorities. Two of the seven offers we made were to females and one of the seven was to a minority. Last year, six of the twenty-one junior candidates invited to campus were female and four of twenty-one were minorities, and six of the eleven offers we made were to females and one of the eleven was to a minority. Retaining high quality women and minorities is also a challenge. Since the start of our department, only one faculty member has left for an academic position elsewhere (Molly Lipscomb, to the University of Virginia) and she was female. One clear vacuum in the department is the absence of a senior female faculty member.

Appendix Table L.1 in Appendix L reports the number of credit hours taught at each rank from 2008 through 2012. The assistant and associate ranks have experienced the largest gains in terms of the number of people teaching at each rank. The total number of credit hours taught has more than doubled since 2008 from 4,274 hours per year to 8,651 hours per year reflecting the large increase in demand for Economics courses. The average number of credit hours taught per full-time faculty member per year was 211 hours in 2012. This is similar to the figures from 2009 to 2011 and slightly below the 2008 figure due to the increase in the number of faculty. Appendix Table L.2 in the appendix reports the percentage of credit hours taught at each rank from 2008 through 2012. The percentages fluctuate due to the variation in the number and rank of new hires and faculty on leave in a given year. In 2012, full professors accounted for seventeen percent, associate professors fourteen percent, assistant professors thirty-two percent, special professional faculty nineteen percent, and graduate students eighteen percent of credit hours. Of these 2012 percentages, the graduate student percentage is significantly lower than in the previous four years. This is due to variation in the number of fourth and fifth year students available to teach.

Hiring, 1997-2013

The 1997 external review report identified several weaknesses in the quality and the composition of the faculty. The report emphasized that the policies in place at the time had led to a “diminution in importance in applied areas where microeconomics and econometrics are applied to policy questions.” They reported that the department had “little to no research effort in several fields commonly found in conventional departments, including public finance, modern labor economics, industrial organization, environmental economics, health economics, technological change, and productivity growth.” The review team recommended that the department follow a hiring strategy that first focused on hiring “one or two prominent senior chair-holders” with an emphasis on empirically oriented, applied micro economists. Regardless of the research interests of new hires, the review team made clear in their report the need to “find people with outstanding research skills...and to remain active on several fronts—research, policy debate, teaching, mentoring, and building the stature of the Notre Dame department over the long run.”

Of the twenty-seven tenured or tenure-track faculty listed in Appendix M, only three were members of the department in 1997 (Leahy, Lee, and Rath).⁹ Jensen joined the department in 2000 and has chaired the department since 2001. A key dimension of the department’s hiring strategy—consistent with the recommendations in the 1997 report—has been a persistent effort to recruit

⁹ Short vitae for all but the most recent hires (Lieber and Donovan) are compiled in Appendix O. These vitae report education history, employment history, publications, external grants, editorial positions, distinguished professional activities, and graduate student placements for each faculty member.

prominent economists for endowed chair positions. These efforts led to the successful recruiting of Waller, Mark, Evans, and Fuerst. Evans is also the University's first Keough-Hesburgh University professor.¹⁰ We have also made two hires at the associate level (Kaboski and Pries). One of these hires (Kaboski) recently won the Frisch Medal for his research on economic development; he has been honored with an associate endowed chair; and departments in the top twenty have approached him.

Most of the growth in our young department has been at the junior level—we have made seventeen junior faculty hires since 2002. There are a number of indicators that many of these junior hires that we have made have been high quality hires. Our first two junior faculty members to come up for tenure (Sullivan and Hungerman) have been promoted (two more assistant professors, Buckles and Wozniak, are currently being reviewed for tenure and promotion). Hungerman was recently honored with an associate endowed chair. Also, as noted in section II.B, we have successfully recruited junior faculty who had offers from other reputable economics departments such as Virginia, George Mason, Ohio State, Purdue, Rice, and Vanderbilt. And as discussed in the Research subsection of section II.A, our junior faculty members have demonstrated some success in quality publishing—more than sixty percent of the articles published by our junior faculty appear in journals ranked in the top ten percent. Moreover, one of our assistant professors (Sims) was recently honored with an endowed college chair in recognition of his outstanding research.

Mentoring of Assistant and Associate Professors

Since much of the recent growth in faculty has occurred at the junior level, the department has made a concerted effort to develop and mentor our assistant professors. Junior faculty have benefitted from senior leadership across many fields, including endowed chairs in both Applied Microeconomics and Macroeconomics. Much of this mentoring occurs informally, but specific examples include: a lively brownbag seminar series—one in Applied Microeconomics and one in Macroeconomics—where junior faculty are encouraged to present preliminary work, and the standard practice of having senior faculty read and comment on the work of our junior faculty. In addition, several department and college policies have helped our junior faculty to establish a research agenda, such as reduced teaching loads; a generous course buyout rate; research leaves; and minimal service requirements. Several of our junior faculty members have been able to secure one (or even two) years of research leave while on the clock.

One cost of minimal service requirements for junior faculty in a department where untenured faculty are a majority is that a significant service burden falls on both associate and full professors. Several associates, in particular, are burdened with substantial service obligations such as heading up recruiting or directing the graduate program. More needs to be done to mentor and foster the development of associate professors in the department.

¹⁰ Waller gave up his endowed chair when he went on leave to serve as Director of Research for the St. Louis Federal Reserve Bank. Jensen was named an endowed chair in 2011.

Outreach

The main outreach activities of the department involve giving lectures to alumni clubs and community organizations and providing interviews for news organizations. Since joining the department, thirteen faculty members have delivered 140 lectures and ten faculty members have given 181 interviews. In addition, another long-time member of the faculty (Leahy) reported giving over 100 lectures and 100 interviews. In addition, prominent national news outlets (such as *Business Week*, *CNN*, *the Economist*, *the New York Times*, *The Washington Post*, *USA Today*, *the Wall Street Journal*, *Christian Science Monitor*, *Reader's Digest*, *Newsweek*, *the Atlantic Monthly*, etc.) have interviewed or cited research by many of our faculty members. While data on peer activity is not generally available and while this type of activity was not addressed in the 1997 external review, we believe that the data reflects a reasonable level of demand for the expertise of ND economists and willingness by a number of faculty to oblige.

To reach out to alumni of the department, we created an annual newsletter, *Increasing Returns*. This newsletter is sent to all current and former Economics majors, and is posted on our department website. The first issue was published in the fall of 2009.

The department website provides another vehicle for highlighting the activities of the department to a broad audience. However, the website is in need of a facelift, and we lack adequate support staff to offer a dynamic website that is regularly updated to reflect the most recent events and accomplishments of the department.

Operating Procedures

All departments are required to have an organization plan, a general department procedure manual, and procedures for its Committee on Appointments and Promotions (CAP) and its Full Professor Committee (FPC). The latter two committees are charged with the responsibility of leading recruiting activities and for evaluating faculty for tenure and/or promotion. The Dean must approve the plan and procedures. The Department's current plan and procedures were most recently updated in November 2012 and have been approved by the College. A copy is available in Appendix N.

Facilities, Collections, and Equipment

Facilities

The 1997 external review noted that department and faculty offices were spread over five locations; while graduate students had access to carrels in the library, they had no common space; and the department seminar room was adequate only for very small meetings. The external review committee recommended that: "it would be a tremendous improvement to house the entire department in the same building—ideally, on the same or adjacent floors. This should include common space (lounge and seminar room) as well as offices. It is particularly important not to separate the chair and the department office and the graduate students from the rest of the faculty."

Today, with the exception of one faculty member, the entire department is located in Flanner Hall (one long-time faculty member chose to keep his office in Decio Hall). Each faculty member has an office that according to University standards is at least 144 sq. ft. in size. Endowed chairs are generally assigned larger offices. All of the graduate students are assigned shared offices and there is a dedicated office where graduate students can hold office hours. Each office is appointed with adequate desk and table space, desk chairs, white board, bookshelves, and filing cabinets.

Despite having the department, faculty, and student offices in one building, it remains the case that the faculty is spread across three non-adjacent floors. The Department does not have a seminar room; rather, it shares a seminar room with another department. This room is sufficient for meetings and seminars of fifteen to twenty people but the entire department can no longer fit in this room, and it is too small for our seminars with external speakers. A non-dedicated room in a nearby building is used for these department seminars. The lounge, to the extent that one exists, can seat approximately six people and doubles as the department mail room.

The University has plans to build a new social science faculty building that would house several departments including the Department of Economics. Once built, all department offices should be located on one floor and the expectation is that we would have a larger, dedicated seminar room. Plans to construct this building are on hold until sufficient funds are raised. In the interim, the distribution of offices across three floors and inadequate seminar space is an impediment to the department's ability to function as well as possible. Space will become an increasing concern as the department continues to expand its faculty size.

Collections

The 1997 external review noted dissatisfaction by some faculty with the library facilities. This is less of an issue today as many faculty members can access needed materials electronically. There remain some issues with the selection of economics books and documents that the library acquires. The Department continues to try to work with library staff so that their acquisitions match the department's needs more closely. The library is currently in the process of hiring a collections specialist for Economics who would also be a data specialist. For this position, the library is seeking someone with strong statistical programming skills as well as experience working with large datasets. This position is being created to provide research assistance to both faculty and students in Economics.

Faculty and graduate students currently have access to all of the restricted databases available at the Census Research Data Center at the Chicago Federal Reserve Bank (Chicago RDC). Databases include, but are not limited to, IRS tax return data for both individuals and businesses; disaggregated trade data; and microdata on individuals, which includes fine geographic and employment detail. This access is the result of an agreement between the University and the Chicago RDC, and mirrors agreements that other research universities in the area (University of Chicago, Northwestern) have with that organization. Without such an agreement, individual researchers are charged for access to the Chicago RDC at a rate of roughly \$10,000-\$15,000 per year or per project.

Currently, two faculty members have ongoing Chicago RDC projects and a third has just completed one. Abigail Wozniak is using microdata to examine three decades of changes in labor

market transitions and long-distance migration. This project has also involved extensive research and training in the RDC for Ning Jia, a graduate student. Antoine Gervais currently uses microdata on U.S. services establishments to understand the impact of changes in international trade and investment policies on employment and welfare. Sarah Miller has recently concluded an RDC project that used restricted-use data (state indicators) from the National Health Interview Survey to analyze the effect of the Massachusetts health reform on healthcare utilization.

A survey of the department noted no concerns about access to databases.

Equipment

The University provides each faculty member with a desktop or laptop computer, which is replaced on a four-year cycle. The standard University funding allotment is not always sufficient for faculty working with large databases or who use computationally demanding software. Discretionary funds can be used to acquire computer equipment that exceeds the University standard issue. However, some faculty members have expressed frustration with the responsiveness of University personnel in approving requested purchases.

The Center for Research Computing (CRC) operates a state of the art High Performance Computing (HPC) facility providing advanced computing support. The current facility is composed of parallel supercomputers, clusters, grid networks and storage (around 10,000 cores and 350TB storage), which provide substantially greater processing speed and power compared to traditional desktop systems. The facility is highly secure and reliable and can be accessed securely and seamlessly. CRC systems also provide a wide range of software (e.g. Matlab, Stata) to the Economics faculty. The HPC facility is available to all Notre Dame researchers.

In 2012, the CRC was awarded an NSF grant to build a HPC facility dedicated to researchers in the social sciences. The Data Analytics Cluster for Computational Social Science (DACCSS) will provide economics, psychology, and sociology researchers with 2,600 CPU cores, 5,300GB of RAM, and 60TB of high performance storage in forty-two dedicated clustered servers connected with a state of the art network running the world's most advanced analytics software applications. The facility goes online in late Spring 2013.

Catholic Mission

The Department of Economics is dedicated to the University's goal of promoting the Catholic character of Notre Dame. This Catholic character has many facets including: (i) providing a witness to the academy of the essential compatibility of faith and reason, (ii) providing a premier economics education within a seriously Catholic university, and (iii) encouraging research programs that are related to Catholic social teaching in poverty reduction and development. It is our goal to be recognized as a top-20 economics department with a critical mass of faculty who are dedicated to the life of the mind illumined by a life of faith. As the university notes in its mission statement, "The Catholic identity of the University depends upon, and is nurtured by, the continuing presence of a predominant number of Catholic intellectuals."

We view the Catholic mission as fundamentally important. But it is also the case that it is instrumental in building a premier economics department. Notre Dame's geographic location

presents some unique challenges in the recruitment and retention of talented faculty. But Notre Dame's authentic Catholic character is unique among premier research institutions. Some prominent economists are interested in Notre Dame precisely because of its Catholic identity. We have and will continue to use Notre Dame's Catholic character as a recruitment tool for attracting top researchers who also happen to be committed Catholics. Notre Dame's Catholic character played a critical role in the successful recruitment of our two most recent externally-hired endowed chairs (Fuerst and Evans); the associate endowed chair who is this year's Frisch Medal winner (Kaboski); as well as some highly sought-after junior hires including an assistant professor who was recently honored with a college chair (Sims). We will continue to use Notre Dame's Catholic character as a recruitment tool for attracting elite researchers who also happen to be committed Catholics.

We also strive to recruit faculty of all faiths who support the mission of the University, which calls on all faculty regardless of faith to provide "...a respect for the objectives of Notre Dame and a willingness to enter into the conversation that gives it life and character."

Another important element of our Catholic mission is the research program of our faculty. The University's mission statement notes that the University must provide "... a disciplined sensibility to the poverty, injustice and oppression that burden the lives of so many." We continue to strive to find faculty whose research can provide insight into the important questions that inform the social justice mission of the church. Our faculty members are engaged in research on such topics as the measurement of poverty, the determinants of family formation, immigration, the social determinants of health, the economics of religion, the economic benefits of trade for low-income countries, Development Economics, the economics of education, the human toll of business cycles, and the causes of economic downturns. All of these research areas inform policies designed to help those most in need.

Providing a premier economics education within a serious Catholic University is another way that the department contributes to the University's mission. Our department provides a selection of courses that not only are relevant to economics in general but also resonate with the Catholic mission of the University in particular. A few notable examples include: the Economics of Catholic Social Teaching; the Development of the American Labor Force; the Economics of the Family; Labor Relations; International Trade, Development; Health Economics; Public Finance, and Environmental Economics. As our faculty size grows we expect to expand the range of such classes that are offered.

Our faculty (of different faiths) have demonstrated a commitment to the University's Catholic mission. Several of our faculty (Buckles, Doran, and Jensen) participated in the Catholic Intellectual Tradition program, an ISLA-sponsored course where faculty study Catholic teachings and how it relates to the University's mission and their own research.

Finally, one distinctive Catholic feature of our department is our engagement with Catholic and other organizations that employ our economic expertise to assist in addressing important questions for the Catholic Church and religious organizations in general. Four examples are illustrative. First, Associate Professor Joe Kaboski has for the past five years run a series of conferences for the Lumen Christi Institute, which bring together the world's best economists, including Nobel Laureates, and local bishops for a discussion on economic issues impacting the

Church and its members. These conferences have grown in size and scope and are an excellent outreach mission for the department.¹¹ Second, the department has established the Lab for Economic Opportunities (LEO), a research center devoted to finding research-driven poverty solutions. Founded by Associate Professor James Sullivan and Professor William Evans, LEO's primary partner in this endeavor is Catholic Charities who—with their network of 180 local agencies—is the largest private provider of services to the poor. LEO is first and foremost a research center and the goal is not only to enhance the research output of the department, but also to help local agencies identify which programs successfully move people out of poverty. Third, in a similar vein to LEO, Associate Professor Joe Kaboski has had a successful academic collaboration with Catholic Relief Services as he has helped evaluate one of their micro savings initiatives. Kaboski and Evans are part of a University working group that fosters greater research ties and a more sustained relationship between Notre Dame and Catholic Relief Services. Finally, Associate Professor Dan Hungerman, who is one of the world's leading authorities on the economics of religion, has twice successfully raised funds from the Templeton Foundation to hold conferences about the economics of religion. Topics in these conferences include interfaith competition for members, the interaction between religion and the secular world, the impact of religious participation on economic and social outcomes, and the social determinants of generosity.

¹¹ A copy of this year's program is available here <http://www.lumenchristi.org/catholic-social-thought/program-in-catholic-social-thought/>.

B. External Environment

Activities of Peer Institutions

As a very new, growing department, it is difficult to quantify our activities in comparison to peer institutions, all of whom have a much more established history. In previous sections, we have compared ourselves to our peers, based on articles published or citations (Research section) or based on placements of graduate students (Graduate Program section). Another useful metric is to examine with whom we are competing for prospective graduate students and new faculty.

As our department has improved, we have begun to compete for faculty and students with departments traditionally regarded as stronger than our own. Institutions we have had success hiring against on the market include Indiana, University of Washington, Virginia, George Mason, Ohio State, Purdue, Rice, and Vanderbilt. In the past two years, candidates have declined us for competing offers at Rochester, Duke, Chicago, Northwestern, NYU, and Maryland (all top twenty-five departments), and Amherst, Ohio State, and Texas. We have also seen success when recruiting graduate students; examples of programs we have recently beaten out for graduate students include Boston University, Texas, UC Santa Barbara, Iowa, Virginia, and Washington University. Programs we have lost to include Johns Hopkins, Texas, UC Davis, UC Irvine, and Cornell. These are all programs that would have qualified as aspirational peers a decade ago.

A comparison of our department with our newer, stronger set of peer institutions indicates several deficiencies at Notre Dame. First, these institutions are larger than we are. This is shown in Table 11, which compares the size of economics departments throughout the top fifty (based on the US News Rankings). Three observations about the table are worth noting. First, regardless of exactly how close our department is to the top twenty, it is clear that our department is smaller than many peers and that this is especially the case with reference to full professors. The relative paucity of senior faculty works against us both because senior scholars may be viewed as especially attractive colleagues to prospective students and faculty, and because some rankings procedures (such as those based on total citations) may favor older faculty. Second, the table in fact significantly understates the disparity between our peers and us, as the table is based on faculty in economics departments and does not include other economists located within an institution (such as in business or policy schools). At Notre Dame, there are only three active economists located in other departments. Finally, the table shows a striking disparity in support staff.

Table 11
Size of the Top 52 Economics Departments in the USNWR Rankings

Group	Total Tenure and Tenure-track Faculty						Support Staff
	Total	Full	Associate	Assistant	Named	Adjuncts	
Notre Dame	25	7	6	12	4	2	2
Departments ranked							
1-10	40.6	29.2	2.5	8.9	16.0	5.7	14.4
11-20	36.9	21.6	5.2	10.1	8.2	6.8	14.3
21-30	31.5	16.4	5.9	9.2	5.5	7.2	9.2
31-40	28.4	16.2	5.7	6.5	4.5	6.6	6.1
41-52	24.3	14.3	4.2	5.8	3.3	5.7	6.5

A second deficiency concerns seminar funding. Remarkably, our department does not currently have funding for an outside seminar series. We consulted with several institutions ranked in or near the top twenty¹²; *none* offered fewer than *three* regular seminar series. Typical funding for seminar series was around \$40,000, with a few budgets exceeding \$100,000. Not only do we lack funding for a seminar series, but, as suggested above, we also lack the staff needed to help support several regular seminar series.

A final, less quantifiable deficiency we face is the lack of a strong historical reputation in the profession.

Availability of Talent

As our reputation has improved, we increasingly see elite programs that encourage their top Ph.D. students to come to Notre Dame. Candidates also seem more open to the department than even five years ago. As part of the job market process, junior candidates are given an opportunity through a service provided by the American Economic Association to “signal” departments that they are particularly interested in. Over the past few years, the quality of candidates who formally signal us in the market has grown considerably; initially we received signals from candidates far below our bar, but this year all of the signals came from candidates at top twenty schools—two were candidates we eventually made offers to, one was a candidate we eventually hired, and one was among the very top candidates on the market this year.

One challenge in this area concerns our efforts to hire in Development Economics. This has been a key hiring goal, but we have had very limited success (although the excellent recent hire of Joe Kaboski may improve our outlook here). The development market is tighter than in many other areas of economics, and many development candidates are international candidates hailing from coastal programs; these candidates have limited enthusiasm for living in the Midwest.

An additional challenge in recruiting has been pursuing faculty who have spouses, either in academia or not. We have lost several candidates, at both the junior and the senior level, due to the inability of the spouse to find an acceptable professional position in the area.

¹² These included Texas, Maryland, Ohio State, Wisconsin, Duke, Vanderbilt, and Northwestern.

III. Future of the Department

A. Goals

In the table below, we list five overall goals for the department, and map these goals to either the College or University goal that it supports. See Appendix P for a list of the College and University Goals.

<i>Department Goal</i>	<i>College Goal(s) Supported</i>
<ul style="list-style-type: none"> • Goal 1. Offer an unsurpassed undergraduate degree program in economics. 	<ul style="list-style-type: none"> • Develop a more sophisticated and intense undergraduate education.
<ul style="list-style-type: none"> • Goal 2. Advance research excellence. 	<ul style="list-style-type: none"> • Advance research excellence.
<ul style="list-style-type: none"> • Goal 3. Offer a premier graduate degree program in economics. 	<ul style="list-style-type: none"> • Advance research excellence.
<ul style="list-style-type: none"> • Goal 4. Promote the Catholic Mission of the University. 	<ul style="list-style-type: none"> • University goal: “Ensure that the University’s Catholic character informs all its endeavors.”
<ul style="list-style-type: none"> • Goal 5. Expand the international focus of the department. 	<ul style="list-style-type: none"> • Become a more international college.

B. Details by Goal

- **Goal 1. Offer an unsurpassed undergraduate degree program in economics**

1. Tactics for Achievement

The University aspires to offer an unsurpassed undergraduate degree program. A strong Economics department is key to this mission as it provides analytical and quantitative skills that anchor work in the social sciences and the liberal arts. The number of students majoring in Economics has grown rapidly over the last seven years. This rapid growth is partly explained by institutional history, in that the department in its current form has only been in existence for a decade. We aspire to continue this growth in the number of majors without sacrificing the quality of our student population. We believe that this is possible because we are in a transitional phase as the department matures. Our fundamental tactics are to continue to strive for excellence at the principles level, and expand electives and research opportunities for our majors in their junior and senior years. In particular, our planned strategy includes:

- Increase the standards for obtaining an Economics degree, such as implementing a minimum grade point average, within the major, for graduation.

- Offer a wide variety of advanced electives for undergraduate majors.
- Increase the number of students engaged in original research. This may require moving more writing-intensive courses to the fall semester to allow students to complete the paper in time for the spring Bernoulli contest and other research competitions.
- Develop a structured research program outside of the Undergraduate Research Opportunity Program (UROP). Students would work with a professor for a year and then have their own research program. We would need to have a coordinator to oversee this program.
- Increase the number of students completing honors and senior theses.
- Offer a greater variety of smaller elective classes at the 40000-level—especially those with a major writing component—and encourage research.
- Promote and support the newly instituted International Economics major.
- Create a specialization in financial economics.
- Continue to promote the Economics Club.
- Move the best professors into introductory and intermediate classes and have them teach large lecture hall classes. This will allow more faculty members to teach upper level electives.
- Continue to have some sections taught by graduate students, but reduce the number of students in these classes.
- Sponsor events that facilitate out-of-classroom contact between undergraduates and the faculty. Encouraging such interaction becomes even more critical as the major, and class sizes, grow. Also, see discussion of the Undergraduate Enrichment Fund in section E.

2. Points of Integration

- Develop a specialization in financial economics, which will be aided by closer relationships with the Mendoza College of Business
- Collaborate with the Lab for Economic Opportunities to engage undergraduates in rigorous research evaluating domestic anti-poverty programs.

3. Indicators of Success

- Continued growth in the number of majors.
- Continued growth toward the College goal of 30% of majors writing a senior thesis.
- Establish a concentration in financial economics.
- Increase the number of students involved in research projects.
- Increase placement of Economics graduates at premiere graduate or professional programs
- Increase the number of Economics graduates finding employment at top business, consulting, and research establishments.

4. Financial Implications

- The continued rapid growth of the major will require adding more tenure-track faculty to the department. This will require substantial resources.
 - Additional Special Professional Faculty will be required to teach principles and help administer the Economics major, the International Economics major, and the Business Economics minor.
 - The Department needs more administrative staff to support the undergraduate program. Again, this will require substantial resources.
- **Goal 2. Advance research excellence**

1. Tactics for Achievement

As highlighted in the Research subsection of section II.A, Economics has made remarkable gains in its measured research productivity since the 1997 external review. Our future goal is to aggressively recruit talented academics at both the junior and senior level. Our specific tactics include the following:

- Continue to hire excellent junior and senior faculty. The evidence in the Research subsection of this report suggests that a top-tier Economics department will require at least forty tenure-track faculty members.
- Expand the relationship with Kellogg to help fund hires in Development Economics.
- Continue the focus on policy-relevant, applied economic research.
- As the faculty grows, expand the weekly seminar series that brings in top economic researchers from other universities to two seminars per week, one in Applied Macroeconomics and the other in applied Microeconomics.
- Expand support staff.
- Continue to mentor and develop junior faculty as discussed in the Faculty subsection of section II.A.

2. Points of Integration

- The continued support of Kellogg will be helpful in attracting economists specializing in work in Development Economics.

3. Indicators of Success

- Publications in the first tier of peer-reviewed journals (the upper decile of about 400 economics journals), with a special emphasis on the premier top journals.
- Increase the research ranking of the department as measured by citation indices.
- Increase faculty presentations at premier conferences and universities
- Increase submissions to and awards of externally funded projects.

4. Financial Implications

- Increased faculty hiring will require substantial resources.
 - More support staff will require resources
 - The weekly seminar series is in need of permanent funding.
- **Goal 3. Offer a premier graduate degree program in economics**

1. Tactics for Achievement

A graduate program is an integral part of any premier economics department. First, the quality of a department's Ph.D. students is one of the key determinants—perhaps second only to faculty quality—of its reputation in the profession. Second, talented graduate students help the faculty to be more productive in carrying out their research. Finally, better graduate students enhance the department's undergraduate program to the extent that the graduate students serve as instructors or as teaching assistants.

Building a new Ph.D. program is difficult, as reputation effects take time to build. Nevertheless, the department has been remarkably successful in developing a small graduate program (seven to eight students accepted per year, with four to six finishing), which has placed all of its graduates in academic positions, governmental agencies, or private consulting companies (see the Graduate Education subsection of section II.A). As our reputation continues to improve, we seek to increase the size and quality of the graduate program. While we intend to grow over time, in the medium term we will remain relatively small compared to other top programs, so that we can invest a greater amount of time and energy on a per-student basis. Our tactics include:

- Increase the size and quality of the applicant pool. The current applicant pool is slightly less than 150, and its composition is heavily skewed towards Asia. We receive very few applications from Europe and Latin America, which are sources for many high-quality applicants for other top programs. We aim to increase the number of applicants from those regions, especially from Latin America, where Notre Dame arguably has more name recognition.
- Develop relationships with economics departments at Catholic universities in the United States, so that undergraduates from those departments are encouraged to apply to our Ph.D. program.
- Develop similar relationships with five to ten universities in Latin America and Europe, to develop a “pipeline” of highly qualified applicants.
- Increase the size of the graduate program, from a current size of twenty-five to thirty to a long-run size of about sixty. This will allow us to offer a richer selection of field courses each year to our second-year (and third-year) students.
- Continue to require a “five years and done” policy, so that resources are not wasted on students who are slow to complete their dissertations.
- Continue to allow for a moderate amount of attrition, either after the comprehensive exams or after the second-year paper, so that students who would otherwise struggle to

complete their dissertations do not consume a disproportionate amount of faculty time and energy.

- Continue to offer our Ph.D. students teaching opportunities as part of the professionalization process to enhance their job market prospects. To the extent possible, have them serve as Teaching Assistants prior to teaching their own course, so as to acquire pedagogical skills firsthand from faculty who are successful teachers.
- Continue to encourage our graduate students to present their research at conferences as a means of improving their research and publicizing it.
- Increase the number of external speakers. These speakers help to expose our students to research ideas other than ones that our faculty members are currently working on. The speakers may also become more informed about the positive developments in our department, giving greater consideration to our Ph.D. students when they are evaluating job market candidates.

2. Points of Integration

- Work with the Kellogg Institute to identify universities in Latin America with whom we can develop relationships that channel their undergraduate and master's students into our Ph.D. program.

3. Indicators of Success

- Size and quality (as measured by undergraduate performance, examination scores, etc.) of the applicant pool.
- More diverse geographic composition of the applicant pool (growth in the number of applications from Europe and Latin America).
- Placement of graduates in tenure-track positions in economics departments, business schools, policy schools, and governmental research institutions, such as the Federal Reserve Banks, the IMF, and the World Bank. Over time, we should be able to begin to place our very best students in tenure-track positions at top departments.
- Time to completion of our Ph.D. students, with all students finishing in no more than five years, and some occasionally finishing in four years.
- Solid Course Instructor Feedback (CIF) scores by Ph.D. students when they teach their own courses.

4. Financial Implications

- Expanding the number of graduate stipends will require substantial additional funding.
- The stipends that we offer to our graduate students (\$18,450 for 2013-2014) are substantially below the levels offered by many of our competitors. As funding for graduate programs is transferred from the Graduate School to the College next year, it will be worthwhile to consider whether stipends to economics students can be increased in order to be more competitive.

- Some non-recurring resources may be necessary in order to visit other universities to build the relationships that direct those universities' undergraduates toward our Ph.D. program.
 - Additional resources are necessary to pay for the expenses associated with having our graduate students present their research at conferences and other professional development activities.
- **Goal 4. Promote the Catholic Mission of the University**

1. Tactics for Achievement

As noted in the "Catholic Mission" subsection of section A, the department is dedicated to the University's goal of promoting the Catholic character of Notre Dame. Our tactics for promoting the Catholic mission include:

- Continue to promote hiring of Catholic faculty at the junior and senior levels. This will include an expanded attempt to be pro-active in seeking out talented Catholic faculty.
- Develop an informal organization of Catholic economists within the profession. The organization can sponsor events at national meetings, such as academic sessions featuring prominent Catholic economists, and religious events, such as a Catholic Mass at national meetings of economists.
- Expand and develop courses on Catholic social thought.
- Support the Laboratory for Economic Opportunities (LEO) to help develop research closely related to the University's mission.
- Sponsor a monthly departmental Mass on campus for faculty and students within the department
- Continue a close relationship with Kellogg to promote faculty hiring in Development Economics.

2. Points of Integration

3. Indicators of Success

- Offer at least one section of Introduction to Economics and Catholic Social Thought or a similar course each year.
- Increase the number of Catholic faculty within the department
- Establish an informal organization of Catholic economists across the profession.

4. Financial Implications

- Expanding the number of faculty in the department will require substantial resources.

- **Goal 5. Expand the international focus of the department**

- 1. Tactics for Achievement**

The department supports the College goal of increasing the international content of our programs. This goal can be pursued at many levels from incorporating more international issues in our undergraduate classes to hiring faculty engaged in research on economic development. Our tactics include:

- Take the lead in the development and administration of the International Economics major.
- Encourage greater emphasis on international issues in undergraduate principles classes, and provide a more robust set of international courses for our majors, such as Development Economics, International Trade and International Finance.
- Sponsor economic research conferences at international venues, such as the Notre Dame facilities in Rome and London.
- Encourage exchange programs of faculty and students with international universities.
- Continue to develop our relationship with Kellogg, especially for our faculty involved in development research
- Expand our relationship with the Institute for Global Development.

- 2. Points of Integration**

- Closer links with Kellogg and the Institute for Global Development will be helpful.

- 3. Indicators of Success**

- Increase in numbers of International Economics majors
- Sponsor economics conferences at international venues.

- 4. Financial Implications**

- The rapid growth of the major requires additional administrative staff support.

C. Key Issues and Questions for External Advisors

1. What is the appropriate size and composition of the faculty, given the following goals and constraints?
 - a. Having an Economics department ranked in at least the first quartile of all Ph.D.-granting institutions in the U.S., or preferably the top twenty.
 - b. Providing reasonable class sizes for required courses and an adequate variety of electives for our roughly 400 majors.
 - c. Staffing Principles of Microeconomics for 450 students majoring in business every semester.
 - d. Becoming more international, offering more international and development courses, and the need to staff interdisciplinary courses in the new international economics major.
 - e. Further increasing the number of Economics majors, especially focusing on students who might otherwise be attracted to the undergraduate business program.
 - f. Having thirty percent of majors write a senior thesis.
 - g. Developing a highly competitive doctoral program.

2. What is the appropriate structure of the undergraduate program, in terms of the sizes of required courses at both the introductory and intermediate levels and the variety of courses offered, given the following goals and constraints?
 - a. Increasing the number of majors who continue to doctoral programs in economics.
 - b. Assisting our majors in finding both internships and post-graduate employment.
 - c. Increasing the number of courses with fewer than twenty students and decrease the number with more than fifty.
 - d. Developing a concentration in Financial Economics that provides rigorous training to majors who want to work in the financial sector.
 - e. The large number of Economics majors and Business majors served (as noted above).
 - f. The requirement that all majors take at least one writing-intensive course whose enrollment is limited to nineteen students.
 - g. The requirement that we staff one college seminar and one university seminar per semester.

3. What is the appropriate structure of the graduate program, in terms of the number of students and the variety of fields, given the following goals and constraints?
 - a. Maintaining a program with small enough enrollment that the each student gets sufficient individualized attention to complete the doctorate in five years, all graduates find credible employment, and some find excellent academic or non-academic placements. Given that the program is quite young, are there special approaches to training, incentives, or placement activities that could be used to optimize placements over the next few years?
 - b. Minimizing the service burden on assistant professors by not asking them to chair dissertation committees.
 - c. The difficulty in attracting many high-quality applicants (a problem that should decrease over time as our reputation improves). Are there special approaches that could be used to increase the size and/or quality of the applicant pool in the next few years?
 - d. The requirement that all graduate courses have a minimum enrollment of five students.

- e. The need to establish an appropriate balance between internal and external funding of graduate student stipends, and to compare our progress on this issue with our peers and aspirational peers.
4. How can the department's relationships with other units on campus be enhanced to assist it in achieving its objectives?
 - a. Should there be more hiring initiatives, such as the one with the Kellogg Institute and Ford Program (that pay half of the faculty hired in development), with the Kroc Institute, the Institute for Educational Initiatives, various departments in the Colleges of Business, Engineering, and Science, or the College of Law?
 - b. Would true joint appointments with any of these units be useful?
 5. Given that the proposed Social Science building may not be ready for many years, is there a way to more effectively use the space in Flanner so that the department faculty, staff and graduate students are more centrally located (as opposed to being spread over five floors)?
 6. How important is an active seminar series with external speakers to the intellectual health of the department and to enhancing its reputation within the discipline? Given its current and projected size, what is an appropriate number of external speakers per semester? What is the usual way to fund these among our peers?
 7. Are there one or more thematic areas that the department should develop as signature strengths? How should this shape faculty hiring?

D. Prioritized List of Resources

1. New faculty positions:
 - a. Five (5) full professors (including several endowed chairs)
 - b. Five (5) associate professors (including several college chairs)
 - c. Five (5) assistant professors
 - d. Two (2) Special Professional Faculty (SPF)

The size of our faculty has grown rapidly in the decade since the department was created, and that growth has been accompanied by a significant increase in quality. Our current faculty size—still small compared with the top twenty departments, as shown in Table 11 in section II.B—presents us with a relatively unique opportunity to continue to transform ourselves into a premier department.

The additional faculty will reduce the majors-to-faculty ratio, which has grown to 18 in the last few years (see Figure 5 in Section A), and will thus allow us to meet our goals to improve education in both the undergraduate and graduate programs. At the undergraduate level, in particular, more faculty are needed in order to reduce class sizes in the upper-level courses, offer additional electives, including the proposed financial economics concentration, and supervise more senior theses. At the graduate level, more faculty members would allow us to grow the graduate program and to offer more flexibility with field courses.

The additional Special Professional Faculty are needed not only to help teach the very large number of students taking Principles of Microeconomics each semester, but also to administer the Economics major, the new International Economics major, and the new Business Economics minor. The administration of the International Economics major requires the coordination of our department with four language departments. In addition, there is a need to staff both the gateway Exploring International Economics course as well as coordinating the capstone experience. The administration of the Business Economics minor requires some administrative-level coordination between our department and the Mendoza School of Business. There will also be substantial advising requirements associated with these new programs. There are 120 enrolled in the minor now, and twenty-seven in the new major, a number that is sure to rise when the four other languages are added this fall (thirty-five of the students admitted early have declared an intent to select this major).

As in the past, we will focus on quality first when hiring, but with a continuing eye to economists who do “policy-relevant” research—that is, research that can inform policy-makers in their efforts to design policies to address the important social problems of the day. Such research is a perfect fit for the University’s mission, and is routinely published in the leading journals of the discipline.

Our growth strategy is to build up all of the primary fields that comprise the bulk of research in our discipline—Microeconomic Theory, Macroeconomics, International Trade and International Finance, Industrial Organization, Labor Economics, Public Economics, and Development Economics. Out of a foundation of strengths across all primary fields, elite quality in one or more fields will arise organically over time. Strength in the primary fields will also allow us to support the growth of related fields of importance to Notre Dame’s mission. For example, it will be difficult to

produce a quality program in Environmental Economics, Health Economics or the Economics of Education without a strong Public Finance core. Hence, building excellence in these primary programs is a necessary first step.

As part of our recruitment strategy, we intend to continue to leverage the one feature that most distinguishes Notre Dame from other universities—its Catholic character. The appeal of working at a university where Catholicism is front and center has been an important factor in several of our most prominent faculty hires (at both the junior and senior levels) and we believe that this is a recruitment strategy that will continue to pay dividends in the future.

We hope to be able to partner with other units on campus as we expand our faculty. The current funding arrangement with the Kellogg Institute for hiring faculty in Human Development has benefited our department and could be expanded to assist in further hiring. We would also be open to arrangements to hire environmental economists in conjunction with the Environmental Change Initiative and/or the Energy Center. If the situation presents itself, our department might collaborate with other colleges or schools on campus, such as the Mendoza College of Business or the Law School, to recruit premier faculty.

2. Two additional administrative professionals.

The two assistants we have now are seriously over-burdened. As our department has grown and transformed itself, our administrative structure has not managed to keep pace with the changes. With two additional administrative professionals, we would be able to re-configure responsibilities in a way that is more in line with the size and structure of the department that we are growing into. In the new arrangement, one of the assistants would have responsibility for the graduate program, and another would have responsibility for the Economics major. A third assistant would have responsibility for the International Economics major and Business Economics minor. A fourth, slightly more senior, assistant, would have responsibility for: internal and external communications, including letters, memos, and newsletters; the content and maintenance of the website, coordination of events (conferences, lectures, and recruiting visits); gathering and compiling information for the Chairperson to support key initiatives and strategic planning; and performing other duties as needed by the Chairperson. This last position would require someone with at least a BA degree and with excellent communication skills.

3. Twenty-two additional graduate assistantships.

The Graduate School currently allocates twenty-eight graduate student stipends to our department. This is small compared to other social science departments in the College of Arts and Letters and also small relative to top twenty departments (which typically have eighty to 120 Ph.D. students at one time). We envision our Ph.D. program growing, over time, to approximately sixty students, with fifty funded by the University and the rest funded by external sources. A stock of sixty students would allow average class sizes of 12, which would make it possible to offer a richer selection of second-year field courses. Indeed, the small size of the old Ph.D. program (eight to eleven students per class) was one area that the 1997 External Review Committee identified as problematic:

“With Regard to the entering class size, we feel that it is too small to make the program sustainable. In the third or fourth year, some classes are as small as two or three students. Most Ph.D. programs admit a minimum of 15 students, and the average is probably on the order of 20-25 at the major universities. This allows a reasonable class size in the second or third year even after normal attrition.”

Currently, our small class sizes (five students on average, after attrition) mean that second year students are often forced to take each of the three offered field courses, regardless of their research interests. Graduate students at the top economics programs have much greater flexibility in regards to field course options.

The greater number of graduate students would be consistent with the growing faculty size, and would thus not represent an unreasonable burden on faculty in terms of dissertation advising. Moreover, as the department matures and the composition shifts toward a more balanced proportion of tenured and untenured faculty, the number of faculty who can advise dissertations, and who will need graduate students for their research projects, will grow. Likewise, as the undergraduate major continues to grow, the need for graduate assistants to serve as teaching assistants and instructors will also grow.

In addition to the fifty University funded fellowships, our goal is to fund, on average, five to ten additional positions through external grant funding or dissertation fellowships. We believe this commitment to be comparable to our peers, though data is hard to find (the Graduate School made an attempt last year and was unable to provide a concrete estimate of external funding for economics graduate students among our peers).

While we recognize that University donors have not historically been eager to endow funding for graduate students, we hope to be able to work with the Development Office to seek out donors interested in endowing graduate student fellowships or “top-off” funds, which would allow us to supplement our base stipends in a way that lets us compete with more generous offers from other programs.

Our intent is to grow the size of our Ph.D. program gradually—over the next 5 to 10 years. Importantly, we will not sacrifice the quality of our incoming students in order to achieve this

growth. As such, we will have to increase the number (and quality) of the applications that we receive.

4. Annual funding of \$40,000 for multiple external-speaker seminar series.

We currently have one weekly seminar series, which invites external speakers from all fields of economics. We receive no guaranteed funding for this seminar series. Instead, we piece together funding by submitting time-consuming applications to the Institute for Scholarship in the Liberal Arts (ISLA), by drawing from the department's discretionary account, and by having individual faculty use funds from their own research accounts.

Weekly seminar series like this contribute to the intellectual vitality of our department in several important ways. First, they allow faculty to stay up-to-date with research that is closely related to their own, and to interact with the leading economists working on topics similar to theirs. Second, these visits provide important opportunities for our faculty (especially our junior faculty) to discuss their own work with the leaders in their field, and to market that work. Third, our graduate students benefit greatly from exposure to the ideas and research methods of outside faculty. Finally, by bringing in leading faculty from other universities, we are able to advertise the positive trajectory of our department. This advertising pays dividends when it comes to recruiting new faculty. In the case of hiring new assistant professors, in particular, we are much more likely to attract a candidate if their dissertation advisor is someone who has been to Notre Dame and has witnessed the vibrant and collegial department that we are building.

With this funding, we would be able to support a minimum of two weekly seminar series (e.g. micro and macro). An informal poll of seven Economics departments (OSU, Wisconsin, UT-Austin, Maryland, Duke, Vanderbilt, and Northwestern) revealed that the minimum number of weekly seminar series was three, and the average was five. The minimum estimated total expenditures were \$35,000, and the average was about \$60,000.

Over time, we hope to raise endowment funds that can provide the resources for these seminar series. Until we are able to do so, this need will require internal funding.

5. Annual funding of \$20,000 for an "Undergraduate Enrichment Fund"

This fund would allow the department to host events that would enhance the out-of-classroom experience of our undergraduate majors and foster greater interaction between faculty and students. Examples of such events include:

- A beginning-of-the-year "meet and greet" barbeque for faculty and Economics majors.
- "Coffee house" chats with faculty about their research or about current economic debates.
- Lectures or presentations by prominent ND Economics alumni who come back to talk with our undergraduates about their jobs in the business world, government, or academia. In addition to the obvious benefits for our undergraduates, this helps our department to build a strong network with alumni (i.e. potential donors).
- A "mixer" event with undergraduates that would be held just prior to the class registration period, which would allow students to meet the faculty who will be teaching the courses being offered and to get general advice on the sequence in which they should take courses.
- Gatherings (e.g. at faculty homes) with students interested in pursuing a Ph.D. in economics.

- Lectures by prominent external economists that are designed for undergraduate audiences
- End-of-year Economics graduation/award ceremony.

Opportunities to socialize with faculty outside the classroom serve to make classroom interactions more comfortable and friendly, and, more generally, to enrich the overall undergraduate experience. This fund would go a long way toward enhancing this aspect of our majors' experiences. It is especially important for a very large major such as ours, where there is a risk that the students feel less connection to the faculty and to the major.

We currently receive an annual amount of \$5,000 for general entertainment. That amount is used almost entirely for the end-of-year Economics graduation/award ceremony, which leaves essentially no resources for the other kinds of activities outlined above. An annual budget of \$20,000 would go a long way toward enhancing our undergraduates' experiences and their connection to the major.

We hope to continue to work with the Development Office to identify a donor interested in endowing this Undergraduate Enrichment Fund, as it would seem like something that would appeal to our alumni who have such a strong interest in preserving the strength of our undergraduate education.

6. Annual \$10,000 "Graduate Enrichment Fund"

Like the "Undergraduate Enrichment Fund," this would provide the resources necessary to hold events that foster out-of-the-classroom interaction between faculty and graduate students. We already hold several of these activities (beginning of the year dinner gathering to welcome new graduate students, student-faculty softball games, Christmas party, etc.), but we do not have a dedicated budget for them (the faculty pay for the Christmas party out of their own pockets). It would be useful to have a fund to finance these activities. The relationship between graduate students and faculty is naturally one with frequent, very hands-on interaction. Since we continually push and challenge our graduate students as they develop their dissertations, and because we occasionally must be quite critical of the students' efforts, it is important to have opportunities for positive, amicable interactions, which create the foundation of trust and collegiality that allows us to be tough with them.

Currently, the only budget items for the graduate program are \$8,000 annually from the graduate school for recruitment of new students and \$4,000 for professional development activities by our graduate students (travel expenses for conference presentations, etc.). Those funds are typically fully exhausted each year, leaving nothing for the kinds of activities outlined above. We believe that an annual amount of \$10,000 would allow us to significantly improve the experiences of our graduate students, which will in turn allow us to attract higher quality students.

Although these kinds of activities are not typically as appealing to university donors, we hope to be able to work with the Development Office to attract gifts that can, over time, cover this budget item.

7. Space needs

Contiguous space (in advance of the much-delayed social science building) would be very helpful. We are currently spread over three floors of Flanner Hall. There appears to be space on those three floors for growth of two or three more faculty members, but growth beyond that will require planning for additional space in the future. Moreover, as our graduate program grows we will need additional office space for graduate students. Reconfiguring our space from the current arrangement to one in which we occupy one floor by ourselves, with additional space on an adjacent floor, would lead to more cohesiveness and further enhance our intellectual community.

Resources the Department Can Reallocate

Aside from wages, salaries, and benefits, the department's current budget includes:

Duplicating/Copying	\$3,000
Telecommunications-Toll	\$700
Supplies	\$4,000
Entertainment-General	\$5,000
Rental Equipment	\$1,200

Most of the entertainment budget goes to the annual reception for graduating majors and their families during graduation weekend. These other budget items are minimal—there is nothing to reallocate here.

The department does have a discretionary account with approximately \$57,000 in it now. This account earns no interest, and the only additions are generally the funds for seminars provided by ISLA in the last three years (we get occasional contributions, but these are rare). We have been drawing on this account heavily the last few years to pay the seminar expenses not covered by ISLA (last year this amount was roughly \$6,850) and other non-routine expenses. We intend to continue our careful stewardship of this discretionary account, but the increased recent rate of expenditure and the growing needs of our expanding department suggest that this funding source will be exhausted in the coming years.

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Appendix A: Program Requirements

Program of Studies. The major is designed to make a unique contribution to the student's liberal education. The program provides students with the insights of scientific analysis and social perspective to deepen their understanding of the complex economic forces at work in society. Such an understanding is an essential ingredient in the development of an educated person. The program is also designed to prepare the student for a variety of options after graduation, including graduate programs and managerial programs in business and finance.

Requirements for the Economics Major:

(i) *Total Course Requirement*

Students must complete the two-semester Principles of Economics sequence (10010/10011/20010/20011 and 10020/20020 or equivalent). Beyond the Principles courses, the major requires a minimum of eight (8) additional course (24 credits) in economics at the junior/senior level (numbered 3xxxx or 4xxxx).

(ii) *Math Requirement*

A course in Calculus (MATH 10260 or equivalent) is a prerequisite for both of the intermediate theory courses. (See core requirement below). Simultaneous enrollment in Calculus II is permitted but not recommended.

Recommendation: It is strongly recommended that students, especially prospective economic majors, who have not had a course in Calculus I (MATH 10250 or equivalent) enroll in the calculus course during their first year of study.

(iii) *Core Requirement*

Students must include the following four courses among their minimum of eight courses in economics beyond the Principles course.

ECON 30010: Intermediate Economic Theory Micro
ECON 30020: Intermediate Economic Theory Macro
ECON 30330: Statistics for Economists
ECON 30331: Econometrics

(iv) *Advanced Course Requirement*

Students must include a minimum of two courses (6 credits) at the senior level (numbered 4xxxx) that have either of the intermediate theory courses (30010, 30020) and/or Econometrics (30331) as a prerequisite.

(v) *Writing-Intensive Requirement*

In completing the minimum of 24 credits at the junior/senior 3xxxx/4xxxx level, the student must fulfill a writing-intensive requirement. This requirement can be satisfied in one of the following three ways: by taking a junior or senior 3xxxx/4xxxx-level economics seminar course; by taking a three credit special studies course consistent with the college's writing-intensive guidelines under the direction of an economic faculty member; or by writing a senior honors essay under the direction of an economic faculty member.

Departmental advisors will assist students in designing a program of study that meets their educational and career goals. Students are also encouraged to pursue related courses in other

departments of the College of Arts and Letters, The Mendoza College of Business and the College of Science. Materials relating to professional work or graduate study in economics, law, business, public policy, foreign service are available from the director of undergraduate studies.

Undergraduate Economics Honor Program

Entry Gate

To be eligible for admission to the Undergraduate Economic Honors Program, the student must:

- (i) Complete Intermediate Economic Theory-Micro (ECON 30010), Intermediate Macro Theory (ECON 30020), and Econometrics (ECON 30331) with minimum grade point average in these courses of A- (3.667).

Or

- (ii) Have a minimum cumulative GPA of 3.4 and minimum GPA of A- (3.667) in Principles of Microeconomics (ECON 10010/10011/20010/20011), Principles of Macroeconomics (ECON 10020/20021) Intermediate Economic Theory-Micro (ECON 30010), Intermediate Macro Theory (ECON 30020), Statistics for Economists (30330), and Econometrics (ECON 30331).

To apply for admission, the student must complete an application form, available from the director of undergraduate studies in Economics, between the end of the sophomore year and the end of the junior year. The application will include: (1) a paragraph explaining why the student wishes to enroll in the honors program, and (2) a signature by a member of the economics faculty who endorse this student's application. The application will be returned to the director of undergraduate studies in Economics who will make recommendations for admission to the Economics Working Committee, which is responsible for the final decisions.

Enriching Experience

The Undergraduate Economics Honors Program requires that the student complete an enriching experience. The following qualify as an enriching experience:

- (i) Completion with a grade B+ or higher of an "advanced methods" course, defined as a 4xxxx-level course in which students are required to apply methods of modern economic research. A list of these courses is available from the director of undergraduate studies.
- (ii) Completion with a grade of B or higher of a course in the core of the graduate program in economics.
- (iii) Completion of some substantive out of classroom activity directly related to the study of economics, such as presentation of the student's own original research at an external conference, an undergraduate research assistantship, an internship, or community service.

All of these activities need to be pre-approved. Students who want pre-approval for a specific activity should submit a written request with other supporting material to the director of undergraduate studies in Economics who will notify applicants of the committee's decision.

Capstone experience

The capstone experience represents the final requirement for the Undergraduate Economic Honors Program. This experience involves three elements:

- (i) Completion of a one-credit honors seminar (ECON 47961) in each semester of the senior year. The seminar not only provides instructional support for these students, but also requires each student to present progress reports to their peers at regular intervals. These seminar credits do not count as regular major (i.e., do not substitute for 3xxx or 4xxx-level elective economics courses) and are graded on a Satisfactory/Unsatisfactory basis. These seminars are open to juniors in the honors program who want advanced insight to what the honors essay entails.
- (ii) Completion of a six credit senior honors essay (with a grade of B+ or higher). The essay is directed by an economics faculty member and represents a significant research effort. The writing of the essay is accomplished over the two semesters of the student's senior year with three credits awarded each semester (ECON 47960). These credits can be counted as economics electives toward the major and can be used to satisfy the major's writing-intensive requirement. The results of the essay must be presented at the economics seminar open to the public during the end of the second semester of each academic year.
- (iii) Participation in all College of Arts and Letters events for departmental honors students.

International Economics Major

In pursuing this major, students take a minimum of eight economics courses and seven to ten intermediate and advanced courses in Arabic, Chinese, French, German, Italian, Japanese, Spanish or Russian. Students are also required to enroll in a one-credit course "Exploring International Economics" designed to foster the integration of the study of culture with the study of economics. Under the guidance of a faculty mentor, International Economics majors are encouraged to integrate their economic and language and cultural study into Senior Capstone research paper/project or senior thesis.

Requirements for the Economics portion of the International Economics Major:

(i) Total Course Requirement

Students must complete the two-semester Principles of Economics sequence (10010/10011/20010/20011 and 10020/20020 or equivalent). Beyond the Principles courses, the major requires a minimum of six (6) additional courses (18 credits).

(ii) Math Requirement

A course in Calculus (Math 10260 or equivalent) is a prerequisite for both of the intermediate theory courses. (See core requirement below). Simultaneous enrollment in Calculus II is permitted but not recommended.

(iii) Core Requirement

Students must include the following four courses among their minimum of eight courses in economics beyond the Principles course.

ECON 30010: Intermediate Economic Theory Micro

ECON 30020: Intermediate Economic Theory Macro
ECON 30330: Statistics for Economists
ECON 30331: Econometrics

(iv) Advanced Course Requirement

Students must include a minimum of two courses (6 credits) from the following list;

ECON 40700: International Economics.
ECON 40800: Development Economics
ECON 40710: International Trade
ECON 40720: International Money

Business Economics Minor

The minor in Business Economics comprises 15 credits. It is open to students who have a major in the College of Arts and Letters. All students are required to take:

Principles of Microeconomics
Principles of Macroeconomics
Statistics
Introductory Accounting
Introductory Finance

Appendix B:

Undergraduate Economics Courses

This is a list of undergraduate courses actively offered (or expected to be offered) by the Economics department. Some courses that are listed in the Registrar's Academic Bulletin of Information have been deleted to reflect the fact that they have not been offered in several semesters and there is no anticipation of offering them in the future. The full list of courses that have been offered since F10, or which can be expected to be taught in the future, are listed in the matrix below the course listing.

Principles Courses

ECON 10010/20010. Principles of Microeconomics (3-0-3)

Prerequisite: MATH 10240 OR MATH 10250 OR MATH 10350 OR MATH 10550 OR MATH 10850

An introduction to economics, with particular attention to the pricing mechanism, competitive and monopolistic markets, government regulation of the economy, labor-management relations and programs, income determination and public policy, and trade and the international economy.

ECON 10020/20020. Principles of Macroeconomics (3-0-3)

Prerequisite: ECON 10010/20010

A continuation of introduction to economics with emphasis on the measurement of national economic performance, alternative explanations of short-run economic fluctuations and long-run economic growth, money and credit, and fiscal and monetary policy.

Required core courses

ECON 30010. Intermediate Economic Theory—Micro (3-0-3)

Prerequisites: ECON 10010/20010 AND ECON 10020/20020

An examination of the language and analytical tools of microeconomics, emphasizing the functional relationship between the factor and product markets and resource allocation.

ECON 30020. Intermediate Economic Theory—Macro (3-0-3)

Prerequisites: ECON 10010/20010 AND ECON 10020/20020

An intensive examination of macroeconomics with particular reference to the determination of economic growth, national income, employment, and the general price level.

ECON 30330. Statistics for Economics (3-0-3)

Prerequisites: ECON 10010/20010

This course seeks to introduce the student to the principles of probability and statistical theory appropriate for the study of economics. The emphasis of the course will be on hypothesis testing and regression analysis.

ECON 30331. Econometrics (3-0-3)

Prerequisite: ECON 30330 OR BAMG 20100

Provides students with an understanding of when and how to use basic econometric methods in their work as an economists, including the ability to recognize which econometric technique is appropriate in a given situation as well as what explicit and implicit assumptions are being made using the method. Topics covered include estimation and

hypothesis testing using basic regression analysis, problems with basic regression analysis, alternative econometric methods, limited dependent

Electives

ECON 30150. Introduction to Economics and Catholic Social Thought (3-0-3)

Prerequisite: ECON 10010/20010

This course will discuss the relationship between economics and Catholic social teaching. We will learn about key principles in Catholic social thought, read key Papal encyclicals and other writings. We will then discuss key economic concepts and empirical facts known from the field of economics, and how these relate to Catholic social teaching. Finally, we will apply these ideas to discussions on labor, capital, finance, the environment, globalization, and development.

ECON 30220 Marxian Economics (3-0-3)

Prerequisite: ECON 10010/20010

An introduction to Marxian economic analysis. Topics include the differences between mainstream and Marxian economics, general philosophy and methodology, Marxian value theory, and critical appraisals and current relevance of Marx's "critique of political economy."

ECON 30400. Labor Economics (3-0-3)

Prerequisite: ECON 10010/20010

A survey course covering the economics of employment and unemployment; wages and income distribution; poverty, education and discrimination; unions and labor and industrial relations systems; and comparative labor systems.

ECON 30481. American Labor Force (3-0-3)

Prerequisite: ECON 10010/20010 AND ECON 10020/20020

This course uses the tools of economics to understand the major forces shaping the American labor force, in both the past and the present. Examples of course topics include; the major waves of European migration to the U.S., including waves of Irish immigration; the development and rise of the high school in America; important trends in education attainment particularly of women and minorities; the economic effects of Civil Rights legislation; and the English language only debate. This course is closely related to Econ 33489 (Migration, Education and Assimilation) but does not require a research paper.

ECON 30530. Environmental Economics (3-0-3)

Prerequisite: ECON 10010/20010

An analysis of the welfare economics of environmental problems, emphasizing market failures due to negative environmental externalities. Air, water, and land pollution are classic examples of these externalities, which occur when third parties bear costs resulting from the transactions of the two primary market participants. The theory and practice of environmental policy to promote efficiency at the U.S. local, state, and federal levels and in other countries is explored. International problems such as transboundary pollution and global warming are also studied.

ECON 30535. Economics of Preserving Natural Resources (3-0-3)

Prerequisite: ECON 10010/20010

Treatises on “optimal” harvesting of trees and other natural resources date back at least to John Evelyn (1620-1706). This course examines a wide variety of situations in which the socially optimal “economic use” of a natural resource involves its preservation. Emphasis is placed on: using the logic of economics to demonstrate when preservation of a natural resource is preferable to its reduction or destruction; using examples to clarify these arguments; and broadening the definition of “natural resources” to include some nontraditional resources.

ECON 30800. Development Economics (3-0-3)

Prerequisite: ECON 30010

The current problems of Third World countries are analyzed in a historical context, with attention given to competing theoretical explanations and policy prescriptions. The course will combine the study of the experiences of Latin American, African, and Asian countries with the use of the analytical tools of economics.

ECON 40050. Game Theory and Strategic Analysis (3-0-3)

Prerequisites: MATH 10250 OR MATH 10550 AND (ECON 30010 OR FIN 30210)

The objective of this course is to help students develop a good understanding of the basic concepts in game theory and learn how to employ these concepts to better understand strategic interactions. Topics covered will include normal form games, extensive form games, pure and mixed strategies, Nash Equilibrium, subgame perfect equilibrium, repeated games, and introduction to games of incomplete information. Selected applications will include competition and collusion in oligopoly, entry deterrence, political competition and rent-seeking, social norms and strategic interaction.

ECON 40060. Advanced Microeconomic Theory (3-0-3)

Prerequisite: ECON 30010

This course will focus on some selective topics in modern micro economic theory. It may vary from term to term. A possible choice of a broad range of topics are choice under uncertainty, game theory, market mechanisms, coalitional analysis, public goods, and welfare economics. Each of these topics will be discussed with mathematical rigor. Some of the objectives of the course are to familiarize students with important analytical techniques of micro theory and their applications to the study of various economic phenomena and to help students to cultivate the ability to critically evaluate the usefulness and limitations of economic models.

ECON 40300. Math for Economists (3-0-3)

Prerequisites: (ECON 30010 OR FIN 30210) AND ECON 30020

Exposition of mathematical methods used in economic theory and analysis with application of these methods to economic theory. Major methods covered include differential and integral calculus and matrix algebra. Recommended for students planning to go to graduate school in economics.

ECON 40360. Money, Credit, and Banking (3-0-3)

Prerequisites: (ECON 30010 OR FIN 30210) AND ECON 30020

An examination of the money and credit-supply processes and the role of money and credit in the economy. Topics include financial intermediaries, financial markets, the changing regulatory environment, monetary policy, and international monetary arrangements.

ECON 40362. Monetary Policy: Formulation, Conduct, and Crisis Management (3-0-3)

Central banks wield enormous influence over a country's economic performance. In this course, students will examine the evolution of monetary policy over time and analyze successes and failures of monetary policy and of measures taken to manage times of economic crisis. Special emphasis will be placed on the Federal Reserve System with some attention paid to policies of the Bank of Japan and the European Central Bank. The course will host a Fed Challenge team for the fall 2008 competition. Students interested in learning how the Fed formulates policy should take the course. Anyone interested in participating in the Fed Challenge must take the course. Prerequisites: intermediate macroeconomics. Money and banking desired.

ECON 40363. Bubbles, Crises, and Speculative Attacks: The Economics of Extreme Events (3-0-3)

Prerequisites: ECON 30030 AND ECON 30020 AND (ECON 40700 OR ECON 40710 OR ECON 70720)

Individuals' economic incentives are displayed clearly during extreme events, such as hyperinflation and currency collapse. In this course we will study the history of such events, such as the German Hyperinflation, during which time German prices rose at more than 50 percent/month and the so-called bubbles such as 17th-century Tulipmania. We will study the history and then apply modern-day modeling and econometrics. From more modern times we will look at the 1980s and 1990s currency crises in Mexico and East Asia as well as the combination crises in many developing countries hit simultaneously by currency, banking, debt, and output crises. In all the experiences, we will first get the facts straight and then apply modern methods. Familiarity with econometrics is useful.

ECON 40400. Advanced Labor Economics (3-0-3)

Prerequisites: (ECON 30010 OR FIN 30210) AND ECON 30331

Labor economics (ECON 30400) is not a prerequisite for this class, but those who have taken ECON 30400 are welcome to enroll. This class presents a detailed exposition of neoclassical labor market theory and empirical research in labor economics. Topics include the determinants of labor supply and demand, occupational and educational choice, mobility, wage dispersion, and discrimination. Students will use the econometric methods introduced in ECON 30331 to analyze the effects that policies have on worker behavior and labor market outcomes. Policies that will be examined include the minimum wage, welfare reform, affirmative action, education policy, and income redistribution policies.

ECON 40520. Economics of Education (3-0-3)

Prerequisites: (ECON 30010 OR FIN 30210) AND (ECON 30330 OR ECON 30331 (MAY BE TAKEN CONCURRENTLY))

This course reviews economic literature addressing current educational issues in America, including the adequacy of our K-12 public school system, the effectiveness of market-based reforms (vouchers and charter schools) and administered forms of accountability (standardized testing). We also examine the rate of return to additional years of education (how much education should individuals undertake?), access to higher education, financial aid systems, and options to offset the rising cost of higher education.

ECON 40540. Public Economics (3-0-3)

Prerequisite: (ECON 30010 OR FIN 30210)

This class will survey the field of public economics, showing students how economic research can address many of the most important questions and controversies facing policymakers today. Some of the issues the class will discuss are contraception, taxation, Medicare, Social Security, welfare programs, and education. The course will familiarize students with current policy programs and policy debates, introduce students to cutting-edge research methods used to study these programs, and show students what economists know and do not know about improving public policy.

ECON 40580. The Economics of Industrial Organization (3-0-3)

Prerequisite: ECON 30010 OR FIN 30210

An investigation into the structure of American industry and an analysis of the implications of corporate economic power for public welfare.

ECON 40700. International Economics (3-0-3)

Prerequisite: ECON 30010 OR FIN 30210

A study of the general theory of international trade: the pattern of trade, gains from trade, tariffs, trade and special interest groups, trade and growth, foreign exchange markets, balance-of-payment problems, and plans for monetary reform.

ECON 40710. International Trade (3-0-3)

Prerequisite: ECON 30010 OR FIN 30210

This course examines major theoretical, empirical, and institutional issues in the study of international trade and international factor movements. The topics covered include determinants of trade patterns, trade and welfare, commercial policy, trade and growth, customs unions, international capital and labor movements, and trade and development.

ECON 40720. International Money (3-0-3)

Prerequisite: ECON 30020

This course examines major institutional changes in the international financial system, theoretical developments in the field of international monetary economics, and policy issues in the contemporary global finance. Topics include balance-of-payments accounts, exchange rate markets and systems, open-economy macroeconomics, international debt, and contemporary international monetary and financial arrangements.

ECON 40830. Economic Growth (3-0-3)

Prerequisite: ECON 30010

This course is an introduction to the study of economic growth. After a brief preamble, the first two parts of the course review the “proximate determinants” of income levels and growth rates—factor accumulation, technology and efficiency—and discuss the relevant theoretical models. The third part looks at the “fundamental determinants” of differences in income levels and growth rates across countries. A final section of the course discusses current and future trends of demographic change, technical progress, and the environment.

ECON 40850. Economics of Innovation, Scientific Research

Prerequisites: ECON 10010/20010 AND ECON 10020/20020

We will use simple microeconomics principles to understand how and why innovation happens, how innovation is related to basic scientific research, what factors influence the production and diffusion of new ideas, and how government policy can help or hinder

innovation. We will also study the relationship between innovation and economic welfare using recent macroeconomic models.

Seminars

ECON 33220. Marxian Economic Theory (3-0-3)

Prerequisite: ECON 10010/20010 OR ECON 10020/20020

An introduction to Marxian economic analysis. Topics include the differences between mainstream and Marxian economics, general philosophy and methodology. Marxian value theory, and critical appraisals and current relevance of Marx's "critique of political economy."

ECON 33250. Justice Seminar (3-0-3)

An examination of major theories of justice, both ancient and modern. Readings include representatives of liberal theorists of rights, such as John Rawls, as well as perfectionist alternatives. This course also serves as the core seminar for the philosophy, politics, and economics concentration.

ECON 33270. The Economics of Science (3-0-3)

Prerequisite: ECON 10010/20010

Economists often fret over whether they qualify as a hard science, but of late, they have begun to turn the tables and apply their theories to the operation of the sciences themselves. This phenomenon is related to the increasing commercialization of science since the 1980s, but other factors include: a shift within economics to portray the market as an ideal information system, the globalization of the modern intellectual property regime, and the transformation of the post- Cold War University. These phenomena all have profound political and social consequences for the future, and so we will not restrict the course to a few abstract models, as is frequently the case in economics curricula. Part of the course consists of a discussion of what topics the 'economics of science' should take as its subject matter. The remainder explores some of the major transformations, especially with regard to intellectual property and the social structures of science. In this class we describe the changing history of the organization and subsidy of scientific research, especially (but not exclusively) in America; and then we survey the different classes of economic theories applied to the scientific process. The second half of the course is then concerned with issues in the modern globalization and privatization of science, focusing on various case studies.

ECON 33420. Employee Relations Law and Human Resources Practices (3-0-3)

Prerequisite: ECON 10010/20010

A study of the development of common statutory law with reference to discrimination in the United States on the basis of race, creed, color, national origin, and disability, and giving emphasis to the case method.

ECON 43110. History of Economic Thought (3-0-3)

Prerequisite: ECON 30010

This course is the seminar version of ECON 40110. The course intends to ask how it is that we have arrived at this curious configuration of doctrines now called "economics"; and importantly, how differing modes of historical discourse tend to ratify us in our prejudices about our own possible involvement in this project. The course will begin in the 18th

century with the rise of a self-conscious discipline, and take us through the stabilization of the modern orthodoxy in WWII. Effort will be made to discuss the shifting relationship of economics to the other sciences, natural and social. A basic knowledge of economics (including introductory economics and preferably intermediate economics) will be presumed.

ECON 43330. Forecasting for Economics and Business (3-0-3)

Prerequisite: ECON 30331

This course is an introduction to forecasting. The course focuses on creating and working with forecasts of economic, finance, and other business data. Basic theory will also be presented. The forecasts are constructed from estimated summary statistics and parameters generated by several methods, including time series procedures and exponential smoothing. Students will learn how to interpret the uncertainty in the forecasts and in the estimated parameters. Diagnostic statistics and model selection criteria will be presented.

ECON 43350. Fed Challenge (1-0-1)

Prerequisite: ECON 30020

An in-depth analysis of Federal Reserve Open market Committee policy actions. Students must participate in college Fed Challenge competition.

ECON 43410 Labor Law (3-0-3)

A study of the development of common and statutory law with reference to industrial relations in the United States with emphasis on the case method.

ECON 43430. Collective Bargaining – Private Sector (3-0-3)

Prerequisite: ECON 10010/20010

The analysis of the procedures and economic implications of collective bargaining as it now operates in the United States. Emphasizes a game theory approach resulting in the negotiation of a labor contract.

ECON 43430. Environmental Economics (3-0-3)

Prerequisite: ECON 30331

An analysis of the welfare economics of environmental problems, emphasizing market failures due to negative environmental externalities. Air, water, and land pollution are classic examples of these externalities, which occur when third parties bear costs resulting from the transactions of the two primary market participants. The theory and practice of environmental policy to promote efficiency at the U.S. local, state, and federal levels and in other countries is explored. International problems such as transboundary pollution and global warming are also studied.

ECON 43550. Economics of the Family (3-0-3)

Prerequisite: ECON 30331

This course will use economic theory and empirical economic research to study the family. Topics will include household decision making; the determinants of marriage and fertility; how marriage, fertility, and family structure are related to other outcomes; and public policies that affect the family and family formation. Students will learn to read and evaluate empirical economic research. This is a writing-intensive seminar course.

ECON 43565. Health Economics (3-0-3)

Prerequisite: ECON 30331

The course is designed to illustrate how economists analyze topics related to the production of health and the delivery of health care in the United States. Topics covered include the social and economic determinants of health, the economic control of unhealthy behavior, economic consequences of the AIDS epidemic, using economics to explain the rise of obesity, economic models of insurance, the problems of moral hazard and adverse selection, the economic impact of employer-provided health insurance. Medicare and Medicaid, the problem of the uninsured, medical technology and the pharmaceutical industry, the malpractice system, and the rise of managed care. Readings for the class will come from a required textbook and academic readings downloadable from the class web page. Class assignments will include problem sets, exams and short policy memos.

ECON 43750. Economics of China (3-0-3)

Prerequisite: ECON 30331 and ECON 30010 and ECON 30020

The course will cover aspects of China's economy (international, macro, labor market issues, demographics, migration, and others) since economic reforms were implemented in 1978.

ECON 43961. Senior Honors Program Seminar (1-0-1)

This seminar provides instructional support for economics majors completing the undergraduate economics honors program. It also provides a venue where honors program students present progress reports on their senior honors essays to their peers at regular intervals. The seminar is graded on a satisfactory/unsatisfactory basis and may be taken twice.

ECON 47950. Special Studies (V-0-V)

Independent study under the direction of a faculty member. Course requirements may include substantial writing as determined by the director. The director will disenroll a student early for failure to meet course requirements. Students who have been disenrolled or who have failed at the end of the first semester are disqualified for Special Studies in the following term.

ECON 47951. Special Studies (2-0-2)

Independent study under the direction of a faculty member. Course requirements may include substantial writing as determined by the director.

ECON 47960. Senior Honors Essay (3-0-3)

A tutorial requiring a completed essay on a selected topic in economics in depth. The faculty of economics awards the John Harold Sheehan Prize Essay Award with inscribed plaque to the graduating senior who has written the best senior honors essay. Senior economics majors only.

Matrix of electives offered (X = offered that semester)

#	Course Name	F10	S11	F11	S12	F12	S13
30150	Intro to Catholic and Economic Thought	X			X	X	
30220	Marxian Economics					X	
30481	American Labor Force					X	
30800	Development Economics						
33200	Introduction to Political Economy		X				
33201	Topics in Political Economy			X		X	
33220	Marxian Economic Theory	X		X			
33240	Economics of War and Peace	X					
33250	Justice Seminar	X		X		X	
33260	Political Economy of Development	X	X	X			
33270	Economics of Science						
33290	Political Economy of the Financial Crises	X		X	X		
33400	Labor Economics						X
33420	Employee Relations Law	X				X	
33481	American Labor Force	X					
40050	Game Theory		X	X	X	X	X
40060	Advanced Microeconomic Theory			X			
40320	Applied Econometrics						
40330	Forecasting for Economics and Business		X				
40360	Money, Credit, and Banking	X		X		X	
40362	Monetary Policy	X		X		X	
40363	Bubbles Crises, and Speculative	X		X		X	
40400	Advanced Labor Economics	X					
40535	Economics of Preserving Natural Resources			X			
40520	Economics of Education						
40540	Public Economics						
40580	Economics of Industrial Organization	X	X	X	X		X
40700	International Economics						
40710	International Trade	X	X	X	X		X
40720	International Money	X				X	
40830	Economic Growth						
40850	Econ of Innovation, Scientific Research			X			
43110	History of Economic Thought		X				X
43330	Forecasting for Economics and Business			X			
43350	Fed Challenge	X		X			
43410	Labor Law		X		X		X
43430	Collective Bargaining			X			
43530	Environmental Economics		X		X		
43550	Economics of the Family			X			X
43565	Health Economics						X
43750	Economics of China						X

Graduate Economics Courses

ECON 60101. Microeconomic Theory I

Mathematical presentation of neoclassical models of consumer choice, firm behavior, and perfectly competitive markets. Choice theory, decision under uncertainty, utility maximization, expenditure minimization, duality, profit maximization, cost minimization, aggregate demand and supply, welfare evaluation of economic changes, and efficiency.

ECON 60102. Microeconomic Theory II

General equilibrium analysis, game theory, and an introduction to mechanism design. Game theory topics include Nash equilibrium, Bayes-Nash equilibrium, subgame perfection, and perfect Bayesian equilibrium. Mechanism design topics include moral hazard and adverse selection.

ECON 60201. Macroeconomic Theory I

First-order difference and differential equations; Solow Model in continuous time and discrete time; a simple two-period model of intertemporal optimization; calculus of variations and optimal control; dynamic programming; neoclassical growth model; overlapping generations model; uncertainty and expected utility; risk-sharing and models of complete asset markets; stochastic growth model; life-cycle model, permanent income hypothesis, borrowing constraints, and precautionary savings; Aiyagari heterogeneous agents model; asset pricing, Lucas Tree model, Mehra-Prescott, and CAPM; options; Modigliani-Miller theorem

ECON 60202. Macroeconomic Theory II

Analysis, solution, calibration, estimation, and extension of dynamic stochastic general equilibrium (DSGE) models, including real business cycle models and New Keynesian models, with applications to optimal monetary and fiscal policies. Time series and quantitative methods are introduced as necessary.

ECON 60302. Econometrics I

Introduction to probability and statistical theory: Random variables, probability distributions, estimation, and hypothesis testing procedures. Presentation of standard econometrics techniques: Simple and multiple linear regression models, nonlinear least squares, GMM, ML, instrumental variables, and non-stationary time-series analysis.

ECON 60303. Econometrics II

Introduce econometric techniques frequently used by economists working with cross-sectional and/or panel data: i) panel data, ii) correlated errors, clustering and the “Moulton” problem, iii) instrumental variables estimation, iv) regression discontinuity, v) Non-linear optimization and maximum likelihood models, vi) discrete data, vii) limited dependent variables, viii) duration data, iv) matching estimators, and v) quantile regressions. Both the theory and examples of research that has used the technique are covered.

ECON 70311. Environmental Economics I

An analysis of the welfare economics of environmental problems, emphasizing market failures due to negative environmental externalities. Air, water, and land pollution are classic examples of these externalities, which occur when third parties bear costs resulting from the transactions of the two primary market participants. The theory and practice of

environmental policy to promote efficiency at the US local, state, and federal levels and in other countries is explored. International problems such as transboundary pollution and global warming are also studied.

ECON 70312. Environmental Economics II

An analysis of the welfare economics of environmental problems, emphasizing market failures due to negative environmental externalities. Air, water, and land pollution are classic examples of these externalities, which occur when third parties bear costs resulting from the transactions of the two primary market participants. The theory and practice of environmental policy to promote efficiency at the US local, state, and federal levels and in other countries is explored. International problems such as transboundary pollution and global warming are also studied.

ECON 70361. Industrial Organization I

Introduction to the study of industrial structures and their relationship to economic performance. Competing theories of the determinants of structure at the level of individual industries and sectors and the role of structure in the competitiveness of firms in the regional, national, and global economy. Role of competitive forces in relatively unregulated environments and role of regulation and industrial policy in creating successful industries.

ECON 70362. Industrial Organization II

This course has two objectives. One is to provide a comprehensive survey of the theoretical models used to analyze the strategic interaction between firms in an industry. The other is to survey recent advances in the literature by studying recently published papers.

ECON 70425. Advanced Macro I

Neoclassical business cycle models, imperfect competition, increasing returns and externalities, monetary models, inflation and monetary policy, budget deficits and fiscal policy.

ECON 70552. International Macroeconomics

Macroeconomic theory and policy in open economies. Balance of payments accounting, basic theory of fiscal and monetary policy under alternative exchange rate regimes, and recent developments in the area of exchange rate economics. Implications of the social issues for current policy issues in the areas of stabilization policies and international borrowing.

ECON 70553. International Finance

This course is an empirically-based examination of exchange rate and balance-of-payments issues and the debt problem.

ECON 70561. Economic Development I

This course will provide a survey of theoretical and empirical research in development economics.

ECON 70562. Economic Development II

Finance and entrepreneurship in development, structural change, trade aspects of development, education and technological change.

ECON 70566. International Economics I

Theoretical and empirical analysis of international trade and factor movements. Ricardian and Heckscher-Ohlin models, increasing returns, welfare implications of trade policies, global trading arrangements.

ECON 70567. International Economics II

Theoretical and empirical analysis of international business cycles, international macroeconomic interdependence, exchange rates, current accounts and international imbalances, sovereign debt issues, crises, international financial issues, growth in an international setting.

ECON 70601. Labor Economics I

This course will provide a survey of theoretical and empirical research in labor economics. Topics typically include compensating differentials, human capital accumulation (including education, experience, and tenure), incentive contracts, job matching, job search, worker mobility, and discrimination. Students will be responsible for analyzing research and presenting it to the class.

ECON 70602. Labor Economics II

This course employs both theoretical and econometric analysis to examine labor markets. Topics typically include dynamic labor supply and labor demand, unemployment, efficiency wages, technical change, and inequality. The course will also look at how ideas in labor economics can be used to explore issues in demography, health, development, and family and gender economics. Students will be responsible for analyzing research and presenting it to the class. Additional emphasis will be given to the development of original research in labor economics

ECON 70701. Public Economics I

This course examines both theoretical and empirical analysis of government expenditures. Topics typically include the provision of public goods, education, fiscal federalism, and health care policy. The course will also provide a survey of data, methods, and policies commonly employed in the empirical public finance literature. Students will be responsible for analyzing research and presenting it to the class.

ECON 70702. Public Economics II

This course is a survey of the theory and evidence on tax and expenditure policy. Topics typically include tax incidence, optimal tax theory, the effect of taxation on labor supply and savings, redistribution, transfer programs, and social insurance. Students will be responsible for analyzing research and presenting it to the class. Additional emphasis will be given to the development of original research in public economics.

ECON 73001. Research Seminar –Micro**ECON 73002. Research Seminar –Macro****ECON 73003. Research Seminar –Theory**

These courses are intended to provide students with insights into current research topics, to help them learn to formulate their own research topics, to stimulate them to engage in independent research, and to offer a forum in which they can learn to present their own research and discuss research presented by others.

Appendix C: Employment and Graduate School Placements of Economics Majors

Appendix Table C.1
Placements of Economics Majors in Graduate Programs (not Ph.D.)

Year	# of students pursuing other graduate degrees	Institutions
2008	4	Marquette , Notre Dame, Washington University,
2009	12	Duke, Columbia, Harvard, Marquette, New York University, Penn State, University of California at Irvine, University of California at San Diego, University of Chicago, University of Kansas, University of Pennsylvania, Yale
2010	11	Case Western Reserve, Columbia, Duke, Fordham, Loyola Marymount, New York University, Northwestern, Rochester Institute of Technology, University of Miami, University of Missouri, University of Notre Dame
2011	15	Case Western Reserve, Georgetown, Loyola Marymount, Loyola, Rochester Institute of Technology, SUNY-Stony Brook, University of Michigan, University of Notre Dame, University of Texas, University of Wisconsin, Yale

C2: Undergraduate Job Placements

Students graduating from the Economics Department have found employment in a number of areas. Data compiled by the Notre Dame Career center contains a more detailed list of placements.

http://careercenter.nd.edu/assets/69296/2011_future_plans_final.pdf

http://careercenter.nd.edu/assets/69297/2010_future_plans_final.pdf

http://careercenter.nd.edu/assets/69298/future_plans_2009_final.pdf

Some notable placements in recent years are:

Financial

- Bank of America
- Credit Suisse
- KPMG
- Morgan Stanley
- PricewaterhouseCoopers

Consulting

- Bain & Company
- Booz Allen Hamilton
- Boston Consulting Group
- McKinsey
- NERA

Industry

- General Electric
- General Mills
- Google
- IBM
- Target
- United Airlines

Public Policy

- Bureau of Labor Statistics
- Urban Institute
- US Navy
- US Senate

Appendix D: Economics Department Learning Goals and Assessment Plan

Learning Goals

The Economics Department wants our majors to have knowledge of economics principles and core analytic techniques and to demonstrate skills to apply this knowledge in the following ways:

I. Knowledge of Economic Principles

ET1. Demonstrate knowledge of macroeconomic and microeconomic theory through the intermediate level

ET2. Utilize this intermediate theory to develop a greater understanding of at least two fields of economics

ET3. Understand and evaluate current economic events and new economic ideas

II. Empirical Analysis

QA1. Know how to use at least one statistical analysis software package

QA2. Understand and apply basic econometric theory

QA3. Obtain and /or collect relevant data using specific qualitative and/or quantitative research methods to study empirically an economic issue or phenomenon

QA4. Conduct appropriate statistical analysis of data, and explain the statistical problems involved

QA5. Interpret statistical results

III. Theoretical Analysis

TR1. Set up and analyze standard intermediate level models

TR2. Demonstrate how the predictions of a theoretical model vary with changes in the model's parameters

TR3. Identify and explain the key economic trade-offs in a model

IV. Critical Thinking Skills

CT1. Use systematic reasoning to solve economic problems and evaluate policy prescriptions

CT2. Understand the role of assumptions and the impact of alternative assumptions in arriving at conclusions

CT3. Analyze and synthesize economic arguments and data

CT4. Understand and evaluate the decision making processes and results of consumers, producers, and various levels of government

V. Communication Skills

CS1. Communicate effectively in written, spoken, and graphical form about specific economic issues

CS2. Formulate a well-organized written argument that states assumptions and hypotheses, which are supported by evidence

Preliminary Assessment Plan

The department is working on developing a comprehensive assessment plan. The current proposal is the following.

Assessment measures

The proposed assessment measures are organized into five areas, each of which can provide feedback on multiple learning goals. More important than some of the specific methods is a development of an ongoing database so that we can assess our progress from year to year. In that spirit, a limited number of data points, carefully collected and systematically evaluated should be our near term goal.

Review of course materials

A basic approach to evaluation of student learning goals would begin with collection and review of syllabi and other relevant course materials. The student learning goals should be included on each syllabus or course website.

Student surveys and interviews

The department currently conducts an informal exit survey primarily geared at determining where our graduates go and getting a bit of information about their particular academic activities. We should expand this survey to include more specific questions related to the learning goals. Further, we can make this an online survey and conduct it before graduation to increase participation. The response rate now is very low. In addition, to the exit survey, we could conduct focus groups of students in all years again with specific questions related to the learning goals to elicit more detailed responses from students with a range of perspectives. The implementation of the focus groups might be subject to resource constraints. At a later date, we could consider implementing a 5 or 10 year post graduation survey.

Use of Course Feedback Information

The University course feedback system currently evaluates faculty regarding promotion of critical and creative thinking. We will develop a brief set of questions which would be added to each faculty member's evaluations addressing specific learning goals. This will provide us with an ongoing assessment by course of how we are doing meeting our goals.

Evaluation of student data and student work

Some measures of student achievement can be found in data such as GRE scores, acceptance rate to graduate programs and number of honors theses completed. Information can also be gathered from a systematic review of student work such as econometrics projects and tests. The first step in the process of evaluating student work is to develop a rubric for evaluation of student work as related to learning goals. This evaluation could be fairly time consuming so we should begin with a pilot program in the Spring to develop a workable, streamlined system. We could also pilot a program of evaluating the performance on particular test questions.

Surveys and interviews with outside parties

Employers provide valuable information on whether we have achieved our goals. Second hand information about employers' feedback can be obtained through the Career Center. We will also consider the feasibility of collecting direct feedback from employers. Small focus groups might be the most effective way of gathering that data.

Appendix E: Data on Undergraduate Economics Courses

1. Course Information Feedback scores
2. GPA comparisons
3. Student-Faculty ratios
4. Class sizes

1. CIF Data

Overall Scores

Year	Dept	Div	Univ
F05	3.08	3.53	3.47
S06	3.55	3.56	3.49
F06	3.49	3.53	3.47
S07	3.4	3.55	3.49
F07	3.52	3.54	3.48
S08	3.4	3.58	3.51
F08	3.77	4.04	4.02
S09	4.01	4.1	4.1
F09	3.87	4.13	4.11
S10	3.93	4.13	4.13
F10	3.96	4.02	4.03
S11	4.06	4.04	4.06
F11	4.22	4.17	4.11
S12	4.22	4.25	4.16
F12	4.24	4.23	4.16

Intellectual Challenge

Year	Dept	Div	Univ
F08	3.87	3.67	3.62
S09	4	3.68	3.6
F09	3.58	3.68	3.67
S10	3.75	3.68	3.67
F10	3.87	3.74	3.72
S11	3.88	3.72	3.72
F11	4.03	3.87	3.64
S12	3.96	3.9	3.63
F12	3.99	3.88	3.66

Source: Institutional Research

2. GPA Comparison

Unit	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2004	Spring 2005
College of A&L	3.511	3.541	3.552	3.572	3.553	3.552
University	3.44	3.466	3.479	3.495	3.489	3.488
Econ. and Econometrics				3.415	3.129	3.22
Economics	3.387	3.498	3.5			

Unit	Fall 2005	Spring 2006	Fall 2006	Spring 2007	Fall 2007	Spring 2008	Fall 2008
College of A&L	3.536	3.557	3.517	3.544	3.525	3.528	3.523
University	3.472	3.489	3.461	3.485	3.47	3.488	3.473
Econ. and Econometrics	3.148	3.341	3.242	3.156	3.25	3.254	3.289
Economics							

Unit	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012
College of A&L	3.529	3.538	3.564	3.551	3.564	3.569	3.563
University	3.497	3.488	3.506	3.503	3.514	3.513	3.515
Econ. and Econometrics	3.103	3.405	3.392				
Economics				3.336	3.385	3.498	3.357

Source: Institutional Research

3. Student Faculty Ratios

Year	Faculty	Students	Student/Faculty ratio
02-03	29	248	8.55
03-04	29	241	8.31
04-05	28	270	9.64
05-06	29	269	9.28
06-07	30	339	11.30
07-08	32	372	11.63
08-09	32	410	12.81
09-10	35	410	11.71
10-11	23	371	16.13
11-12	23	415	18.04
12-13	24	422	17.58

Source: Number of faculty from Academic Bulletin – Economic Policy and Economics and Econometrics are combined.

4. Class Sizes

PRINCIPLES		F07	S08	F08	S09	F09	S10	F10	S11	F11	S12	F12	S13
Microeconomics	#Students	521	468	524	569	549	514	556	575	574	544	651	572
	#classes	12	10	11	11	8	9	9	9	8	11	8	8
	Avg. size	43.4	46.8	47.6	51.7	68.6	57.1	61.8	63.9	71.8	49.5	81.4	71.5
Macroeconomics	#Students	89	124	120	147	107	101	128	100	133	161	164	208
	#classes	4	4	3	3	3	2	4	2	3	4	3	3
	Avg. size	22.3	31.0	40.0	49.0	35.7	50.5	32.0	50.0	44.3	40.3	54.7	69.3
Avg. Principles		38.2	42.3	46.0	51.1	59.6	55.9	52.6	61.4	64.3	47.0	74.1	70.9
CORE													
Int Micro	#Students	62	59	78	58	73	71	54	72	67	71	78	80
	#classes	2	2	2	2	2	1	2	1	2	1	2	2
	Avg. size	31.0	29.5	39.0	29.0	36.5	71.0	27.0	72.0	33.5	71.0	39.0	40.0
Int Macro	#Students	71	82	54	69	78	89	95	81	73	78	83	83
	#classes	2	2	2	2	2	2	2	2	2	2	2	2
	Avg. size	35.5	41.0	27.0	34.5	39	44.5	47.5	40.5	36.5	39.0	41.5	41.5
Statistics	#Students	53	42	50	31	80	34	43	36	51	58	54	91
	#classes	2	2	2	1	2	1	1	1	2	2	2	3
	Avg. size	26.5	21.0	25.0	31.0	40.0	34.0	43.0	36.0	25.5	29.0	27.0	30.3
Econometrics	#Students	31	29	82	70	80	95	65	60	81	71	95	85
	#classes	2	1	3	2	2	2	2	2	2	2	3	2
	Avg. size	15.5	29.0	27.3	35.0	40.0	47.5	32.5	30.0	40.5	35.5	31.7	42.5
Avg. Core		27.2	30.3	29.3	32.6	38.9	48.2	36.7	41.5	34.0	39.7	34.4	37.7
ELECTIVES													
All Electives	#Students	272	216	249	305	247	212	305	244	263	254	214	306
	#classes	12	11	13	14	14	12	17	10	18	8	9	13
	Avg. size	22.7	19.6	19.2	21.8	17.6	17.7	17.9	24.4	14.6	31.8	23.8	23.6

The data above are average class sizes. We have also collected data on the number of classes in recent years with less than 20 students and the number greater than 50.

Semester	# classes <20 students	#classes >50 students
F09	8	2
S10	10	9
F10	8	2
S11	5	4
F11	8	4
S12	3	7
F12	2	7
S13	6	7

Appendix F: Teaching Awards

Kasey Buckles

Boston University

Outstanding Teaching Award in the BU Department of Economics in: 2001

William Evans

University of Maryland

Departmental Teaching Award, Department of Economics: Spring 2007, Fall 1994, Fall 1988

Mary Flannery

University of California, Santa Cruz

Merrill College Teaching Recognition: Spring 2010

Crown College Certificate of Merit: Spring 2005-6

Timothy Fuerst

Bowling Green State University

College of Business Undergraduate Teaching Award: 2004

University Master Teacher Award: 2000

Thomas Gresik

Pennsylvania State University

Departmental Undergraduate Teaching Award: Spring 1996, Fall 1996, Spring 1998, Spring 1999

Andreas Hagemann

University of Illinois at Urbana-Champaign

List of Teachers Ranked as Excellent by Their Students: Fall 2009, Spring 2010, Fall 2010, Spring 2011

Dan Hungerman

University of Notre Dame

Rev. Edmund P. Joyce, C.S.C. Award for Excellence in Undergraduate Teaching: 2012

Terence Johnson

University of Maryland

Departmental Teaching Award, Undergraduate Game Theory: Spring 2009, Spring 2011

William Leahy

University of Notre Dame

Sheedy Excellence in Teaching Award: 2004

Rev. Edmund P. Joyce, C.S.C. Award for Excellence in Undergraduate Teaching: 2003, 2011

Michael Mogavero

Alfred University

Excellence in Teaching: 1982, 1986, 1988, 1990

University of Notre Dame

Favorite Professor Award: 2009, 2010

Michael Pries

University of Maryland

College of Behavioral and Social Sciences Teaching Award: 2004

Economics Department Teaching Award: 1999, 2000, 2002, 2003, 2004, 2006

James Sullivan

University of Notre Dame

Rev. Edmund P. Joyce, C.S.C., Award for Excellence in Undergraduate Teaching: 2010

**Appendix G: Prospective Graduate Student Visitation Schedule of Events
March 2013**

Thursday, March 21

Prospective students arrive at Notre Dame in the afternoon and evening. Informal dinner with some continuing graduate students and faculty at 7:00 p.m. at Brothers on Eddy Street.

Friday, March 22

9:00 – 10:00 AM	Welcome and orientation with Departmental Chair, DGS, members of GSC, advanced graduate students. Pastry, juice and coffee will be served (Flanner 424).
10:00 – 10:30 AM	Introductions and group meeting with faculty (Flanner 424).
10:30 – 12:00 PM	One-on-one meeting with faculty (respective offices).
12:00 – 1:30 PM	Lunch: faculty, visiting students and continuing graduate students (Flanner 114)
1:30 – 2:30 PM	Campus tour with continuing graduate students (Julieta Yung).
2:30—3:30 PM	On campus housing visit for those interested.
3:30 – 5:00 PM	Faculty Research Presentations (Flanner G20). Kasey Buckles: “Birth Spacing and Sibling Outcomes” Tim Fuerst: “Models and Macroeconomics”
6 PM	Dinner at O’Rourke’s

Saturday, March 23

Visitors return home at their convenience.

Appendix H: Recent Graduate Student Placements by Select Peer Economics Departments

Year-by-year placements were available online for three of the four departments that have formed the comparison group throughout this self-study (not available for Boston College). Placements for four other comparable departments—Indiana, Ohio State, Michigan State, and Rochester—have been added to provide additional perspective.

Boston University	
2011	2012
Bank of Canada	Analysis Group, Boston
Bank of Italy	Brown University
College Board	Central University of Finance and
Fletcher School of Diplomacy, Tufts University	Economics, Beijing, China
Harvard Business School	Harvard Medical School/Center for
Max Weber fellowship at European University Institute, Florence	Multicultural Mental Health Research
Shanghai University of Finance and Economics	Kyunghee University, South Korea
Universitat de Barcelona	National Sun Yat-Sen University, Taiwan
University of Houston	National University of Singapore (NUS)
University of Missouri	Purdue University
University of New South Wales	The University of Warwick, UK
University of Pittsburgh, Dept. of Health Policy and Management	Université Libre de Bruxelles, ECARES
Université de Quebec a Montreal	Yale-National University of Singapore
	World Bank

Indiana University	
2011	2012
Korea Institute for International Economic Policy (KIEP)	Federal Reserve Board
The Bank of Korea	Auburn University
Korea Institute of Public Finance	Health Management and Policy Department,
New College of Florida	University of Iowa
Tan Tao University	Bucknell University
Korea Energy Economics Institute	Shanghai Jiaotong University
	School of Economics and Management,
	Tsinghua University
	Bank of Canada
	Weber State University
	Chinese Academy of Finance and
	Development, Central University of
	Finance and Economics
	California State University, Fullerton
	California State University, Northridge
	Korea Insurance Research Institute
	Research Associate J-PAL (Poverty Action
	Lab, MIT, India office)

Johns Hopkins University

2011	2012
University of Connecticut International Food Policy Research University of Pittsburgh, Graduate School of Public Health Ryerson University University of Richmond Norwegian School of Economics	Hamilton College Southern Methodist University DePaul University Bureau of Economic Analysis Bank of Canada Fannie Mae

Vanderbilt University

2011	2012
Meliksah University, Turkey Colgate University Washington & Lee University Price Waterhouse Coopers, LLC University of Massachusetts, Lowell Florida International University	United States Military Academy Bank of Canada Claremont Graduate University London School of Economics Kenyon College Korea Institute of Public Finance World Bank (consultant) SKK Graduate School of Business, Korea Grinnell College

Michigan State University

2011	2012
Korea Development Institute (KDI) Connecticut College Dept. of Public Administration and Policy at American University Grand Valley State University (Visiting Professor) University of Queensland Nanjing University, China Thomson Reuters Freddie Mac University of Cincinnati Capital One Wooster College (Visiting Assistant Professor)	Tulane University Chongqing Technology and Business university, China University of Edinburgh Georgia Southern University Massey University of New Zealand (Lecturer) Franklin P. Purdue School of Business, Salisbury University Federal Communications Commission Kansas Department of Labor Capital One Financial Corp U of Nevada, Reno

University of Rochester

2011	2012
Central Bank of Turkey	ADA University
U.S. Naval Academy	Heritage Foundation's Center for Data Analysis
Freddie Mac	Vanderbilt University
University of Montreal	Lahore University of Management Sciences
Federal Reserve Bank of Kansas City	Federal Reserve Bank of Richmond
University of Queensland	Long Island University
Institute of Economics, Academia Sinica	Manchester University
University of Maastricht	Korea Development Institute
	Ohio State University
	Durham Business School

Ohio State University

2011	2012
Berea College	California State University (Fullerton)
National University of Singapore [Post Doc.]	Central University of Finance & Economics, China
Shanghai Jiao Tong University, China	European University Institute, Italy [Post Doc.]
University of Alabama (Tuscaloosa)	Kyoto University, Japan
University of Richmond	Loyola University
University of West Georgia	Ohio State University [Lecturer]
West Virginia University	Renmin University, China
U.S. Food and Drug Administration	Saint Joseph's University
Employee Benefit Research Institute	Universite de Cergy-Pontoise, France [Post Doc.]
Bank of Korea	University of Akron
Bank of Turkey	University of North Carolina at Chapel Hill [Public Policy]
Korea Development Institute	U.S. Federal Trade Commission
Capital One	Bank of Canada
Christensen Associates	Bank of Japan
Integrated Financial Engineering	Bank of Korea
Moody's Analytics	Korea Development Institute
Price Waterhouse Coopers	Capital One
Salient Partners	Korea Capital Market Institute
	State Street Corporation

Appendix I: Graduate Student Publications

Below is a list of publications by students (in bold) who have graduated from, or are currently in, the Economics Ph.D. program.

- Bee, C. Adam**, Bruce Meyer, and James Sullivan. “The Validity of Consumption Data: Are the Consumer Expenditure Interview and Diary Surveys Informative?” In *Improving the Measurement of Consumer Expenditures*, Christopher Carroll, Thomas Crossley, and John Sabelhaus, eds. NBER Book Series Studies in Income and Wealth, University of Chicago Press. (forthcoming)
- Deines, A., **C. Adam Bee**, C. Katongo, R. Jensen, and D. Lodge. “The Potential Tradeoff Between Artisanal Fisheries Production and Hydroelectricity Generation on the Kafue River, Zambia.” *Freshwater Biology*. (forthcoming)
- Flood, R, N. Marion, and **Juan Yopez**. “A Perspective on Predicting Currency Crises.” In *Financial Globalization*, Gerard Caprio, ed. Elsevier. (forthcoming)
- Moulton, Shawn**. “Does Increased Funding for Homeless Programs Reduce Chronic Homelessness?” *Southern Economic Journal*, 79, 600-620. 2013.
- Buckles, Kasey S. and **Elizabeth L. Munnich**. “Birth Spacing and Sibling Outcomes.” *The Journal of Human Resources*, 47, 613-642, 2012.
- Chicoine, Luke**. “AIDS Mortality and its Effect on the Labor Market: Evidence from South Africa.” *Journal of Development Economics*, 98(2): 256-269. 2012.
- Flood, R, N. Marion, and **Juan Yopez**. “A Common Framework for Thinking About Currency Crises.” In *Handbook of Exchange Rates*, Jessica James, Ian Marsh, and Lucio Sarno, eds. Wiley 2012.
- Wozniak, Abigail, and **Thomas J. Murray**. “Timing is everything: Short-run population impacts of immigration in US cities.” *Journal of Urban Economics*, 72, 60-78, 2012.
- Curtis, Chadwick** and Nelson C. Mark. “Business Cycles, Consumption and Risk-Sharing: How Different is China.” In *The Evolving Role of Asia in Global Finance*, Yin-Wong Cheung, Vikas Kakkar, and Guonan Ma, eds. Emerald Press, Bingley, UK, 2011.

Appendix J: Journal Rankings

The Top 40 Journals in Economics – Roughly the top 10% of Journals

Tier 1: The top general interest journals in economics (5 journals) [alphabetical order]

- American Economic Review
- Econometrica
- Journal of Political Economy
- Quarterly Journal of Economics
- Review of Economic Studies

Tier 2: Second tier general interest journals and the very best specialty field journals (13 journals)

- Economic Journal
- European Economic Review
- International Economic Review
- Journal of Economic Literature
- Journal of Economic Perspectives
- Journal of Econometrics
- Journal of Economic Theory
- Journal of Finance
- Journal of International Economics
- Journal of Monetary Economics
- Journal of Public Economics
- RAND Journal of Economics
- Review of Economics and Statistics

Tier 3: Excellent field-specific journals (22 journals)

- American Economic Journal: Applied Economics
- American Economic Journal: Economic Policy
- American Economic Journal: Microeconomics
- American Economic Journal: Macroeconomics
- Brookings Papers on Economic Activity
- Games and Economic Behavior
- Journal of Applied Econometrics
- Journal of Business and Economic Statistics
- Journal of Economic Behavior and Organizations
- Journal of Economic Growth
- Journal of Economics and Dynamic Control
- Journal of Environmental Economics and Management
- Journal of the European Economic Association
- Journal of Development Economics
- Journal of Health Economics
- Journal of Human Resources
- Journal of Industrial Economics

- Journal of Labor Economics
- Journal of Law and Economics
- Journal of Money Credit and Banking
- Journal of Urban Economics
- NBER Macro Annual

Appendix K: External Grants Received by Current Faculty, since 2003

Kasey Buckles:

- National Institute of Health Grant (1R03HD058947-01A1), “Season of Birth and Later Outcomes: Old Questions, New Answers.” \$150,000, June 2009. With Dan Hungerman.
- University of Kentucky Center for Poverty Research, Young Investigator Development Grant, “Does the Adoption Subsidy Program help At-Risk Children?” \$5,000, September 2008.
- National Science Foundation Grant (SES-0720950), “Does the Adoption Subsidy Program Help At-Risk Children?” \$34,679, June 2007

Kirk Doran:

- Principal Investigator, \$295,876 grant from the Alfred P. Sloan Foundation, 2010-2012
- Principal Investigator, \$20,000 grant from the Ewing Marion Kauffman Foundation, 2010
- Principal Investigator, \$10,000 grant from the W.E. Upjohn Institute Policy Research, 2010

William N. Evans

- Russell Sage Foundation, “The Great Recession and Public Education.” William N. Evans and Robert Schwab, PIs, June 1, 2012 – May 31, 2014, \$250,000
- St. Joseph’s Regional Medical Center, “Evaluating Bundles Payments.” March 1, 2012 – August 31, 2013.
- Russell Sage Foundation, “Does Higher Family Incomes Produce Better Child Health? Evidence from the 1993 Expansion of the Earned Income Tax Credit,” William N. Evans, PI, January 1, 2008 – Dec 31, 2009. \$140,000.
- National Institute of Child Health and Human Development, “Length of Postpartum Hospital Stays and the Health of Mothers and Their Newborns,” William N. Evans, PI, June 1, 2006 – May 31, 2008. \$160,000.

Dan Hungerman:

- Principal Investigator, \$61,094 Grant from the John Templeton Foundation, 2012
- Principal Investigator, \$165,461 Grant from the NICHD, 1R03HD057362-01A2, 2009-2011
- Principal Investigator, \$46,650 Grant from the John Templeton Foundation, 2009
- Principal Investigator, \$150,000 Grant from the NICHD, 1R03HD058947-01A1, 2009-2011
- Principal Investigator, \$148,426 Spiritual Capital Research Grant from the Metanexus Institute, 2006-2008

Joe Kaboski:

- “Unlocking the Black Box of Savings: Using Quantitative Theory and a Microfinance Experiment to Measure Motives.” NICHD Grant #1R21HD073771-01A1, 2013-2015, PI
- “Evaluation of Privatized Delivery Model for ASCAs” U. of C. Consortium on Financial Systems and Poverty Grant (Gates), 2010-2012, PI
- “Credit and Impact: Examining a Policy Experiment.” NICHD Grant #1R03HD047768-01, 2004 to 2007, PI

Richard Jensen:

- National Oceanic and Atmospheric Administration: "Forecasting Spread and Bioeconomic Impacts of Aquatic Invasive Species from Multiple Pathways to Improve Management and Policy in the Great Lakes," September 1, 2009 - August 31, 2014 (Co-PI with D. Lodge), \$2,474,560.
- Ewing Marion Kaufman Foundation: "University Research and Faculty Consulting," June 1, 2006 - May 31, 2007, \$44,775.
- Ewing Marion Kaufman Foundation: "How Effective Are Technology Transfer Officers In Achieving Their Objectives?," September 1, 2006 - August 31, 2007, \$55,125.
- Ewing Marion Kaufman Foundation and National Bureau of Economic Research: "University Invention, Entrepreneurship, and Start-Ups," (with C. Chukumba), 2004 - 2005, \$10,000.

James Sullivan:

- National Bureau of Economic Research (co-PI, \$25,000), Research Grant, 2010
- The Smith Richardson Foundation (co-PI, \$272,673), Research Grant, 2008-2010
- Earhart Foundation (PI, \$6,236), Fellowship Research Grant, 2006
- United States Department of Agriculture (co-PI, \$40,000), Research Development Grant, 2006
- National Bureau of Economic Research (co-PI, \$25,000), Research Grant, 2006
- Annie E. Casey Foundation (co-PI, \$50,366), Research Grant, 2005
- The Smith Richardson Foundation (PI, \$60,000), Domestic Public Policy Research Fellowship Program, 2004
- The W.E. Upjohn Institute for Employment Research (PI, \$5,000), Mini-Grant, 2003

Abigail Wozniak:

- Upjohn Institute Research Mini-Grant (PI, \$5000) 2009-2010

Appendix L: Credit Hour Information

Appendix Table L.1: Credit Hours Taught By Rank

Year	Full	Associate	Assistant	SPF	Grad	Other	Total	Total/FTE
2008	1077	689	1218	0	1290	0	4274	237.4
2009	989	454	1863	852	1356	237	5751	213.0
2010	1174	884	1626	1242	1945	0	6871	202.1
2011	1069	2052	1233	1164	2454	12	7984	194.7
2012	1467	1232	2775	1605	1572	0	8651	211.0

Appendix Table L.2: Percentage of Credit Hours Taught By Rank

Year	Full	Associate	Assistant	SPF	Grad	Other
2008	25.2%	16.1%	28.5%	0.0%	30.2%	0.0%
2009	17.2%	7.9%	32.4%	14.8%	23.6%	4.1%
2010	17.1%	12.9%	23.7%	18.1%	28.3%	0.0%
2011	13.4%	25.7%	15.4%	14.6%	30.7%	0.2%
2012	17.0%	14.2%	32.1%	18.6%	18.2%	0.0%

Appendix M: Faculty List

(Name, Year of Hire/Appointment(a), Gender)

Endowed Chairs (4)

William Evans, 2007, male
Timothy Fuerst, 2012, male
Richard Jensen, 2000, male
Nelson Mark, 2003, male

Full Professors (3)

Robert Flood, 2009, male
Thomas Gresik, 2004(a), male
William Leahy, 1963, male

Associate Professors (6)

Daniel Hungerman, 2005, male
Joseph Kaboski, 2010, male
Byung-Joo Lee, 1996, male
Michael Pries, 2007, male
Kali Rath, 1991, male
James Sullivan, 2002, male

Professor on Indefinite Leave (1)

Chris Waller**, 2003, male

Concurrent Faculty (2)

Jeffrey Bergstrand, 2012 (a), male
Thomas Cosimano, 2004 (a), male

Assistant Professors (14)

Simeon Alder, 2009, male
Wyatt Brooks, 2012, male
Kasey Buckles, 2005, female
Kevin Donovan, 2013*, male
Kirk Doran, 2008, male
Antoine Gervais, 2010, male
Andreas Hagemann, 2012, male
Terence Johnson, 2011, male
Ethan Lieber, 2013*, male
Stephen Lugauer, 2008, male
Sarah Miller, 2014*, female
Eric Sims, 2009, male
Jeffrey Thurk, 2010, male
Abigail Wozniak, 2005, female

Special Professional Faculty (2)

Mary Flannery, 2012, female
Michael Mogavero, 2009, male

*Sarah Miller will join the Department in 2014 after finishing a Robert Wood Johnson fellowship at the University of Michigan. Kevin Donovan and Ethan Lieber will join the faculty in the fall of 2013.

**Chris Waller is the Director of Research for the St. Louis Federal Reserve Bank. He is on leave from the department indefinitely.

**Appendix N: Organization Plan and General Procedures for the Committee on
Appointments and Promotions**

UNIVERSITY OF NOTRE DAME
DEPARTMENT OF ECONOMICS

**ORGANIZATION PLAN AND GENERAL
PROCEDURES FOR
THE COMMITTEE ON APPOINTMENTS AND
PROMOTIONS
AND
THE FULL PROFESSOR COMMITTEE ON
PROMOTIONS**

AND

OPERATING PROCEDURES

November 2, 2012

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COMMITTEE ON APPOINTMENTS AND PROMOTIONS

I. Membership

The Committee on Appointments and Promotions (CAP) of the Department of Economics consists of all tenured members of the teaching-and-research faculty whose primary appointment resides in the Department of Economics and Econometrics and the Chairperson of the Department, who serves as *ex officio* chairperson of the CAP.

II. Responsibilities

A. The CAP is responsible for deliberating and providing a recommendation on all cases that consider appointment, reappointment, promotion, and tenure to the teaching-and-research faculty with the exception of promotion to the rank of Professor or Endowed Chair, and on all cases that consider appointment, reappointment, promotion, and tenure to the special professional faculty.

B. All deliberations of the CAP are made in compliance with the University of Notre Dame's Academic Articles, PAC recommendations, College recommendations, and departmental practices. The Chairperson participates in CAP deliberations, but does not vote with the CAP. In all cases the Chairperson is required to provide an independent recommendation in a written letter addressed to the Dean.

C. The CAP may advise the Chairperson and the Department on other departmental matters.

III. Procedures for Reappointment as Assistant Professor

A. Standards for Reappointment

The Academic Articles provide no guidance regarding the standards for reappointment. For reappointment, the Assistant Professor should have demonstrated sufficient progress in teaching ability, growth in knowledge and maturity, salutary influence upon students, standing among colleagues, and achievement in scholarship that there is a reasonable likelihood that the standards for promotion to Associate Professor (see IV.A) will be satisfied when that decision is contractually mandated.

For reappointment achievement in scholarship is interpreted as follows. Assistant professors are expected to complete their doctoral degree before or soon after they arrive on campus, and to submit several articles by the time the renewal case is considered. Thereafter, they are expected to demonstrate substantial research activity, including: some articles published, accepted for publication, and invited to be revised and

resubmitted at leading journals; a steady stream of working papers and submissions to appropriate journals; participation and presentations of their research at appropriate general interest and specialty conferences, seminar series at other universities, and internal workshops. Other examples of achievement may include citations, external grants, and awards.

For reappointment, the Academic Articles provide no guidance regarding standards for teaching. For reappointment, sufficient progress in teaching ability is interpreted as follows. Assistant professors are expected to teach well-organized classes that challenge students at a level appropriate for the course and consistent with departmental expectations. They are expected to provide and maintain an environment within their classes that encourages students to learn. Assistant professors are expected to be available to students outside of class at least three hours per week for additional instruction, mentoring, and advice. To the extent initial deficiencies in teaching ability arise, candidates are expected to take concrete steps to remedy the deficiencies. It will be important for the candidate to document these steps.

The Academic Articles also provide no guidance regarding standards for service. For reappointment, expectations for the Assistant Professor are minimal, intended to involve a commitment of no more than five percent of their time, and restricted to those departmental and professional activities of direct benefit to the individual, such as recruiting, hosting seminar speakers, serving as discussant at conferences, and refereeing. Nevertheless, assistant professors are expected to perform reasonable service for the department when asked, to demonstrate a commitment to the construction of a healthy and vibrant department, and to maintain an appropriate level of civility and collegiality in their interactions with other faculty and staff. As with research and teaching, it is the quality and impact of service, not the quantity, which matters.

B. Timing

1. Faculty members are considered for reappointment only when contractually mandated.
2. Upon becoming a candidate for reappointment, the Chairperson meets privately with the candidate to explain the entire process, normally in May of the preceding academic year.
3. A candidate for reappointment may request that his/her case be withdrawn before a decision is reached and tender his/her resignation effective either at the end of the current academic year or the following year.

C. Materials Provided by the Candidate

1. The evaluation of the research of a candidate for reappointment is conducted internally. In exceptional circumstances an external evaluation may be approved by the Dean.

2. Candidates for reappointment are required to provide the following materials to the Chairperson by September 1 of the current academic year:

a. Curriculum vita (CV). The CV should distinguish between those publications that have appeared or that are forthcoming in refereed journals and those that are not refereed. Co-authors must be listed in the order in which they appear on the publication, and page numbers must be provided for all published articles.

b. One copy of all publications listed on the CV.

c. For publications which are listed as forthcoming, an acceptance letter from the editor.

d. A list of no more than five articles, published or unpublished, which the candidate considers to be her/his best work. The candidate should be advised that members of the CAP are expected to read all of her/his publications, but will pay special attention to the ones on this list.

e. A teaching portfolio consisting of materials from all courses taught at Notre Dame. For each course, the candidate must provide:

i. the course syllabus.

ii. an articulation of learning goals.

iii. a description of teaching strategies and learning activities.

iv. all teaching materials, assignments, and examinations.

v. a representative sample of graded student work with names redacted reflecting the type of feedback students received including information about the full distribution of scores for each piece of work and examples of the strongest, the median, and the weakest student work.

vi. all written course evaluations.

f. An integrative personal statement of no more than five pages describing the candidate's research achievements and agendas, teaching goals, and how service activities may relate to his/her professional career.

g. Any other documents that the candidate believes will help the CAP to evaluate her/his research, teaching and service contributions.

3. The Chairperson is responsible for providing the CAP with all the relevant information that is necessary to conduct a fair and objective review. The Chairperson provides feedback on the materials provided so that the candidate can improve them, if necessary. The candidate provides the Chairperson with any new information, such as articles accepted for publication, which becomes available during the process.

D. CAP Procedures and Deliberations

1. The Chairperson can call a CAP meeting at any time during regular working hours when members of the CAP do not have regularly scheduled classes. When the purpose of

the meeting is to provide a recommendation and/or vote on a case, a reasonable attempt will be made to achieve a quorum, defined as two-thirds of the membership of the CAP. Members of the CAP who are unable to attend can submit written recommendations to be included in the minutes, but cannot be counted toward a quorum, and cannot vote.

2. The Chairperson provides the time schedule for reappointment decisions to both the CAP and the candidate as soon as feasible after it is received from the Office of the Provost. The Chairperson calls a CAP meeting within the first two weeks of classes. At this meeting the CAP arranges a tentative schedule of meetings designed to complete its work at least one week in advance of the date when the file must be forwarded to the Dean, so that the Chairperson has sufficient time to prepare her/his separate recommendation.

3. Deliberations concerning reappointment require a comprehensive review of all aspects of the candidate's research by all members of the CAP, and an equally comprehensive review of the candidate's teaching and service. These discussions are conducted in as many meetings as necessary. Minutes are taken at each meeting and submitted to the members of CAP for their approval in a timely fashion.

4. The CAP selects one or more of its members to write the required research report on the candidate, one or more of its members to write the required teaching report, and one or more of its members to write the required service report. Each of these reports is prepared in accordance with current PAC guidelines, copies of which the Chairperson will provide to the CAP. Each report must be signed by its author(s).

5. The research report is no more than six pages and written in a way that makes the candidate's contributions to the over-all discipline accessible to non-economists. Evaluative comments, if any, should be written in a careful and unbiased manner that identifies both the strengths and weaknesses of the candidate's research.

6. Evaluation of Teaching

a. Scope of Review.

In accord with the ACPET Guidelines, the CAP will conduct a comprehensive evaluation of the candidate's teaching that will include:

- i. a detailed narrative that analyzes the candidate's TCE Instructor History Report for all courses taught over the entire review period.
- ii. an in-depth evaluation of 3-5 representative courses taught by the candidate in the last three years.
- iii. an appraisal of additional contributions to teaching.

The courses that will receive an in-depth evaluation will be selected by the CAP in consultation with the candidate. The selection of courses will reflect the range of courses taught by the candidate.

b. Supplemental Sources of Information

At the request of the candidate, the report can include information from peer reviews or videotapes of the candidate's classes from at least 4 semesters. The candidate must request that the CAP conduct or schedule such reviews early enough in the review period to allow for reviews of 3-5 representative courses. The CAP will appoint two members to conduct all the peer reviews for a candidate. For each selected course, the reviewers will evaluate at least two classes chosen by the reviewers without the prior knowledge of the candidate. The reviewers may ask the candidate for course scheduling information to avoid class meetings that are not conducive to review, e.g. exam dates. With the concurrence of the candidate, the reviewers may schedule select class meetings to be videotaped by the Kaneb Center for review at a later date. Other sources of information can also be considered given the mutual consent of the candidate and the CAP.

c. Elements of Teaching Report

For each course the CAP chooses for in-depth evaluation, the teaching report will evaluate evidence of:

- i. Effective course design including meaningful and clearly articulated learning goals, course rigor, relevance to students' needs, and relationship to the program's curricular requirements.
- ii. Effective implementation of teaching strategies including the ability to create a stimulating environment that is conducive to learning and effectively uses the students' time, to encourage students to think analytically and creatively, and to develop knowledge, skills, and habits of mind appropriate to the discipline.
- iii. Effective evaluation of student work including high expectations for student performance, helpful feedback throughout the course, and the application of appropriate standards for assessing student achievement of course learning goals.
- iv. Student perceptions including student feedback on quality of instruction and student satisfaction with their learning experience.

With regard to (iii), contributions beyond classroom teaching enrich the student learning experience and advance the teaching mission of the department, College, or University. Examples include student mentoring; facilitating experiential learning opportunities, such as research, fieldwork, or scholarly or creative endeavors; directing student theses; and introducing significant innovations within the curriculum. Contributions that lead to student publications, performances, exhibitions, placements, and awards should be highlighted.

7. The service report includes a summary of the quality and quantity of the candidate's service to the Department, College, University, and discipline.

8. At a final meeting, there is a discussion in which each member of the CAP states her/his opinion on each aspect of the case. This is followed by an open vote in which each member of the CAP must vote either in favor, against, or abstain. In the case of dissent, a minority report may be included in the CAP report on research, teaching, or service. The minutes from this meeting should provide a balanced summary of the discussion at the meeting(s), and should contain sufficient information to allow subsequent readers to understand the rationale for the votes cast. The minutes are signed

by all members of the CAP and forwarded with the CAP reports as part of the candidate's file.

9. The Chairperson votes in a letter to the Dean, explaining his/her vote in detail. If the Chairperson anticipates disagreeing with the CAP's recommendations, the Chairperson should meet with the CAP to discuss the disagreement prior to forwarding her or his letter to the Dean. If disagreement occurs, communication and trust are likely to be improved by open discussion of the opposing viewpoints. However, there is no explicit or implicit preference for unanimity in making a recommendation within the CAP or between the CAP and the Chairperson.

10. As stated in the Academic Articles (III.3.a): "If the University chooses to terminate the services of an Assistant Professor at the end of a contract period, the University will give 12 months' notice of such termination." If a candidate's reappointment has not been approved, the Dean, upon request, gives the faculty member as full a report of the reasons for the decision as possible without violating the rule of confidentiality (see X below).

IV. Procedures for Tenure or Tenure and Promotion to the Rank of Associate Professor

A. Standards for Tenure and Promotion to Associate Professor

The Academic Articles (III.3.a) state that the standards for appointment to the rank of Associate Professor should guide the evaluation. As stated in the Academic Articles: "The Associate Professor should have demonstrated outstanding teaching ability, growth in knowledge and maturity, salutary influence upon students, and standing among colleagues. Notable achievement in scholarship, as shown by significant publication or its equivalent or, where appropriate, by meaningful contributions to public service, will ordinarily be required for this rank."

For promotion to the rank of Associate Professor with tenure, notable achievement in scholarship is interpreted as follows. Assistant professors are expected to demonstrate that their research is beginning to have an impact on both their own area of specialization and the broader discipline, as evidenced by substantial research activity, including: some articles published, accepted for publication, or invited to be revised and resubmitted at leading journals; a steady stream of working papers and submissions to appropriate journals, participation and presentations of their research at conferences, seminars at other universities, and internal workshops. Other examples of achievement may include citations, external grants, and awards. Quality, not quantity, is of primary importance in demonstrating that a candidate's research is beginning to have an impact on the discipline. Generally, this involves publication of several articles in some of the leading journals of economics or other closely related disciplines.

For promotion to the rank of Associate Professor with tenure, outstanding teaching ability is interpreted as follows. Candidates for the rank of Associate Professor with tenure are expected to consistently teach well-organized classes that challenge students at a level

appropriate for the course and consistent with departmental expectations. They are expected to provide and maintain an environment within their classes that encourages students to learn. Candidates are expected to be available to students outside of class meetings at least three hours per week for additional instruction, mentoring, and advice. At the undergraduate level, candidates should have begun to develop a record of supervising honors theses. At the graduate level, candidates are expected to teach graduate classes and serve on dissertation committees when requested.

The Academic Articles provide no guidance regarding standards for service. For promotion to the rank of Associate Professor with tenure, expectations for the Assistant Professor are minimal, intended to involve a commitment of no more than five percent of their time, and restricted to those departmental and professional activities of direct benefit to the individual, such as recruiting, hosting seminar speakers, serving as discussant at conferences, and refereeing. Nevertheless, assistant professors are expected to perform reasonable service for the department when asked, to demonstrate a commitment to the construction of a healthy and vibrant department, and to maintain an appropriate level of civility and collegiality in their interactions with other faculty and staff. As with research and teaching, it is the quality and impact of service, not the quantity, which matters.

B. Timing

1. Faculty members may be considered for tenure and promotion either by contractual mandate or by their own request. A candidate who provides a written request for early consideration for tenure and promotion has the right to receive full consideration of her/his case starting with the Department and proceeding to consideration by the President. However, if the review is not contractually mandated and the candidate has requested a review in the preceding year, then the candidate must provide a written explanation for the second request, and the CAP may decline to conduct a full review if it does not consider the candidate's reasons to be sufficient justification for the request.
2. Faculty members who request early consideration for tenure and promotion must inform the Chairperson in writing by May 1 of the preceding academic year. The Chairperson consults with the CAP and the Dean, and then meets with the candidate to provide the feedback from these consultations.
3. Upon becoming a candidate for tenure and promotion, the Chairperson meets privately with the candidate to explain the entire process, normally in May of the preceding academic year.
4. Tenure and promotion cases that are not contractually mandated may be withdrawn at any point in the process, but only with the candidate's approval. If a case is withdrawn after external letters have been solicited and the case is reconsidered in the following academic year, then either the CAP must use exactly the same evaluators as it did in the preceding year, or it must choose an entirely new set of evaluators.

5. In tenure and promotion cases that are contractually mandated, a candidate may request that his/her case be withdrawn before a decision is reached and tender his/her resignation effective either at the end of the current academic year or the following year.

C. Materials Provided by the Candidate

1. Candidates for tenure and promotion are required to provide the following materials to the Chairperson by June 1 of the preceding academic year:

a. A list of three external experts whom the candidate designates as appropriate evaluators of her/his research, ranked in the order in which s/he prefers that they be contacted. These experts should hold the rank of Professor. If these experts are not at academic institutions, they should be of similar stature. The candidate should be advised that neither her/his dissertation advisor nor any faculty member at his/her Ph.D.-granting institution can serve as an evaluator, that the expectation is that these experts are at departments or institutions which are at least as prestigious as Notre Dame's Department, and that this list is included in her/his tenure and promotion file.

b. A list of no more than two external experts whom the candidate does not want to be selected by the CAP as evaluators of his/her research. The candidate should be advised that this list is included in his/her tenure and promotion file.

2. Candidates for tenure and promotion are required to provide the following materials to the Chairperson by September 1 of the current academic year:

a. CV. The CV should distinguish between those publications that have appeared or that are forthcoming in refereed journals and those that are not refereed. Co-authors must be listed in the order in which they appear on the publication, and page numbers must be provided for all published articles.

b. One copy of all publications listed on the CV.

c. For publications which are listed as forthcoming, an acceptance letter from the editor.

d. A list of no more than five articles, published or unpublished, which the candidate considers to be her/his best work. The candidate should be advised that members of the CAP are expected to read all of her/his publications, but will pay special attention to the ones on this list.

e. A teaching portfolio consisting of materials from all courses taught at Notre Dame, a description of supervised honors theses, and a summary of participation on doctoral committees. For each course, the candidate must provide:

i. the course syllabus.

ii. an articulation of learning goals.

iii. a description of teaching strategies and learning activities.

iv. all teaching materials, assignments, and examinations.

v. a representative sample of graded student work with names redacted reflecting the type of feedback students received including information about the full distribution of scores for each piece of work and examples of the strongest, the median, and the weakest student work.

vi. all written course evaluations.

f. An integrative personal statement of no more than five pages describing the candidate's research achievements and agendas, teaching goals, and how service activities may relate to his/her professional career.

g. Any other documents that the candidate believes will help the CAP to evaluate her/his research, teaching and service contributions.

3. The Chairperson is responsible for providing the CAP with all the relevant information that is necessary to conduct a fair and objective review. The Chairperson provides feedback on the materials provided so that the candidate can improve them, if necessary. The candidate provides the Chairperson with any new information, such as articles accepted for publication, which becomes available during the process.

D. CAP Procedures and Deliberations

1. The Chairperson can call a CAP meeting at any time during regular working hours when members of the CAP do not have regularly scheduled classes. When the purpose of the meeting is to provide a recommendation and/or vote on a case, a reasonable attempt will be made to achieve a quorum, defined as two-thirds of the membership of the CAP. Members of the CAP who are unable to attend can submit written recommendations to be included in the minutes, but cannot be counted toward a quorum, and cannot vote.

2. The Chairperson provides the time schedule for tenure and promotion decisions to both the CAP and the candidate as soon as feasible after it is received from the Office of the Provost. The Chairperson calls a CAP meeting within the first two weeks of classes. At this meeting the CAP arranges a tentative schedule of meetings designed to complete its work at least one week in advance of the date when the file must be forwarded to the Dean, so that the Chairperson has sufficient time to prepare his/her separate recommendation.

3. The CAP obtains at least six written external evaluations of the candidate's research. No more than two of these external reviewers can be suggested by the candidate. The CAP will make every effort to avoid potential conflicts of interest in selecting external reviewers. Reviewers who have served on the candidate's dissertation committee, are from the candidate's home PhD department, or who are close research collaborators will be avoided. The CAP cannot select evaluators who were prohibited by the candidate without the approval of the Dean.

4. All communication with external evaluators is conducted by the Chairperson, who begins by contacting the first two evaluators from the candidate's list and four chosen by

the CAP to determine if they are willing to serve. The Chairperson will specifically ask each evaluator to describe any working relationship she or he has or has had with the candidate to avoid potential conflicts of interest (see D.3 above). If such a relationship becomes known after the solicitation of external letters, these letters will be included in the package, the conflict of interest will be disclosed in the description of the reviewers, and additional external letters will be sought so that the goal of six external evaluations from reviewers who have no perceived or potential conflict of interest are available to the CAP in their deliberations. This contact should be made in writing, so that the same language can be used in the requests made to all potential evaluators for all candidates. If an evaluator agrees, the Chairperson sends the candidate's CV and a selection of publications, including the ones designated by the candidate (see IV.C.2.d), with a cover letter recommended by the Office of the Provost for this purpose. An evaluator is normally given at least six weeks to complete the review, and may be offered a modest honorarium for a timely response. If an evaluator chosen by the candidate is unable to serve, the Chairperson contacts the remaining evaluator on the candidate's list. If an insufficient number of evaluators can be found, the Chairperson contacts the CAP to request names of other possible evaluators.

5. Deliberations concerning reappointment and tenure and promotion require a comprehensive review of all aspects of the candidate's research by all members of the CAP, and an equally comprehensive review of the candidate's teaching and service. These discussions are conducted in as many meetings as necessary. Minutes are taken at each meeting and submitted to the members of CAP for their approval in a timely fashion.

6. The CAP selects one or more of its members to write the required research report on the candidate, one or more of its members to write the required teaching report, and one or more of its members to write the required service report. Each of these reports is prepared in accordance with current PAC guidelines, copies of which the Chairperson will provide to the CAP. Each report must be signed by its author(s).

7. The research report is no more than six pages and written in a way that makes the candidate's contributions to the over-all discipline accessible to non-economists. Evaluative comments, if any, should be written in a careful and unbiased manner that identifies both the strengths and weaknesses of the candidate's research.

8. Evaluation of Teaching

a. Scope of Review.

In accord with the ACPET Guidelines, the CAP will conduct a comprehensive evaluation of the candidate's teaching that will include:

- i. a detailed narrative that analyzes the candidate's TCE Instructor History Report for all courses taught over the entire review period.
- ii. an in-depth evaluation of 3-5 representative courses taught by the candidate in the last three years.
- iii. an appraisal of additional contributions to teaching.

The courses that will receive an in-depth evaluation will be selected by the CAP in consultation with the candidate. The selection of courses will reflect the range of courses taught by the candidate.

b. Supplemental Sources of Information

At the request of the candidate, the report can include information from peer reviews or videotapes of the candidate's classes from at least 4 semesters. The candidate must request that the CAP conduct or schedule such reviews early enough in the review period to allow for reviews of 3-5 representative courses. The CAP will appoint two members to conduct all the peer reviews for a candidate. For each selected course, the reviewers will evaluate at least two classes chosen by the reviewers without the prior knowledge of the candidate. The reviewers may ask the candidate for course scheduling information to avoid class meetings that are not conducive to review, e.g. exam dates. With the concurrence of the candidate, the reviewers may schedule select class meetings to be videotaped by the Kaneb Center for review at a later date. Other sources of information can also be considered given the mutual consent of the candidate and the CAP.

c. Elements of Teaching Report

For each course the CAP chooses for in-depth evaluation, the teaching report will evaluate evidence of:

- i. Effective course design including meaningful and clearly articulated learning goals, course rigor, relevance to students' needs, and relationship to the program's curricular requirements.
- ii. Effective implementation of teaching strategies including the ability to create a stimulating environment that is conducive to learning and effectively uses the students' time, to encourage students to think analytically and creatively, and to develop knowledge, skills, and habits of mind appropriate to the discipline.
- iii. Effective evaluation of student work including high expectations for student performance, helpful feedback throughout the course, and the application of appropriate standards for assessing student achievement of course learning goals.
- iv. Student perceptions including student feedback on quality of instruction and student satisfaction with their learning experience.

With regard to (iii), contributions beyond classroom teaching enrich the student learning experience and advance the teaching mission of the department, College, or University. Examples include student mentoring; facilitating experiential learning opportunities, such as research, fieldwork, or scholarly or creative endeavors; directing student theses; and introducing significant innovations within the curriculum. Contributions that lead to student publications, performances, exhibitions, placements, and awards should be highlighted.

9. The service report includes a summary of the quality and quantity of the candidate's service to the Department, College, University, and discipline.

10. At a final meeting, there is a discussion in which each member of CAP states her/his opinion on each aspect of the case. This is followed by an open vote in which each

member of the CAP must vote either in favor, against, or abstain. In the case of dissent, a minority report may be included in the CAP report on research, teaching, or service. The minutes from this meeting should analyze the strengths and weaknesses of the case, provide a balanced summary of the discussion at the meeting(s), and should contain sufficient information to allow subsequent readers to understand the rationale for the votes cast. The minutes are signed by all members of the CAP and forwarded with the CAP reports as part of the candidate's file.

11. The Chairperson votes in a letter to the Dean, explaining his/her vote in detail. If the Chairperson anticipates disagreeing with the CAP's recommendations, the Chairperson should meet with the CAP to discuss the disagreement prior to forwarding her or his letter to the Dean. If disagreement occurs, communication and trust are likely to be improved by open discussion of the opposing viewpoints. However, there is no explicit or implicit preference for unanimity in making a recommendation within the CAP or between the CAP and the Chairperson.

12. As stated in the Academic Articles (III.3.a): "If the University chooses to terminate the services of an Assistant Professor [or an Associate Professor without tenure] at the end of a contract period, the University will give 12 months' notice of such termination." If a candidate's reappointment has not been approved, the Dean, upon request, gives the faculty member as full a report of the reasons for the decision as possible without violating the rule of confidentiality (see X below).

FULL PROFESSOR COMMITTEE ON PROMOTIONS (FPC)

V. Membership

The Full Professor Committee on Promotions (FPC) of the Department of Economics consists of all members of the teaching-and-research faculty who hold the rank of Professor and the Chairperson of the Department, who serves as *ex officio* chairperson of the FPC. The FPC must contain at least three members in addition to the Chairperson. If the Department has fewer than three Professors, the Dean, after consultation with the Chairperson and Professors, appoints Professors from another department who have an appropriate understanding of the discipline of economics.

VI. Responsibilities

A. The FPC is responsible for deliberating and providing a recommendation on all cases of promotion of teaching-and-research faculty to the rank of Professor or Endowed Chair.

B. All deliberations of the FPC are made in compliance with the University of Notre Dame's Academic Articles, PAC recommendations, College recommendations, and departmental practices. The Chairperson participates in FPC deliberations, but does not

vote with the FPC. The Chairperson is required to provide an independent recommendation in a written letter addressed to the Dean.

C. The FPC is also expected to review Associate Professors at least once every three years, although this is not obligatory. The review provides feedback and mentoring to Associate Professors on their progress toward promotion to Professor. The FPC normally meets in May to review the status of eligible Associate Professors. This review should involve consultation with the Dean.

VII. Procedures for Promotion

A. Standards

The Academic Articles (III.3.a) state that the standards for appointment to the rank of Professor should guide the evaluation. The Articles state: “The Professor should possess the qualifications required for appointment as Associate Professor, should have maintained excellence in teaching, and should have gained widespread recognition as a scholar.”

For promotion to the rank of Professor, widespread recognition as a scholar is interpreted as follows. Associate professors are expected to demonstrate that their research has had an impact on both their own area of specialization and the broader discipline. This is indicated by substantial research activity, including: a stock of publications; a continuing steady stream of working papers and articles published in appropriate journals; participation and presentations of their research at conferences, seminars at other universities, and internal workshops. Quality, not quantity, is of primary importance in demonstrating that a candidate’s research has had an impact on the discipline. Generally this involves not only publication after tenure of several articles in some of the leading journals of economics or other closely related disciplines, but also a record of substantial citations to all publications throughout the candidate’s career. Other examples of achievement may include external grants and awards.

For promotion to the rank of Full Professor, maintained excellence in teaching is interpreted as follows. Candidates for the rank of Full Professor are expected to consistently teach well-organized classes that challenge students at a level appropriate for the course and consistent with departmental expectations. They are expected to provide and maintain an environment within their classes that encourages students to learn. Candidates are expected to be available to students outside of class meetings at least three hours per week for additional instruction, mentoring, and advice. Candidates are expected to have a record of supervising undergraduate honors theses, serving on doctoral committees, and supervising doctoral students. They are also expected to encourage and mentor undergraduates capable of pursuing a Ph.D. in economics and to help such students apply to graduate programs commensurate with the student’s ability.

The Academic Articles provide no guidance regarding standards for service. For promotion to the rank of Professor, expectations for the Associate Professor are substantial, but still less than those for Professors, intended to involve a commitment of no more than ten percent of their time. Service expectations include not only departmental and professional activities beyond those of direct benefit to them, including service on various committees, but also occasional service to the college and university. In addition, associate professors are expected to perform reasonable service for the department when asked, to demonstrate a commitment to the construction of a healthy and vibrant department and to the discipline, and to maintain an appropriate level of civility and collegiality in their interactions with other faculty and staff. As with research and teaching, it is the quality and impact of service, not the quantity, which matters.

B. Timing

1. Consideration of promotion to Professor may be initiated by the candidate or the FPC. Faculty members who request consideration for promotion to Professor must inform the Chairperson in writing no later than May 1 of the preceding academic year. The Chairperson consults with the CAP and the Dean, and then meets with the candidate to provide the feedback from these consultations.

2. Upon becoming a candidate for promotion to Professor, the Chairperson meets privately with the candidate to explain the entire process, normally in May of the preceding academic year.

3. Promotion to Professor cases may be withdrawn at any point in the process, but only with the candidate's approval. If a case is withdrawn after external letters have been solicited and the case is reconsidered in the following academic year, then either the FPC must use exactly the same evaluators as it did in the preceding year, or it must choose an entirely new set of evaluators.

C. Materials Provided by the Candidate

1. Candidates for promotion to Professor are required to provide the following materials to the Chairperson by June 1 of the preceding academic year:

a. A list of three external experts whom the candidate designates as appropriate evaluators of her/his research, ranked in the order in which s/he prefers that they be contacted. These experts should hold the rank of Professor. If these experts are not at academic institutions, they should be of similar stature. The candidate should be advised that neither her/his dissertation advisor nor any faculty member at his/her Ph.D.-granting institution can serve as an evaluator, that the expectation is that these experts are at departments or institutions which are at least as prestigious as Notre Dame's Department, and that this list is included in her/his promotion file.

b. A list of no more than two external experts whom the candidate does not want to be selected by the FPC as evaluators of his/her research. The candidate should be advised that this list is included in his/her promotion file.

2. Candidates are required to provide the following materials to the Chairperson by September 1 of the current academic year:

a. CV. The CV should distinguish between those publications that have appeared or that are forthcoming in refereed journals and those that are not refereed. Co-authors must be listed in the order in which they appear on the publication, and page numbers must be provided for all published articles.

b. One copy of all research listed on the CV published since the candidate was granted tenure.

c. For publications which are listed as forthcoming, an acceptance letter from the editor.

d. A list of no more than five articles, published or unpublished, which the candidate considers to be her/his best work. The candidate should be advised that members of the FPC are expected to read all of her/his publications after the granting of tenure, but will pay special attention to the ones on this list.

e. A teaching portfolio consisting of materials from all courses taught at Notre Dame, a description of supervised honors theses, a summary of mentoring activities of students seeking to pursue graduate education, and a summary of participation on doctoral committees. For each course, the candidate must provide:

i. the course syllabus.

ii. an articulation of learning goals.

iii. a description of teaching strategies and learning activities.

iv. all teaching materials, assignments, and examinations.

v. a representative sample of graded student work with names redacted reflecting the type of feedback students received including information about the full distribution of scores for each piece of work and examples of the strongest, the median, and the weakest student work.

vi. all written course evaluations.

f. An integrative personal statement of no more than five pages describing the candidate's research achievements and agendas, teaching goals, and how service activities may relate to his/her professional career.

g. A list of graduate students whose dissertations the candidate has supervised, together with their employment placements and significant publications arising from the dissertation.

h. Any other documents that the candidate believes will help the FPC to evaluate her/his research, teaching and service contributions.

3. The Chairperson is responsible for providing the FPC with all the relevant information that is necessary to conduct a fair and objective review. The Chairperson provides feedback on the materials provided so that the candidate can improve them, if necessary. The candidate provides the Chairperson with any new information, such as articles accepted for publication, which becomes available during the process.

D. FPC Procedures and Deliberations on Promotions

1. The Chairperson can call an FPC meeting at any time during regular working hours when members of the FPC do not have regularly scheduled classes. When the purpose of the meeting is to provide a recommendation and/or vote on a case, a reasonable attempt will be made to achieve a quorum, defined as two-thirds of the membership of the FPC. Members of the FPC who are unable to attend can submit written recommendations to be included in the minutes, but cannot be counted toward a quorum, and cannot vote.

2. The Chairperson provides the time schedule for promotion decisions to both the FPC and the candidate as soon as feasible after it is received from the Office of the Provost. The Chairperson calls an FPC meeting within the first two weeks of classes. At this meeting the FPC arranges a tentative schedule of meetings designed to complete its work at least one week in advance of the date when the file must be forwarded to the Dean, so that the Chairperson has sufficient time to prepare her/his separate recommendation.

3. The FPC obtains at least six written external evaluations of the candidate's research. No more than two of these external reviewers can be suggested by the candidate. The FPC will make every effort to avoid potential conflicts of interest in selecting external reviewers. Reviewers who have served on the candidate's dissertation committee, are from the candidate's home PhD department, or who are close research collaborators will be avoided. The FPC cannot select evaluators who were prohibited by the candidate without the approval of the Dean.

4. All communication with external evaluators is conducted by the Chairperson, who begins by contacting the first two evaluators from the candidate's list and four chosen by the FPC to determine if they are willing to serve. The Chairperson will specifically ask each evaluator to describe any working relationship she or he has or has had with the candidate to avoid potential conflicts of interest (see D.3 above). If such a relationship becomes known after the solicitation of external letters, these letters will be included in the package, the conflict of interest will be disclosed in the description of the reviewers, and additional external letters will be sought so that the goal of six external evaluations from reviewers who have no perceived or potential conflict of interest are available to the FPC in their deliberations. This contact should be made in writing, so that the same language can be used in the requests made to all potential evaluators for all candidates. If an evaluator agrees, the Chairperson sends the candidate's CV and a selection of publications, including the ones designated by the candidate (see VII.C.2.d), with the cover letter recommended by the Office of the Provost for this purpose. An evaluator is normally given at least six weeks to complete the review, and may be offered a modest

honorarium for a timely response. If an evaluator chosen by the candidate is unable to serve, the Chairperson contacts the remaining evaluator on the candidate's list. If an insufficient number of evaluators can be found, the Chairperson contacts the FPC to request names of other possible evaluators.

5. Deliberations concerning promotion to Professor require a comprehensive review of all aspects of the candidate's research by all members of the FPC, and an equally comprehensive review of the candidate's teaching and service, although greater emphasis should be placed on the candidate's performance in each of these areas since being granted tenure. These discussions are conducted in as many meetings as necessary. Minutes are taken at each meeting and submitted to the members of FPC for their approval in a timely fashion.

6. The FPC selects one or more of its members to write the required research report on the candidate, one or more of its members to write the required teaching report, and one or more of its members to write the required service report. Each of these reports is prepared in accordance with current PAC guidelines, copies of which the Chairperson will provide to the FPC. Each report must be signed by its author(s).

7. The research report is no more than six pages and written in a way that makes the candidate's contributions to the over-all discipline accessible to non-economists. Evaluative comments, if any, should be written in a careful and unbiased manner that identifies both the strengths and weaknesses of the candidate's research.

8. Evaluation of Teaching

a. Scope of Review.

In accord with the ACPET Guidelines, the CAP will conduct a comprehensive evaluation of the candidate's teaching that will include:

- i. a detailed narrative that analyzes the candidate's TCE Instructor History Report for all courses taught over the entire review period.
- ii. an in-depth evaluation of 3-5 representative courses taught by the candidate in the last three years.
- iii. an appraisal of additional contributions to teaching.

The courses that will receive an in-depth evaluation will be selected by the CAP in consultation with the candidate. The selection of courses will reflect the range of courses taught by the candidate.

b. Supplemental Sources of Information

At the request of the candidate, the report can include information from peer reviews or videotapes of the candidate's classes from at least 4 semesters. The candidate must request that the CAP conduct or schedule such reviews early enough in the review period to allow for reviews of 3-5 representative courses. The CAP will appoint two members to conduct all the peer reviews for a candidate. For each selected course, the reviewers will evaluate at least two classes chosen by the reviewers without the prior knowledge of the candidate. The reviewers may ask the candidate for course scheduling information to

avoid class meetings that are not conducive to review, e.g. exam dates. With the concurrence of the candidate, the reviewers may schedule select class meetings to be videotaped by the Kaneb Center for review at a later date. Other sources of information can also be considered given the mutual consent of the candidate and the CAP.

c. Elements of Teaching Report

For each course the CAP chooses for in-depth evaluation, the teaching report will evaluate evidence of:

- i. Effective course design including meaningful and clearly articulated learning goals, course rigor, relevance to students' needs, and relationship to the program's curricular requirements.
- ii. Effective implementation of teaching strategies including the ability to create a stimulating environment that is conducive to learning and effectively uses the students' time, to encourage students to think analytically and creatively, and to develop knowledge, skills, and habits of mind appropriate to the discipline.
- iii. Effective evaluation of student work including high expectations for student performance, helpful feedback throughout the course, and the application of appropriate standards for assessing student achievement of course learning goals.
- iv. Student perceptions including student feedback on quality of instruction and student satisfaction with their learning experience.

With regard to (iii), contributions beyond classroom teaching enrich the student learning experience and advance the teaching mission of the department, College, or University. Examples include student mentoring; facilitating experiential learning opportunities, such as research, fieldwork, or scholarly or creative endeavors; directing student theses; and introducing significant innovations within the curriculum. Contributions that lead to student publications, performances, exhibitions, placements, and awards should be highlighted.

9. The service report includes a summary of the quality and quantity of the candidate's service to the Department, College, University, and discipline.

10. At a final meeting, there is a discussion in which each member of the FPC states his/her opinion on each aspect of the case. This is followed by an open vote in which each member of the FPC must vote either in favor, against, or abstain. In the case of dissent, a minority report may be included in the FPC report on research, teaching, or service. The minutes from this meeting should analyze the strengths and weaknesses of the case, provide a balanced summary of the discussion at the meeting(s), and should contain sufficient information to allow subsequent readers to understand the rationale for the votes cast. The minutes are signed by all members of the FPC and forwarded with the FPC reports as part of the candidate's file.

11. The Chairperson votes in a letter to the Dean, explaining her/his vote in detail. If the Chairperson anticipates disagreeing with the FPC's recommendations, the Chairperson should meet with the FPC to discuss the disagreement prior to forwarding her or his letter to the Dean. If disagreement occurs, communication and trust are likely to be improved

by open discussion of the opposing viewpoints. However, there is no explicit or implicit preference for unanimity in making a recommendation within the FPC or between the FPC and the Chairperson.

12. If a candidate's promotion has not been approved, the Chairperson, upon request, gives the faculty member as full a report of the reasons for the decision as possible without violating the rule of confidentiality (see X below).

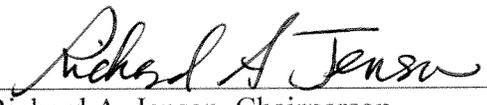
CONFIDENTIALITY

VIII. The members of the CAP and FPC are bound to maintain full and complete confidentiality of the proceedings and deliberations of these committee meetings. Even if a committee member has not participated in a discussion or decision because of organizational rules or any other reasons, that member is bound to maintain silence about that decision. Moreover, although committee members can give general advice to faculty members in a personal capacity, they should use extreme caution so as not to evaluate faculty members in private in their official capacity as CAP or FPC members. All communication between the CAP or FPC and faculty members who are not on CAP or FPC should be done through the Department Chairperson, unless the CAP or FPC specifically designates other members for specific purposes. Any breach of confidentiality will be punished by removal of the faculty member from the CAP or FPC, and return to the CAP or FPC is conditional upon that faculty member's credible assurance that no further breaches will occur.

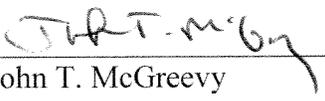
ORGANIZATION PLAN

IX. The approval of any amendment to this organization plan may be adopted by an absolute majority of the eligible voting faculty, defined as all teaching-and-research faculty whose primary appointment resides in the Department of Economics. A vote for an amendment can be called if at least one-third of the voting faculty provides notice in writing to the Chairperson. The amendment must be included in the agenda of a faculty meeting and must be distributed to all eligible members of voting faculty at least one week in advance. Amendments which are adopted must be in accordance with the University of Notre Dame's Faculty Handbook and are subject to the approval of the Dean of College of Arts and Letters.

Unanimously approved by the teaching-and-research faculty of the Department of Economics by a vote of 25 in favor and none opposed on November 2, 2012. .


Richard A. Jensen, Chairperson

Approved by the Dean of the College of Arts and Letters:


John T. McGreevy

Date

OPERATING PROCEDURES

I. Standing Committees

A. Committee on Appointment and Promotions (see p. 1).

B. Full Professor Committee on Promotions (see p. 12)

C. Search Committee (see below)

D. Chair Advisory Committee

The Chair Advisory Committee is an ad hoc committee composed of the chairperson and at least two, but no more than four, tenured members of the faculty appointed by the chairperson. The purpose of the committee is to advise the chairperson on a variety of issues that might arise and are not within the purview of other committees. This includes, but is not limited to, the mandated annual performance reviews of the faculty.

E. Undergraduate Studies Committee (see II below).

F. Graduate Studies Committee (see III below)

II. Search Procedures

A. Search Committees and Job Announcements

1. To initiate the search process the Chairperson, in consultation with the faculty, identifies priorities and programmatic needs that should be addressed in the search. The Chairperson then writes a letter to the Dean requesting authorization for the search.

2. After the Dean has authorized the Department to conduct a search, the Chairperson appoints a search committee chair (or chairs). The Chairperson, in consultation with the chair(s), then appoints additional faculty to the search committee, which typically consists of three to six members in addition to the chair(s). The search committee must have one member specifically designated as an affirmative action representative.

3. Each job announcement is written by the search committee chair(s) in consultation with the Chairperson and the search committee, and must be approved by the Associate Dean for the Social Sciences. Announcements are sent to *Job Openings for Economists* and other appropriate publications.

B. Interviews and Campus Visits

1. Job application packets are summarized in a database made accessible to all faculty. The chair(s) of the search committee will assign faculty members, not necessarily

restricted to members of the search committee, to evaluate applicant files, but any faculty member may request to review any file. Based on these evaluations and in consultation with the recruiting committee and the Department Chairperson, the search committee chair(s) selects the candidates who are to be interviewed at the Allied Social Sciences Association (ASSA) meetings. This interview list must be approved by the Associate Dean.

2. After receiving feedback from faculty about the interviews, the search committee chair(s), in consultation with the recruiting committee and the Department Chairperson, selects the candidates who are to be invited to campus. Candidates may be invited to campus without interviews at the ASSA meetings. All campus invitees must be approved by the Associate Dean.

3. Junior candidates who visit campus should meet with individual faculty members, the Chairperson, the Associate Dean, the Director of ISLA, and other interested members of the university community as appropriate. Senior candidates also meet with the Dean. The candidate should also present a seminar to the faculty, graduate students, and other interested members of the university community.

III. Appointment Procedures

A. Candidate's File

1. A junior candidate's file must include a current CV, a sample of his/her research, evidence of teaching ability when available, and three letters of recommendation.

2. A senior candidate's file must include a current CV, samples of her/his research, teaching evaluations or other evidence of teaching ability, a list of dissertation advisees with their employment placements, any significant publications, and at least six written external evaluations of their research. The procedure for obtaining these evaluations is the same as that described in IV.D.3 and VII.D.3.

B. CAP Deliberations

1. After candidates have completed campus visits, the chair(s) of the search committee should solicit feedback from faculty. Informed by this feedback, the search committee chair, in consultation with the recruiting committee and the Department Chairperson, then makes appointment recommendations to the CAP.

2. The Chairperson can call the CAP meeting to discuss the candidate(s) at any time during regular working hours when members of the CAP do not have regularly scheduled classes. A reasonable attempt will be made to achieve a quorum, defined as one-half of the members of the CAP. Members of the CAP who are unable to attend can submit written proxies and/or recommendations to be included in the minutes, and are counted toward a quorum if they do so.

3. The CAP meets to make its recommendation, which is summarized in the minutes of that meeting. The minutes are signed by all members of the CAP and forwarded with the candidate's file. The minutes from this meeting should provide a balanced summary of the discussion at the meeting(s), and should contain sufficient information to allow subsequent readers to understand the rationale for the votes cast. The Chairperson is required to provide an independent recommendation in a written letter addressed to the Dean.

IV. Undergraduate Studies

1. The Undergraduate Studies Committee is composed of the Director of Undergraduate Studies (DUS), who serves as its chairperson, and four other members of the faculty chosen by the Chairperson in consultation with the Director of Undergraduate Studies and the Dean.

2. The Director of Undergraduate Studies is chosen by the Chairperson in consultation with the Dean.

V. Graduate Studies

1. The Graduate Studies Committee is composed of the Director of Graduate Studies, who serves as its chairperson, and four other members of the faculty chosen by the Chairperson in consultation with the Director of Graduate Studies and the Dean.

2. The Director of Graduate Studies is chosen by the Chairperson in consultation with the Dean.

VI. Performance Reviews of Faculty

A. University policy requires that the performance of tenure-track faculty be reviewed annually and that written copies of the reviews be provided to the faculty. It is departmental policy to provide written reviews of all faculty annually.

B. Evaluations are based upon an annual activity report that each member of the faculty must submit to the chairperson by the first day of classes in the spring semester (see Appendix for template).

C. Evaluations are made by the chairperson with the assistance of the Chair Advisory Committee in the areas of teaching, research, and service. The general guidelines are outlined in an explanatory memo from the chairperson that is updated annually as needed (see Appendix for sample).

VII. Leave Policy

A. University policy is stated in Article III.11 of the Academic Articles, and College policy is stated in Section 76 of the Reference Guide for Arts & Letters Chairpersons and Faculty. Departmental policy is largely limited to prioritizing leaves. College policy urges departments to adopt their own procedures, as needed, to insure that not too many faculty request leaves in any given year, and the College reserves the right to deny leaves to guarantee there are no undue disruptions in the provision of courses.

B. Departmental policy is to strive to insure that leaves requested do not reduce the provision of undergraduate course offering by more than 20% in any given semester.

C. Medical leaves and maternity leaves are federally mandated and therefore receive first priority without reservation. University policy regarding leaves is outlined on pages 33 and 102-104 in the 2007-2008 Faculty Handbook. In part, this policy states: "As with any family and medical leave, no University duties are required during the period of the leave. In addition, a faculty member whose due date for the birth of her child falls during the semester is relieved of all teaching responsibilities during that semester. When a faculty member's due date falls outside of a semester, she should contact the Office of the Provost regarding whether she will be relieved from teaching responsibilities." The Department focuses upon providing an environment which allows a faculty member to maintain her research program and to remain active in the intellectual life of the department. There are, of course, a variety of approaches that would accomplish these goals, and the department is committed to flexibility in achieving these goals. For example, if a reasonable case can be made, the department is willing to support a request for a maternity leave in which one works on a half-time basis throughout the year, halving the time commitments to teaching, research, and service during this time period. In addition, the department supports equivalent work load reductions for all faculty members receiving maternity leave, regardless of the timing of the birth. Nevertheless, the Department acknowledges that, in these cases, the faculty member must negotiate with the Office of the Provost regarding the details of her leave.

D. Beyond these leaves, support of leave requests is prioritized in the following order, starting with highest and descending to lowest: assistant professor post-renewal leaves, other assistant professor leaves, post-tenure leaves, other associate professor leaves, and all other leaves. Within each category, highest priority is given to those who have a leave or have waited the longest since their most recent leave.



Richard A. Jensen
Professor and Chair
Department of Economics
434 Flanner Hall

MEMORANDUM

Date: January 10, 2012

To: ECOE Faculty

From: Richard Jensen

Re: Faculty Review for 2008-2010

Although our annual review process is now codified in our CAP and Operating Procedures documents (on both our web site and the College's web site), I thought I should provide another annual memo about the process for your convenience. As in the past, I will conduct the annual reviews with the assistance of the Chair Advisory Committee (Professors Evans and Mark). Again, I will provide each of you with a draft of your review, then afford you the opportunity to provide any new information that you may have omitted from your activity report, and to respond to any issues raised in the review, before I complete the final version that goes into your file, and is used as the basis for my salary recommendation to the Dean.

This memo provides the details of the procedure we have employed for the last few years, and will employ in the process again this year. Suggestions for improvement are welcome.

The "scale" in this review process has five possible evaluations: excellent, very good, good, fair, and poor. The rating "good" is the one assigned when the committee decides that one has met what the University and College administration refers to as "the normally high expectations of a major research and teaching university." Two higher and lower categories are provided not only to reward truly remarkable performance, but also to allow the option to send signals regarding performance that does not meet expectations. An over-all evaluation is then determined by taking the weighted average of the evaluation in each area. The weights for the three-year window are an ordinary average of the annual weights.

Teaching

The annual weight for each regular course taught is 10%. This is also the maximum weight that can be placed on teaching, with one exception. Faculty who teach more than the “standard” four courses per year can, if they choose, receive 20% for each additional course taught in that year. Conversely, faculty who teach less than the standard four courses must put the weight for each course reduction in that year into research.

Explicit statements of our expectations in teaching by rank are now incorporated into our CAP document. In the evaluation of teaching, we obviously consult your TCEs and CIFs. I ask you to report the mean for Q17 of the TCEs and Q11 of the CIFs on the form because the administration continues to focus on this “over-all” question. Typically we conclude that one meets expectations in teaching unless the means for this question in your courses are in one of the two tails of the distribution. However, given the recent emphasis by the administration on curbing grade inflation and appropriately challenging our students, I also ask you to report the GPA and the mean for Q15 of the TCEs and Q14 of the CIFs for each course. The difficulties inherent in teaching large sections, required classes, new preparations, and writing-intensive classes are definitely taken into account. Nevertheless, I emphasize that in the past means on Q17 of the TCEs below 3.0 have been nearly impossible to defend to the administration as meeting expectations. I assume the same will be true for means below the equivalent 3.75 on Q11 of the CIFs. I will look at each of your CIFs for the last year in detail, and provide any other feedback about your teaching that I think is important in your review.

Involvement in teaching and/or advising at either the undergraduate or graduate level, such as chairing and serving on dissertation committees, and supervising special studies students or senior honors theses, also is considered seriously. Indeed, the Dean has especially emphasized rewarding supervision of honors theses, and I interpret this to mean that we can raise someone’s evaluation over that strictly implied by performance in courses taught if there is evidence of good work supervising honors theses. Therefore, I also now specifically report this information in my salary recommendations summary to the Dean.

Service

The College’s “typical” weight on service is 20%. This is certainly the maximum except for those who have course relief for administrative assignments (chair, DGS, DUS). Reductions in weight here below 20% must be shifted into research, and more service is expected, in general, when the weight on it is higher. However, from the perspective of the administration, this weight is supposed to be an accurate assessment of time actually spent in service. Thus, it is our policy that the service weight should be lower for both assistant professors and associate professors who need, and are given, lighter service duties in order to focus on their research. The annual review form gives you the opportunity to state what weight you think is appropriate, but your choice is not binding on the committee. We expect assistant (or untenured associate) professors to choose service weights in the 2.5% to 5% range, and associate professors to choose weights in

the 5% to 10% range. Please come to see me if you have any question about what weight is appropriate.

Explicit statements of our expectations in service by rank also are now incorporated into our CAP document. In the evaluation of service, we focus on contributions to the profession, department, College, University, and community. At a minimum, reasonable contributions to the profession and department are expected of all, although the amounts vary by rank as noted above. One could exceed expectations either through supranormal quantity of service, which is strongly discouraged at lower ranks, or through exceptional quality, such as serving on the editorial boards of leading journals.

Research

The minimum annual weight placed on research is 40%, though it can be higher when one puts less than 20% weight in service or when one's teaching falls below four courses per year. The only way to reduce this minimum weight is to volunteer to teach additional sections, as noted above. Conversely, this weight increases for those who have reduced teaching loads due to leaves, grant buyouts, or other factors.

This department was created because the University wants an economics faculty with high visibility in research throughout the discipline, which as we all know requires an emphasis on publishing articles in the leading journals. Nevertheless, we also understand that, given the vagaries of the refereeing process, years may go by with no refereed publications. This is the main reason for adopting a three-year window. Nevertheless, it seems reasonable to expect that each of us produce a steady stream of working papers that are developed, completed, submitted, and then resubmitted elsewhere, if necessary. The goal should always be to produce something for a premier or first-tier journal. Given this emphasis, one would need multiple publications in first-tier journals or a premier publication to exceed expectations.

Similarly, visibility throughout the profession also requires that each of us attend and present our research at regional, national, and international conferences of suitable stature. This is important for all of us, both individually and collectively, but this is especially important for assistant professors and associate professors who are striving to become recognized as serious researchers throughout the profession and to build a strong case for tenure and/or promotion.

cc: John T. McGreevy, I. A. O'Shaughnessy Dean of Arts and Letters
Mark Schurr, Associate Dean

Annual Activity Report: 2009-2011
Department of Economics

Name:

Rank:

I. Research and Scholarship.

Please provide as much bibliographic detail as possible for each publication, acceptance, or working paper. Submit any supporting material you think appropriate.

A. Articles Published:

B. Articles Accepted but Not Yet In Print:

C. Books, Reviews, Chapters in Books, and Other Publications:

D. Completed Papers Submitted to Journals (please indicate if resubmitted at request of editor):

E. Papers Completed and Submitted for the First Time in 2009:

F. Work in Progress (please be as specific as possible about the stage of development):

G. Seminar Presentations (please indicate organization and date):

H. Conference Presentations (please indicate conference and date):

I. Recognitions, Honors, Awards, or Grants:

J. Professional Development (please list any significant workshops or seminars attended and describe their relationship to your development as a researcher):

K. Other (anything else relevant to your research you want to mention):

II. Teaching and Advising.

A. Courses taught (please note below whether any were new or unusually time-consuming).

Fall 2011	enrollment	GPA	CIF #14	CIF #11

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Spring 2011	enrollment	GPA	CIF #14	CIF #11

Fall 2010	enrollment	GPA	CIF #14	CIF #11

Spring 2010	enrollment	GPA	CIF #14	CIF #11

Fall 2009	enrollment	GPA	CIF #14	CIF #11

Spring 2009	enrollment	GPA	TCE #15	TCE #17

B. Undergraduate Advising (please provide the name of each honors thesis student you advised, with the thesis title and completion date or expected completion date; for those completed, please indicate what they are doing now if you know that):

C. Dissertations Directed (please provide the names of students whose committees you chaired, with the title and completion date or expected completion date; for those completed, please provide initial placement and, if different, current position):

D. Dissertation Committees (please provide the names of students on whose committees you serve or have served, with completion dates when appropriate):

E. Professional Development (please list any significant workshops or seminars attended and describe their relationship to your development as a teacher or adviser):

F. Other (anything else related to your teaching or advising you want to mention):

III. Service.

Please include, by date, anything you think is relevant.

A. Profession:

B. Department:

C. College:

D. University:

E. Community:

F. Other (anything else relevant to your service you want to mention):

IV. Time Allocation.

Indicate the percentage weights you think are appropriate for each activity in this period. These should conform to our agreed guidelines. Provide an explanation below, if necessary.

Research:

Teaching:

Service:

V. Any Other Comments?

Appendix O: Abbreviated Curriculum Vitae

This appendix includes the abbreviated curriculum vitae for each member of the faculty. Full vitae for each faculty member can be provided upon request.

SIMEON D. ALDER
CURRICULUM VITAE

January 2013

EDUCATION

Ph.D., Economics, UCLA, 2009.

M.A., Economics, UCLA, 2005.

M.I.A., Columbia University (School of International and Public Affairs), 2000

lic.rel.int., Graduate Institute of International Studies, 1998.

ACADEMIC EXPERIENCE

Assistant Professor, Department of Economics, University of Notre Dame, 2009-present.

WORKING PAPERS

"In the Wrong Hands: Complementarities, Resource Allocation, and TFP" [under review]

"Deceptive Redistribution" (with Guillermo Ordóñez) [under review]

REFEREEING

Journal of Economic Theory, B.E. Journal of Macroeconomics, Review of Economic Dynamics, Economic Inquiry, Journal of Human Capital

DOCTORAL STUDENTS

Chadwick Curtis, committee (2012, University of Richmond)

JEFFREY H. BERGSTRAND
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, University of Wisconsin at Madison, 1981.

M.S., Economics, University of Wisconsin at Madison, 1979.

B.A., Economics and Political Science, Northwestern University, 1974.

ACADEMIC EXPERIENCE

Professor, Department of Finance, Mendoza College of Business, University of Notre Dame. 2004-present.

Concurrent Professor, Department of Economics, University of Notre Dame, 2012-present.

Associate Professor, Department of Finance, Mendoza College of Business, University of Notre Dame, 1992-2004.

Assistant Professor, Department of Finance, Mendoza College of Business, University of Notre Dame, 1986-1992.

Economist, Federal Reserve Bank of Boston, 1981-1986.

PUBLICATIONS (Selected)

“What Determines BITs?” with Peter Egger. Forthcoming. *Journal of International Economics*.

“Shouldn’t Physical Capital Also Matter for Multinational Enterprise Activity?” with Peter Egger. Forthcoming. *Review of International Economics*.

“Gravity Redux: Estimation of Gravity-Equation Coefficients, Elasticities of Substitution, and General Equilibrium Comparative Statics under Asymmetric Bilateral Trade Costs.” January 2013. *Journal of International Economics* 89 (1).

“Gravity Equations and Frictions in the World Economy” with Peter Egger. In *Palgrave Handbook of International Trade*. Edited by D. Bernhofen, R. Falvey, D. Greenaway, and U. Kreickemeier. Palgrave Macmillan, 2011.

“A General Equilibrium Theory for Estimating Gravity Equations of Bilateral FDI, Final Goods Trade, and Intermediate Goods Trade” with Peter Egger. In *The Gravity Model in International Trade: Advances and Applications*. Edited by P.A.G. van Bergeijk and S. Brakman. Cambridge University Press, 2010. (invited)

“Approximating General Equilibrium Impacts of Trade Liberalizations using the Gravity Equation: Applications to NAFTA and the European Economic Area” with Scott Baier. In *The Gravity Model in International Trade: Advances and Applications*. Edited by P.A.G. van Bergeijk and S. Brakman. Cambridge University Press, 2010. (invited)

“Estimating the Effects of Free Trade Agreements on International Trade Flows using Matching Econometrics” with Scott Baier. February 2009. *Journal of International Economics* 77 (1).

“Bonus Vetus OLS: A Simple Method for Approximating International Trade-Cost Effects using the Gravity Equation” with Scott Baier. February 2009. *Journal of International Economics* 77 (1).

“The Growth of Regional Economic Integration Agreements and the Middle East” with Scott Baier and Peter Egger. *Region et Developpement*, 2009.

“Trade Costs.” *The New Palgrave Dictionary of Economics*, Second Ed, 2008.

“Regional and Inter-Regional Trade Agreements: Examining their Role for the Middle East” with Scott Baier and Patrick McLaughlin. In *Globalization in the 21st Century: How Interconnected is the World?* Emirates Center for Strategic Studies and Research (Abu Dhabi, UAE), 2008. (invited)

“Do Economic Integration Agreements Actually Work? Issues in Understanding the Causes and Consequences of the Growth of Regionalism” with Scott Baier, Peter Egger, and Patrick McLaughlin. April 2008. *The World Economy* 31 (4).

“A Knowledge-and-Physical-Capital Model of International Trade Flows, Foreign Direct Investment, and

- Multinational Enterprises” with Peter Egger. November 2007. *Journal of International Economics* 73 (2).
- “Free Trade Agreements In the Americas: Are the Trade Effects Larger than Anticipated?” with Scott Baier and Erika Vidal. September 2007. *The World Economy* 30 (9).
- “The New Regionalism: Causes and Consequences” with Scott Baier and Peter Egger. January-June 2007. *Integration and Trade* 26. Reprinted in *Economie Internationale*. (invited)
- “Do Free Trade Agreements Actually Increase Members’ International Trade?” with Scott Baier. March 2007. *Journal of International Economics* 71 (1).
- “Trade Costs and Intra-Industry Trade” with Peter Egger. 2006. *Review of World Economics* 1421 (3).
- “Economic Determinants of Free Trade Agreements” with Scott Baier. October 2004. *Journal of International Economics* 64 (1).
- “Trade Agreements and Trade Flows: Estimating the Effect of Free Trade Agreements on Trade Flows with an Application to an EU-GCC Free Trade Agreement” coauthored with Scott Baier. September 2004. *European Economy, Economic Papers* 214, European Commission (invited paper). http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers214_en.htm
- “Government Expenditure and Equilibrium Real Exchange Rates” with Ronald Balvers. October 2002. *Journal of International Money and Finance* 21 (5).
- “The Growth of World Trade: Tariffs, Transport Costs, and Income Similarity” with Scott Baier. February 2001. *Journal of International Economics* 53 (1). (Bhagwati Award from *JIE* for Best Paper, 2001-2002).
- “International Trade in Services, Regional Free Trade Agreements, and the WTO” with Scott L. Baier. In *Services in the International Economy*, in the *Studies in International Economics* series. Edited by Robert Stern. University of Michigan Press, 2001 (invited paper).
- “Equilibrium Real Exchange Rates: Closed-Form Theoretical Solutions and Some Empirical Evidence” with Ronald Balvers. June 1997. *Journal of International Money and Finance* 16 (3).
- “International Trade, Regional Free Trade Agreements, and Economic Development” with Scott Baier. June 1997. *Review of Development Economics* 1 (2) (invited, inaugural volume).
- “International Trade, Regionalization, and Economic Linkages within the Pacific Basin” with Scott Baier. In *Economic Cooperation and Integration: East Asian Experiences*. Edited by Kwan Kim and Robert Riemer. Kellogg Institute for International Studies, 1997 (invited paper).
- “Productivity, Factor Endowments, Military Expenditures, and Relative National Price Levels.” In *International Comparisons of Prices, Output and Productivity*, in the *Contributions to Economic Analysis*. Edited by J. Salazar-Carillo and D.S. Prasada Rao. Elsevier Science Publishing, 1996 (invited paper).
- “The Scope, Growth and Causes of Income Inequality in an Open U.S. Economy” with T. Cosimano, J. Houck, and R. Sheehan. In *The Changing Distribution of Income in an Open U.S. Economy*, in the *Contributions to Economic Analysis* series. Edited by J. Bergstrand et al. Elsevier Science Publishing, 1994.
- “On Modeling the Impact of Arms Reductions on World Trade.” In *The Economics of Arms Reduction and the Peace Process*. Edited by Walter Isard and Charles Anderton. Elsevier Science Publishing, 1992 (invited paper).
- “Real Exchange Rates, National Price Levels, and the Peace Dividend.” May 1992. *American Economic Review* 82 (2) (invited paper).
- “Structural Determinants of Real Exchange Rates and National Price Levels: Some Empirical Evidence.” March 1991. *American Economic Review* 81 (1).
- “Currency Substitution and Monetary Autonomy: The Foreign Demand for U.S. Demand Deposits” with Thomas Bundt. September 1990. *Journal of International Money and Finance* 9 (3).
- “The Heckscher-Ohlin-Samuelson Model, the Linder Hypothesis, and the Determinants of Bilateral Intra-Industry Trade.” December 1990. *Economic Journal* 100 (403).
- “The Generalized Gravity Equation, Monopolistic Competition, and the Factor-Proportions Theory in

- International Trade.” February 1989. *Review of Economics and Statistics* 71 (1).
- “The U.S. Trade Deficit: A Perspective from Selected Bilateral Trade Models.” May/June 1987. *New England Economic Review*.
- “United States-Japanese Trade: Predictions Using Selected Economic Models.” May/June 1986. *New England Economic Review*.
- “Money, Interest Rates, and Foreign Exchange Rates as Indicators for Monetary Policy.” November/December 1985. *New England Economic Review*. Summer 1986. Summarized in *The Chartered Financial Analysts Digest* 16 (2).
- “Exchange Rate Variation and Monetary Policy.” May/June 1985. *New England Economic Review*.
- “The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence.” August 1985. *Review of Economics and Statistics* 67 (3).
- “Bretton Woods Revisited.” September/October 1984. *New England Economic Review*. Reprinted in 1984. *The International Monetary System: Forty Years After Bretton Woods*. Federal Reserve Bank of Boston Conference Series 28.
- “Short-Run Domestic Monetary Control in an International Money Market.” July/August 1984. *New England Economic Review*. 1985. Summarized in *The Chartered Financial Analysts Digest* 15 (1).
- “Measurement and Determinants of Intra-Industry International Trade.” In *Intra-Industry Trade: Empirical and Methodological Aspects*. Edited by P.K.M. Tharakan. Elsevier Science Publishing, 1983 (invited paper).
- “Is Exchange Rate Volatility ‘Excessive’?” September/October 1983. *New England Economic Review*.
- “Selected Views of Exchange Rate Determination After a Decade of ‘Floating.’” May/June 1983. *New England Economic Review*.
- Reprinted in *Financial Institutions and Markets in a Changing World*. Edited by D.R. Fraser and P.S. Rose. Business Publications, Inc., 1984.
 - Reprinted in *Modern Concepts in Macroeconomics*. Edited by T. Havrilesky. Harlan Davidson, Inc., 1985.
 - Reprinted in *Readings in International Finance*. Edited by J. Kvasnicka. Federal Reserve Bank of Chicago, 1987.
 - Winter 1984. Summarized in *The Chartered Financial Analysts Digest* 14 (1).
- “The Scope, Growth and Causes of Intra-Industry International Trade.” September/October 1982. *New England Economic Review*.

GRANTS

- “Causes and Consequences of the Growth of Regionalism,” with Scott Baier, National Science Foundation, 2004-2009, \$116,878.

PROFESSIONAL ACTIVITIES

- Singapore Management University, Visiting Scholar, 2012.
- ETH University, Zurich, Switzerland, Visiting Scholar, 2009, 2010, 2011, 2012.
- University of Munich (LMU), Munich, Germany, Visiting Scholar, 2005, 2006, 2007, 2008, 2009, 2011.
- European Commission, Brussels, Belgium, Visiting Scholar, 2004.
- DIW, Berlin, Germany, Visiting Scholar, 2001.
- Austrian Institute for Economic Research, Visiting Scholar, 2001.
- Fundacao, Getulio Vargas, Sao Paulo, Brazil, Visiting Scholar, 1998.

Keynote Lectures:

- Asia-Pacific Trade Seminars, Singapore, July 2012.
- 18th Annual Empirical Investigations in International Trade Conference, Purdue University, Nov. 2011.
- 12th Conference of the Spanish International Economics Society, Castellon de la Plana, Spain, June 2011.
- CESifo Conference, Ifo Institute, Munich, Germany, February 2011.

EDITORIAL POSITIONS

Editorial Board, *Review of International Economics*, 1996 – present.

REFEREEING

American Economic Review, Blackwell Publishers, *bulletin of Economic Research*, *Canadian Journal of Economics*, *Econometrica*, *Economic Journal*, *Economic Inquiry*, *Economic Letters*, *European Economic Review*, *Geographical Analysis*, *International Economic Journal*, *International Economic Review*, *Journal of Applied Business Research*, *Journal of Development Economics*, *Journal of Economic Integration*, *Journal of Economic Literature*, *Journal of Economics and Business*, *Journal of International Economics*, *Journal of International Money and Finance*, *Journal of International Trade and Economic Development*, *Journal of Macroeconomics*, *Journal of Money, Credit, and Banking*, *Journal of Post-Keynesian Economics*, National Science Foundation, Oxford University Press, *Quarterly Journal of Economics*, *Quarterly Review of Economics and Finance*, *Review of Economic Studies*, *Review of Economics and Statistics*, *Review of Income and Wealth*, *Review of International Economics*, *Small Business Economics*, *Southern Economic Journal*, *Transactions on Engineering Management*, *Urban Studies*, *The World Bank Economic Review*, and *the World Economy*.

DOCTORAL STUDENTS

University of Notre Dame

Ronald Mariutto

Groningen University, Netherlands

Tristan Kohl

WYATT J. BROOKS
CURRICULUM VITAE
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EDUCATION

Ph.D., Economics, University of Minnesota, 2012.

M.A., Economics, University of Minnesota, 2011.

B.S. *cum laude* with Distinction in Economics, University of Washington, 2007.

B.S. *cum laude*, Mathematics, University of Washington, 2007.

ACADEMIC EXPERIENCE

Assistant Professor of Economics, University of Notre Dame. 2012-present.

Faculty Fellow, Kellogg Institute for International Studies, 2012-present.

REFEREEING

Journal of International Economics, Review of Economic Studies

KASEY S. BUCKLES
CURRICULUM VITAE
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EDUCATION

Ph.D., Economics, Boston University, 2005.

M.A., Political Economy, Boston University, 2003.

B.A., Economics and Spanish (Phi Beta Kappa, Summa Cum Laude), University of Kentucky, 2000.

ACADEMIC EXPERIENCE

Assistant Professor of Economics, University of Notre Dame, 2005-present.

PUBLICATIONS

"Geographic Variation in the Use and Appropriateness of Cesarean Delivery" with Katherine Baicker and Amitabh Chandra. August 8, 2006. *Health Affairs* (25): w355-w367.

"Understanding the Returns to Delayed Childbearing for Working Women." May 2008. *American Economic Review*, Papers and Proceedings (98): 403-407.

"Changing the Price of Marriage: Evidence from Blood Test Requirements" with Melanie Guldi and Joseph Price. Summer 2011. *Journal of Human Resources* (46): 539-577.

"Birth Spacing and Sibling Outcomes" with Elizabeth Munnich. Summer 2012. *Journal of Human Resources* (47):613-642.

"Infertility Insurance Mandates and Multiple Births." Forthcoming. *Health Economics*. Published online in advance of print, June 2012: DOI: 10.1002/hec.2850.

"Season of Birth and Later Outcomes: Old Questions, New Answers" with Daniel Hungerman. Forthcoming. *Review of Economics and Statistics*. Published online in advance of print, July 2012: DOI: 10.1162/REST_a_00314.

"Selection and the Marriage Premium for Infant Health" with Joseph Price. Forthcoming. *Demography*.

"Adoption Subsidies and Placement Outcomes for Children in Foster Care." Forthcoming. *Journal of Human Resources*.

GRANTS

"Estimating the Economic Impact of Undocumented Workers and Their Families in the South Bend Area" with Abigail Wozniak. Rodney F. Ganey, Ph.D. Collaborative Community-Based Research Mini-Grant, Center for Social Concerns, University of Notre Dame. 2007-2008. \$6000.

"Are Outcomes for Foster Children Improved by Adoption?" Seng Foundation Grant, Institute for Scholarship in the Liberal Arts, University of Notre Dame. 2007-2008. \$1,614.75.

"Does the Adoption Subsidy Program Help At-Risk Children?" National Science Foundation Grant (SES-0720950). 2007-2009. \$34679.

"Does the Adoption Subsidy Program Help At-Risk Children?" University of Kentucky Center for Poverty Research, Young Investigator Development Grant. 2008-2009, \$5000.

"Season of Birth and Later Outcomes: Old Questions, New Answers" with Daniel Hungerman. National Institute of Health Grant (1R03HD058947-01A1). 2009-2011. \$150,000.

"Season of Birth and Later Outcomes: Old Questions, New Answers" with Daniel Hungerman. Graduate Student Assistant Award, Institute for Scholarship in the Liberal Arts. 2010-2011, \$2,400.

PROFESSIONAL ACTIVITIES

CeMENT Mentoring Workshop, Committee on the Status of Women in the Economics Profession, January 2009.

NBER Summer Institute (Children's Program), 2009

IZA/SOLE Transatlantic Meeting of Labor Economists, 2009

REFEREEING

National Science Foundation, *Quarterly Journal of Economics*, *Review of Economics and Statistics*,

American Economics Journal: Applied Economics, American Economics Journal: Economic Policy, Journal of Human Resources, Journal of Labor Economics, Journal of Public Economics, Demography, Population and Development Review, Journal of Health Economics, Journal of Population Economics, Journal of Urban Economics, Economic Inquiry, Southern Economic Journal, Labour Economics, Population Review, Journal of Labor Research, Eastern Economic Journal, The B.E. Journal of Economic Analysis and Policy, Labour

DOCTORAL STUDENTS

Elizabeth Munnich (expected graduation: May 2013)

Nolan Noble (expected graduation: May 2014)

THOMAS F. COSIMANO
CURRICULUM VITA

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EDUCATION

Ph.D., State University of New York at Buffalo, in Economics, 1979.

M.A State University of New York at Buffalo, in Economics, 1977.

BA State University of New York at Buffalo, in Mathematics and Economics (cum laude), 1974.

ACADEMIC EXPERIENCE

Instructor, Department of Economics, The Pennsylvania State University (1978 – 1979).

Assistant Professor, Department of Economics, The Pennsylvania State University (1979 - 1981).

Assistant Professor, Department of Economics, Texas A&M University (1981 - 1987).

Associate Professor, Finance and Business Economics, University of Notre Dame (1987 - 1990).

Tenured Associate Professor, Finance and Business Economics, University of Notre Dame (1990 -1995)

Professor, Finance, University of Notre Dame (1995 - Present).

Concurrent Professor of Economics, University of Notre Dame (2004-Present).

Concurrent Professor of Mathematics, University of Notre Dame (2007-Present).

PUBLICATIONS

“Monetary Policy with a Touch of Basel,” Co-Author Ralph Chami. Lead article, Journal of Economics and Business, 62, 2010, 161-175. With Ralph Chami.

“Continuous Time One-Dimensional Asset Pricing Models with Analytic Price-Dividend Functions.” Lead article, Economic Theory, 42, 2010, 461-503. With Y Chen and Alex Himonas.

“Analytic Solving of Asset Pricing Models: The By Force of Habit Case.” Journal of Economic Dynamics & Control, 32, 2008, 3631-3660. With Yu Chen and Alex Himonas.

“Optimal Experimentation and the Perturbation Method in the Neighborhood of the Augmented Linear Regulator Problem,” Journal of Economic Dynamics & Control, 32, 2008, 1857-1894.

“Solving An Asset Pricing Model with Hybrid Internal and External Habits, and Autocorrelated Gaussian Shocks.” Annals of Finance, 4, 2008, 305-344. With Yu Chen and Alex Himonas.

“Solving Asset Pricing Models when the Price-Dividend Function is Analytic.” Econometrica, 73, 2005, 961-982. With Ovidiu Calin, Yu Chen and Alex Himonas.

“Solving Ramsey Problems with Nonlinear Project Methods,” Studies in Nonlinear Dynamics & Econometrics May 2005 9 1-36. Co-Author Michael T. Gapen.

“Did the Basel Accord cause a Credit Slowdown in Latin America?” Economia Fall 2004 5 135-175. With Adolfo Barajas and Ralph Chami.

“Financial Institutions and Trustworthy Behavior in Business Transactions,” Journal of Business Ethics, 52(2), (2004) 179-188.

“Capital Trading, Stock Trading, and the Inflation Tax on Equity: A Note,” Review of Economic Dynamics, 6, (2003) 987-990. With Scott Baier, Charles T. Carlstrom, Ralph Chami Timothy S. Fuerst, and Connel Fullenkamp

“Introduction to Managing Ethical Risk: How Investing in Ethics Adds Value”, 26, (2002) 1697-1718 Journal of Banking and Finance. With Ralph Chami and Connel Fullenkamp.

“Capital Trading, Stock Trading, and the Inflation Tax on Equity,” Review of Economic Dynamics, 4, (2001) 575-606. With Ralph Chami and Connel Fullenkamp.

"What's Different Among Banks?" Journal of Monetary Economics, 41(1998) 57-70. With Bill McDonald.

“Risk Averse Behavior and Normal Employment,” Perspectives on Money, Sanjeev Joshi Editor, Reserve Bank of India Endowment Unit.” With G. Subrahmanyam.

"Intermediation," *Economica*, 63 (1996) 131-143.

"Is the Conventional View of Discount Window Borrowing Consistent with the Behavior of Weekly

- Reporting Banks?" *Review of Economics and Statistics*, 76 (1994) 761-770. With Richard G. Sheehan.
- "Inflation Variability and Gradualist Monetary Policy." *Review of Economic Studies*, 61 (1994) 721-738. With Ronald J. Balvers.
- "Federal Reserve Operating Procedure 1984-1991: An Empirical Analysis." *Journal of Macroeconomics*, 16 (1994) 573-588. With Richard G. Sheehan.
- "Central Bank Secrecy, Interest Rates and Monetary Control." *Economic Inquiry* 31 (July 1993) 370-382. With John B. Van Huyck.
- "Periodic Learning with A Hidden State Variable." *Journal of Economic Dynamics & Control* 17 (1993) no. 5-6 805-828. With Ronald J. Balvers.
- "DIDMCA and Bank Market Risk: Theory and Evidence." *Journal of Banking and Finance* 16 (1992) 1179-1193. With Thomas P. Bundt and John A. Halloran.
- "Actively Learning About Demand and the Dynamics of Price Adjustment." *Economic Journal* 100 (1990) 882-898. With Ronald J. Balvers.
- "Predicting Stock Returns in an Efficient Market." *Journal of Finance* 45 (1990) 1109-1128. With Ronald J. Balvers and Bill McDonald.
- "Choosing Sides in Matching Games: Nash Equilibria and Comparative Statics." *Economica* 57 (1990) 283-294. Co-Author Michael R. Baye.
- "Dynamic Monetary Control and Interest Rate Stabilization." *Journal of Monetary Economics* 23 (1989) 53-63. Co-Author John B. Van Huyck.
- "Spatial Competition with Free Entry, Chamberlinian Tangencies, and Social Efficiency: A Reevaluation." *Journal of Urban Economics* 26 (1989) 84-89. With Bruce L. Benson.
- "Estimates of the Variance of U.S. Inflation Based Upon the ARCH Model: a comment." *Journal of Money, Credit, and Banking* 20 (1988) 409-421. With Dennis W. Jansen.
- "The Banking Industry under Uncertain Monetary Policy." *Journal of Banking and Finance* 12 (1988) 117-139.
- "Federal Reserve Policy 1975 - 1985: An Empirical Analysis." *Journal of Macroeconomics* 10 (1988) 27-47. With Dennis W. Jansen.
- "The Relation Between Money Growth Variability and the Variability of Money About Target." *Economics Letters* 25 (1987) 355-358. With Dennis W. Jansen.
- "The Federal Funds Market under Bank Deregulation." *Journal of Money, Credit, and Banking* 19 (August 1987) 326-339.
- "Reserve Accounting and Variability in the Federal Funds Market." *Journal of Money, Credit, and Banking* 19 (1987) 199-209.
- "Erratic Monetary Policy and the Dispersion of Commodity Prices." *Journal of Macroeconomics* 8 (1986) 201-212. With Michael R. Baye.
- "Erratic Monetary Policy and Price Variability." *Journal of Macroeconomics* 7 (1985) 313-331.
- "The Incentive to Adopt Cost Reducing Innovation in the Presence of a Non-Linear Demand Curve." *Southern Economic Journal* 47 (1981) 97-104.
- "Money and Biased Technical Progress." *Journal of Monetary Economics* 5 (1979) 497-504. With G. Subrahmanyam.

EDITORIAL ACTIVITIES

- The Changing Distribution of Income in an Open US Economy, Edited by Jeffery H. Bergstrand, Thomas F. Cosimano, John W. Houck and Richard G. Sheehan, published in the series Contributions to Economic Analysis, Edited by D. W. Jorgenson and J. J. Laffont by Elsevier Science Publishers B.V. 1994.
- Guest Editor, *Journal of Banking and Finance*, 26 (2002) for the conference volume from "Measuring and Managing Ethical Risk: How Investing in Ethics Adds Value." With Ralph Chami and Connel Fullenkamp.

Macroeconomic Consequences of Remittances. IMF Occasional Paper 259, IMF 2008. With Ralph Chami, Adolfo Barajas, Connel Fullenkamp, Michael Gapen, and Peter Montiel.
Member Board of Editors, Economic Inquiry (April 1997- 2008).
Member Board of Associate Editors Journal of Economics and Business (January 1999 to Present).

KIRK BENNETT DORAN
CURRICULUM VITA
January 2013

EDUCATION

Ph.D., Economics, Princeton University, 2008.
S.M., Applied Mathematics, Harvard University, 2002.
A.B., Physics, Harvard University, 2002.

ACADEMIC EXPERIENCE

Visiting Researcher, National Bureau of Economic Research, 2010-2011.
Assistant Professor of Economics, Department of Economics, University of Notre Dame, 2008-2012.
Instructor of Economics, Department of Economics, University of Notre Dame, 2007-2008.

PUBLICATIONS

“The Collapse of the Soviet Union and the Productivity of American Mathematicians”, with George Borjas, *The Quarterly Journal of Economics*, Volume 127, Issue 3, Pages 1143-1203, August 2012.
“How Does Child Labor Affect the Demand for Adult Labor? Evidence from Rural Mexico”, *The Journal of Human Resources*, forthcoming.
“A Shred of Credible Evidence on the Long Run Elasticity of Labor Supply”, with Orley Ashenfelter and Bruce Schaller, *Economica*, Volume 77, Issue 308, Pages 613–800, October 2010

GRANTS

"Immigration, Innovation, and Knowledge Creation", with George Borjas, Alfred P. Sloan Foundation, 2010-2012, \$295,876.
"Together We Will Solve the Problem: Immigration, Innovation, and Knowledge Creation", Ewing Marion Kauffman Foundation, 2010, \$20,000.
"Employment, Innovation, and High-Skill Immigration", W.E. Upjohn Institute Policy Research, 2010, \$10,000.

REFEREEING

The American Economic Review; The Quarterly Journal of Economics; The Journal of Labor Economics; The Journal of Human Resources; The American Economic Journal: Applied Economics; Economics Letters; and World Development.

WILLIAM N. EVANS
CURRICULUM VITA

January 11, 2013

EDUCATION

Ph.D. in Economics, Duke University, December 1987.

M.A. in Economics, Duke University, 1985.

B.A. in Mathematics and Economics, Wake Forest University, 1983.

ACADEMIC EXPERIENCE

Keough-Hesburgh Professor of Economics, Department of Economics and Econometrics, University of Notre Dame, 2007-Present

Professor, Department of Economics, University of Maryland, 1998-2007.

Associate Professor, Department of Economics, University of Maryland, 1994-1998.

Assistant Professor, Department of Economics, University of Maryland, 1987-1994.

PUBLICATIONS

Edited Books

The Biological Consequences of Economic Inequalities. Ed. Barbara Wolfe, William Evans, and Teresa Seaman, Russell Sage Foundation: New York, 2012.

Refereed Journals

Javier Esponosa and William N. Evans, "Excise Taxes and the Flight to Quality: Evidence from Scanner Data." *Public Finance Review*, Forthcoming.

Javier Espinosa and William N. Evans, "Maternal Bereavement." *Economics & Human Biology*, Forthcoming.

William N. Evans and Craig Garthwaite, "Estimating the Heterogeneity in Benefits of Medical Treatment Intensity," *Review of Economics and Statistics*, 2012, 94(3), 635-649.

William N. Evans and Timothy J. Moore, "Liquidity, Activity, Mortality." *Review of Economics and Statistics*, 2012, 94(2), 400-418.

William N. Evans and Timothy J. Moore, "The Short-Term Mortality Consequences of Income Receipt." *Journal of Public Economics*. 2011 95(11-12), 1410-1424.

William N. Evans, Melinda S. Morrill, Stephen T. Parente. "Measuring Excess Medical Diagnosis and Treatment in Survey Data: The Case of ADHD among School-Age Children." *Journal of Health Economics*. 2010 29(5), 657-673

William N. Evans, Craig Garthwaite, and Heng Wei, "Postpartum Length of Stay and Outcomes of Mothers and their Infants," *Journal of Health Economics*, 2008 27(4), 843-870.

Javier Espinosa and William N. Evans, "Marriage Selection or Marriage Protection?" *Journal of Health Economics*, 2008, 27 (5), 1326-1342.

Mark Duggan and William N. Evans, "The Impact of New Medical Technology: The Case of HIV Antiretroviral Treatments," *Forum for Health Economics and Policy*, 2008, 11(2).
<http://www.bepress.com/fhep/11/2/1/>

William N. Evans and Ping Zhang, "The Impact of Earmarked Lottery Profits on Education Spending," *Education Finance and Policy*, Winter, 2007, 2(1), 40-73.

William N. Evans and Emily Owens, "COPS and Crime." *Journal of Public Economics*, February 2007, 91(1-2), 181-201.

William N. Evans and Steven Snyder, "The Impact of Income on Mortality: Evidence from the Social Security Notch," *Review of Economics and Statistics*, 88(3), 2006, 482-495.

William N. Evans and BeomSoo Kim, "Patient Outcomes When Hospitals Experience a Surge in Admissions." *Journal of Health Economics*, March 2006, 25(2), 365-388.

W. Kip Viscusi and William N. Evans, "Behavioral Probabilities," *Journal of Risk and Uncertainty*, 32 (1), January 2006, 5-15.

Schoenman, J., Parente, S., Feldman, J., Shah, M., Evans, W., and Finch, M. "The Impact of HMO

- Withdrawals on Vulnerable Medicare Beneficiaries." *Health Care Finance Review*, Spring 2005; 26(3):31-43.
- Parente, S., Schoenman, J., and Evans, W. "Changes in Health Care Use and Expenditures of Medicare HMO Disenrollees Who Return to Fee-for-Service Medicare: Results from a Natural Experiment." *Health Care Finance Review*, Spring 2005; 26(3):5-30
- Christine Eibner and William N. Evans, "Relative Deprivation, Poor Health Habits and Mortality," *Journal of Human Resources*, Summer 2005, 40(3), 591-620.
- Diana Stech Lien and William N. Evans, "Estimating the Impact of Large Cigarette Tax Hikes: The Case of Maternal Smoking and Low Birth Weight." *Journal of Human Resources*. 40(2): 2005, 373-392
- William N. Evans and Diana Stech Lien, "Does Prenatal Care Improve Birth Outcomes? Evidence from the PAT Bus Strike," *Journal of Econometrics*, 125, 2005, 207-239.
- Sean Corcoran, William N. Evans and Robert Schwab, "The Changing Quality of Teachers over the Past Four Decades," *Journal of Policy Analysis and Management*, 23(3), Summer 2004, 449-470.
- Thomas Dee and William N. Evans, "Teen Drinking and Educational Attainment: Evidence from Two-Sample Instrumental Variables (TSIV) Estimates," *Journal of Labor Economics*, 21(1), January 2003, 178-209.
- William N. Evans and Jeanne S. Ringel, "Cigarette Taxes and Maternal Smoking." *American Journal of Public Health*, 91, December 2001, 1851-1856.
- Amy Harris, William N. Evans and Robert M. Schwab, "Public Education Financing in an Aging America." *Journal of Public Economics*, September 2001, 81, 449-72.
- Michael Cook and William N. Evans, "Families or School? Accounting for the Convergence in White and Black Academic Performance." *Journal of Labor Economics*, October 2000, 18(4), 729-754.
- Matthew Farrelly, William N. Evans and Andrew E.S. Sfekas, "The Impact of Workplace Smoking Bans: Results from a National Survey." *Tobacco Control*. Autumn 1999, 272-7.
- William N. Evans, Matthew Farrelly, and Edward Montgomery, "Do Workplace Smoking Bans Reduce Smoking?" *American Economic Review*, 89, September 1999, 728-747.
- William N. Evans and Jeanne Ringle, "Can Higher Cigarette Taxes Improve Birth Outcomes?" *Journal of Public Economic*, 72, 1999, 135-154.
- Joshua Angrist and William N. Evans, "Schooling and Labor-Market Consequences of the 1970 State Abortion Reforms," *Research in Labor Economics*, vol 18, 1999. Edited by Solomon Polachek and John Robst, 75-114.
- William N. Evans and Matthew Farrelly, "The Compensating Behavior of Smokers: Taxes, Tar, and Nicotine," *RAND Journal of Economics*. 29, Autumn 1998, 578-595.
- Sheila Murray, William N. Evans, Robert Schwab, "Education Finance Reform and The Distribution of Education Resources," *American Economic Review*, 88, September 1998, 789-312.
- Joshua Angrist and William N. Evans, "Children and Their Parents' Labor Supply: Evidence from Exogenous Variation in Family Size," *American Economic Review*, 88, June 1998, 450-477.
- Steve Parente and William N. Evans, "Effect of Low-Income Elderly Insurance Copayment Subsidies" *Health Care Financing Review*. Winter 1998;20(2):19-37.
- Tami Mark, William N. Evans, Claudia Schur, and Stewart Guterman, "Hospital Physician Arrangement and Hospital Financial Performance," *Medical Care*, 1998.
- W. Kip Viscusi and William N. Evans, "Estimation of Revealed Probabilities and Utility Functions for Product Safety Decisions," *Review of Economics and Statistics*, 80, 1998, 28-33.
- Julie Schoeneman, William N. Evans, and Claudia Schur, "Primary Care Case Management for Medicaid Recipients: Evaluation of the Maryland Access to Care Program," *Inquiry*, Summer 1997, 34(2), 155-170.
- William N. Evans, Sheila Murray, and Robert Schwab, "School House, Court Houses, State Houses after Serrano," *Journal of Policy Analysis and Management*, January 1997, 16(1), 10-31.
- Peter Neuman, Miriam Bernardin, William N. Evans, and Ellen Bayer, "Identifying Barriers to Access in the Qualified Medicare Beneficiary Program," *HCFA Review*, 1995, 17(2), 169.
- William N. Evans and Robert Schwab, "Finishing High School and Starting College: Do Catholic Schools Make a Difference?, *Quarterly Journal of Economics*, 1995, 110 (4), 941-974.
- William N. Evans and Ioannis Kessides, "Living by the 'Golden Rule': Multi-Market Conduct in the U.S.

- Airline Industry," *Quarterly Journal of Economics*, May 1995, 109 (2), 341-366.
- William N. Evans, Luke M. Froeb, and Gregory J. Werden, "Endogeneity in the Concentration-Price Relationship: Causes and Consequences," *Journal of Industrial Economics*, December 1993, 41(4), 431-437.
- William N. Evans and W. Kip Viscusi, "Income Effects and the Value of Health," *Journal of Human Resources*, Summer 1993, 28(3), 497-518.
- William N. Evans and Ioannis Kessides, "Localized Market Power in the U.S. Airline Industry," *Review of Economics and Statistics*, February 1993, 75(1), 66-75.
- William N. Evans, John D. Graham, and Doreen Neville, "Toward Humility in Statistical Interpretation: Response to Zador and Lund," *Risk Analysis*, January 1993, 13(1), 21-22.
- William N. Evans and Ioannis Kessides, "Structure, Conduct, and Performance in the Deregulated Airline Industry," *Southern Economic Journal*, January 1993, 59(3), 450-467.
- William N. Evans, Wallace Oates, and Robert Schwab, "Measuring Peer-Group Effects: A Study of Teenage Behavior," *Journal of Political Economy*, October 1992, 100 (5), 966-991.
- Maureen Cropper, William N. Evans, Steve Berardi, Maria Soares, and Paul Portney, "An Analysis of EPA Regulation of Food-Use Pesticides," *Journal of Political Economy*, February 1992, 100(1), 175-197.
- William N. Evans, Doreen Neville, and John D. Graham, "General Deterrence of Drunk Driving: Evaluation of Recent American Policies," *Risk Analysis*, June 1991, 11(2), 297-289.
- William N. Evans and W. Kip Viscusi, "Estimation of State-Dependent Utility Functions with Survey Data," *Review of Economics and Statistics*, February 1991, 73(1), 94-104.
- William N. Evans and John D. Graham, "Risk Reduction or Risk Compensation? The Case of Mandatory Safety Belt Use Laws," *Journal of Risk and Uncertainty*, January 1991, 4(1), 61-73.
- William N. Evans and John D. Graham, "An Estimate of the Lifesaving Benefit of Child Restraint Use Legislation," *Journal of Health Economics*, September 1990, 9(2), 121-142.
- W. Kip Viscusi and William N. Evans, "Utility Functions that Depend on Health Status: Estimates and Economic Implications," *American Economic Review*, June 1990, 80(3), 353-374.
- Henry Grabowski, W. Kip Viscusi, and William N. Evans, "Price and Availability Tradeoffs of Automobile Insurance Regulation," *The Journal of Risk and Insurance*, 1989, 61 (2), 275-299.
- Michael I. Luger and William N. Evans, "Regional Differences in Production Technologies," *Regional Science and Urban Economics*, August 1988, 18(3), 399-424.
- William N. Evans and John D. Graham, "Traffic Safety and the Business Cycle," *Alcohol, Drugs, and Driving*, January-March 1988, 4(1), 31-38.

Conference Proceedings and Edited Volumes

- Sean Corcoran and William N. Evans, in Katharine Magnuson and Jane Waldfogel, "The Role of Inequality in Teacher Quality," *Steady Gains and Stalled Progress: Inequality and the Black White Test Score Gap*, New York: Russell Sage Foundation, 2008, 212-249.
- Sean Corcoran and William N. Evans, "Equity, Adequacy and the Evolving State Role in Education Finance," in Helen F. Ladd and Edward B. Fiske, *Handbook of Research in Education Finance and Policy*, New York: Routledge, 2008, 332-356.
- Javier Espinosa and William N. Evans, "Falling Consumption and Worker Displacement in the Cigarette Manufacturing Industry," in *Social and Economic Consequences of Tobacco Control Policy*, ed. Peter Bearman, Kathryn Neckerman, and Leslie Wright, Columbia University Press, 2011.
- Kurt Ribisal, William N. Evans and Ellen Feigherty, "Falling Cigarette Consumption in the United States and the Impact upon Tobacco Retailer Employment," in *Social and Economic Consequences of Tobacco Control Policy*, ed. Peter Bearman, Kathryn Neckerman, and Leslie Wright, Columbia University Press, 2011.
- Christine Eibner and William N. Evans, "The Income-Health Relationship and the Role of Relative Deprivation," in *Social Inequality*, ed. Kathryn M. Neckerman, New York: Russell Sage Foundation, 2004, 545-568.
- William N. Evans, Michael Hout, and Susan Mayer, "Assessing the Effect of Economic Inequality," in *Social Inequality*, ed. Kathryn M. Neckerman, New York: Russell Sage Foundation, 2004, 933-968.

- Sean Corcoran, William N. Evans, Jennifer Godwin, Sheila Murray and Robert Schwab, "The Changing Distribution of Education Finance: 1972 -1997," in *Social Inequality*, ed. Kathryn M. Neckerman, New York: Russell Sage Foundation, 2004, 433-466.
- Sean Corcoran, William N. Evans and Robert Schwab, "Changing Labor Market Opportunities for Women and the Quality of Teachers 1957-2000." *American Economic Review Papers and Proceedings*, May 2004, 94(2), 23-235.
- William N. Evans, Sheila Murray and Robert Schwab, "The Property Tax and Education Finance: Uneasy Compromises," in *Property Taxation and Local Government Finance*, ed. Wallace E. Oates, 2001, Lincoln Institute of Land Policy: Cambridge, MA., 209-235.
- Thomas Dee and William N. Evans, "Behavioral Policies and Teen Traffic Safety," *American Economic Review Papers and Proceedings*, May 2001, 91-96.
- Thomas Dee and William N. Evans, "Teens and Traffic Safety," in *An Economic Analysis of Risky Behavior Among Youths*, ed. by Jon Gruber, University of Chicago Press, 2001, 121-165.
- William N. Evans, Helen Levy and Kosali Simon, "Research Data in Health Economics," *Journal of Economic Perspectives*, Fall 2000, 14(4), 203-216.
- Thomas Dee, William N. Evans and Sheila E. Murray, "Data Watch: Research Data in the Economics of Education," *Journal of Economic Perspectives*, 13, Summer 1999, 205-216.
- William N. Evans, Jeanne Ringel and Diana Stech, "Tobacco Taxes and Public Policy to Discourage Smoking," 1999, *Tax Policy and the Economy: Vol. 13*, Edited by James Poterba, Cambridge, MA: National Bureau of Economic Research.
- William N. Evans, Sheila E. Murray, and Robert Schwab, "State Education Finance Policy after Court Mandated Reform: The Legacy of Serrano," *Proceedings of the 89th Annual Conference on Taxation*, 1997, 366-371.
- William N. Evans, Sheila Murray, and Robert Schwab, "Toward Increased Centralization in Public School Finance," in Ronald Fisher, ed., *Intergovernmental Fiscal Relations*, Boston: Kluwer Academic Publishers, 1997, 139-172.
- Maureen Cropper, William N. Evans, Steve Berardi, and Maria Soares, "Pesticide Regulation and the Rule-making Process," *Northeast Journal of Agricultural and Resource Economics*, October 1992, 77-82.
- William N. Evans and W. Kip Viscusi, "Utility-Based Measures of Health," *American Journal of Agricultural Economics*, December 1991, 1422-1427.

GRANTS

- "The Great Recession and Public Education." Russell Sage Foundation, William N. Evans and Robert Schwab, PIs, June 1, 2012 – May 31, 2014
- "Does Higher Family Incomes Produce Better Child Health? Evidence from the 1993 Expansion of the Earned Income Tax Credit," Russell Sage Foundation, William N. Evans, PI, January 1, 2008 – Dec 31, 2009.
- "Length of Postpartum Hospital Stays and the Health of Mothers and Their Newborns," National Institute of Child Health and Human development, William N. Evans, PI, June 1, 2006 – May 31, 2008.
- "The Impact of Nurse Staffing Levels on Adverse Hospital Events," Robert Wood Johnson Foundation, January 1, 2005 - August 31, 2005, William N. Evans, principal investigator.
- "Third Annual Conference, University Working Groups, Russell Sage Foundation's Special Program on the Social Dimensions of Inequality," Washington, DC, May 2003, William N. Evans, principal investigator.
- "The Socioeconomic Impact of Native American Casinos," National Institute of Child and Maternal Health, January 1, 2003 - December 31, 2005, William N. Evans, Principal Investigator.
- "The Consequences of Social Inequality for Families, Schools and Communities," Russell Sage Foundation, January 1, 2001 - December 31, 2003, William N. Evans, Project Director.
- "The Economic Consequences of Gambling for Native Americans," Smith-Richardson Foundation, January 1, 2001 - December 31, 2003. William N. Evans, principal investigator.
- "Quasi Experiments in Health and Environmental Economics," National Science Foundation, October

- 1, 2000 - September 30, 2003, William N. Evans, principal investigator.
- “The Impact of Education Finance Equalization on Students, Teachers, Schools and State Governments,” National Science Foundation, July 1, 1998 - June 30, 2001, William N. Evans and Robert Schwab, co-principal investigators.
- “The Impact of Higher Cigarette Taxes on Maternal Smoking,” Robert Wood Johnson Foundation Program, July 1, 1998 - June 30, 2000. William N. Evans, principal investigator.
- “The Health and Economic Impacts of Workplace Smoking Bans,” Robert Wood Johnson Foundation Program, May 1, 1997 - August 31, 1998. William N. Evans, principal investigator.
- “The Distribution of Education Resources and Outcomes: Lessons from 25 years of Education Reform,” National Science Foundation, 7-15-94 through 6-30-97, William N. Evans and Robert Schwab, co-principal investigators.
- “The Compensating Behavior of Smokers: Taxes, Tar, and Nicotine,” National Cancer Institute, 6-1-95 through 5-31-97, William N. Evans, principal investigator.

PROFESSIONAL ACTIVITIES

- Co-founder, Lab for Economic Opportunities, University of Notre Dame, 2012-Present.
- Member, R03 Review Panel, NIH, 2011-Present.
- Director of Research, Ford Family Program in Human Development Studies and Solidarity, August 2009-Present.
- Member, NSF Economics Review Panel, Spring 2006- Fall 2007.
- Research Associate, Maryland Population Research Center, September 2000-Present.
- Executive Committee, Maryland Population Research Center, September 2001-August 2004, August 2006-August 2007.
- National Advisory Committee, Health Policy Scholars Program, Robert Wood Johnson Foundation, 2002-Present.
- Site Selection Committee, Health Policy Scholars Program, Robert Wood Johnson Foundation, 2001.
- Member, NIH Review Panel, Spring 2001, Summer 2003, Fall 2003, Spring 2004, Spring 2005, Summer 2005, Spring 2009.
- Member, NSF Review Panel, IT in the Workforce, Spring 2000
- Research Associate, National Bureau of Economic Research, 1996-Present.
- Faculty Research Fellow, National Bureau of Economic Research, 1993-1996.
- Senior Research Associate, Project HOPE, Center for Health Affairs, 1993-2001.

EDITORIAL POSITIONS

- Associate Editor, *Review of Economics and Statistics*, 2012-Present.
- Associate Editor, *American Economic Journal: Economic Policy*, 2012-Present
- Editor, *Journal of Human Resources*, February 2007 – May 2012.
- Coeditor, *Journal of Human Resources*, January 2002 – February 2007.
- Associate Editor, *Journal of Policy Analysis and Management*, September 2000-2004.
- Contributing Editor, “Data Watch” section of *Journal of Economic Perspectives*, 2000-2002.

HONORS

- Keynote Address, 27th Annual Meeting European Society of Population Economists, Aarhus, Denmark, June 2013.
- Keynote Address, 15th Annual Labour Econometrics Workshop, Wollongong, Australia, August 2012.
- Graduate Research Board Distinguished Research Fellowship, University of Maryland, 2000-2001.
- Distinguished Service, College of Behavioral and Social Sciences, University of Maryland, Spring 1996.
- Alfred. P Sloan Doctoral Dissertation Fellowship, 1986-87.

DOCTORAL STUDENTS

- Students for which I have served as a primary or major advisor and their current employer:*
University of Maryland
 Jessica Banthin, (Congressional Budget Office)

Sean Corcoran (New York University School of Education)
Julian Cristia (IADB)
Thomas Dee (Stanford University School of Education)
Noelia Duchovny (Congressional Budget Office)
Christine Eibner (RAND)
Javier Espinosa (Rochester Institute of Technology)
Matthew Farrelly (Research Triangle Institute)
Mary Flannery (University of Notre Dame)
Craig Garthwaite (Kellogg School of Management, Northwestern University)
Jennifer Godwin (Duke University Center for Aging)
Amy Harris (Congressional Budget Office)
Sara Helms (Sanford University)
Amanda Honeycutt (Research Triangle Institute)
Lynn Huang (NORC)
Beomsoo Kim (Korea University)
Wooyoung Kim (Bank of Korea)
Diana Lien (Center for Naval Analysis)
Jeffrey Livingston (Bentley College)
Dave Loughran (RAND)
Jennifer Ma (TIAA-CREF)
Carol Mansfield (Research Triangle Institute)
Jennifer Mellor (College of William and Mary)
Ed Miller (Agency for Healthcare Research and Quality)
Timothy Moore (George Washington University)
Chiara Orsini (London School of Economics, Department of Epidemiology)
Emily Owens (Cornell University PAM)
Mayank Raturi (Swiss Re)
Jeanne Ringel (RAND)
Kosali Simon (Indiana University)
Stephen Snyder (University of Pittsburgh)
Thomas Stratman (George Mason University)
Julie Topoleski (Congressional Budget Office)
Mark Turner (Optimal Solutions)
Bac Tran (NERA)
Heng Wei (Price Waterhouse)
Ping Zhang (Hong Kong Monetary Authority)
Lan Zhao (NORC)

University of Notre Dame

Adam Bee (U.S. Bureau of Census)
Luke Chicoine (DePaul University)
Shawn Moulton (ABT Associates)
Thomas Murray (Fairfield University)

REFEREEING

Grant proposals reviewed for: National Institutes of Health, National Science Foundation, Robert Wood Johnson Foundation, Russell-Sage Foundation, Smith-Richardson Foundation.

Articles reviewed for: *American Economic Review; American Economic Journal: Applied Economics, American Economic Journal: Economic Policy; American Journal of Public Health; Accident Analysis and Prevention; Econometrica; Economic Development and Cultural Change; Economic Inquiry; Economics of Education Review; Economic Journal; Empirica; Health Services Research; Health Economics; Industrial Labor Relations Review; JAMA; Journal of Business and Economic Statistics;*

Journal of Health, Politics, Policy and Law; Journal of Health Economics; Journal of Human Resources; Journal of Industrial Economic; Journal of Law and Economics; Journal of Policy Analysis and Management; Journal of Political Economy; Journal of Risk and Uncertainty; Journal of Urban Economics; Quarterly Journal of Business and Economics; Quarterly Journal of Economic; RAND Journal of Economics; Review of Economics and Statistics; Tobacco Control.

**MARY FLANNERY
CURRICULUM VITAE**

January 2013

EDUCATION

Ph.D, Economics, University of Maryland, 1996

M.A., Economics, University of Notre Dame, 1979

B.A., Economics, University of Notre Dame, 1978

ACADEMIC EXPERIENCE

Professional Specialist, University of Notre Dame, July 2012-present.

Lecturer, University of California at Santa Cruz, 1996-2012.

Lecturer, Santa Clara University, Santa Clara, CA, 1996-2002.

ROBERT P. FLOOD JR.
CURRICULUM VITA

January 2013

EDUCATION

B.B.A., Wake Forest University, 1970

M.A., University of Rochester, 1975

Ph.D., University of Rochester, 1977

ACADEMIC/PROFESSIONAL EXPERIENCE

Research Assistant, International Monetary Research Programme, London, 1975

Assistant Professor, Department of Economics, University of Virginia, 1976-81

Economist, Board of Governors of the Federal Reserve System, 1980-82

Associate Professor, Department of Economics, University of Virginia, 1981-83

Professor, Department of Economics, Northwestern University, 1983-1989

Senior Economist/Editor, *IMF Staff Papers*/Assistant to Director, Research Department, International Monetary Fund, 1987-2008

Professor, Department of Economics, University of Notre Dame 2008-present.

PUBLICATIONS

“A Common Framework for Thinking About Currency Crises” (with N. Marion and J Yepez) in Handbook of Exchange Rates, Jessica James, Ian Marsh and Lucio Sarno, Wiley 2012.

“A Perspective on Predicting Currency Crises,” (with N. Marion and J Yepez) forthcoming Stijn Claessens volume.

“Getting Shut Out of the International Capital Markets: It Doesn’t Take Much.” (with N. Marion) forthcoming, *Review of International Economics*.

“Stock Prices, Output and the Monetary Regime” (with N. Marion), *Open Economies Review* 17, 147-173, 2006

“Financial Integration: A New Methodology and an Illustration” (with A. Rose), *Journal of the European Economic Association*, 2005

“Estimating the Expected Marginal Rate of Substitution: A Systematic Exploitation of Idiosyncratic Risk” (with A. Rose), *Journal of Monetary Economics*, 2005

“A New Approach to Asset Integration” (with A. Rose), *Pacific Economic Review*, 2005

“A Model of the Joint Distribution of Banking and Currency Crises” (with N. Marion), *Journal of International Money and Finance*, Vol. 23/6, pp. 841-865, 2004

“Equity Integration in Times of Crisis” (with A. Rose). In *Market Discipline* (Borio, Hunter, Kaufman, and Tsatsaronis, eds, MIT Press) 2004

“Uncovered Interest Parity in Crisis” (with A. Rose), *IMF Staff Papers* 2002. A version is also in *Economic Policy in the International Economy* (Helpman and Sadka, eds, Cambridge Press) 2003

“Holding International Reserves in an Era of High Capital Mobility” (with N. Marion), *Brookings Trade Forum 2001*, Washington, D.C.: The Brookings Institution, pp.1-68, 2002

“Self-Fulfilling Risk Predictions: An Application to Speculative Attacks” (with N. Marion), *Journal of International Economics*, Jubilee Issue, Vol. 50, No. 1, pp. 245-268, 2000

“Understanding Exchange Rate Volatility without the Contrivance of Macroeconomics” (with A. Rose), *Economic Journal*, 1999

International Finance and Financial Crises: Essays in Honor of Robert P. Flood (with P. Isard and A. Razin), Kluwer/International Monetary Fund, 1999

“Perspectives on the Recent Currency Crisis Literature” (with N. Marion), *International Journal of Finance and Economics*, Vol 4, No. 1, pp.1-26, 1999

Reprinted in *Money, Capital Mobility, and Trade: Essays in Honor of Robert A. Mundell*, edited by Guillermo Calvo, Rudi Dornbusch and Maurice Obstfeld, Cambridge: MIT Press, 2001

- Reprinted in *New Developments in Exchange Rate Economics*, edited by Lucio Sarno and Mark P. Taylor, U.K.: Edward Elgar Publishing Ltd., 2002
- “Policy Implications of Second Generation Crisis Models” (with N. Marion), *IMF Staff Papers*, September 1997, pp.10-17
- “The Size and Timing of Devaluations in Capital-Controlled Developing Countries” (with N. Marion), *Journal of Development Economics*, 1997
- “Collapsing Exchange Rate Regimes: Another Linear Example” (with P. Garber and C. Kramer), *Journal of International Economics*, 41, no. 3/4, pp. 223-234, November, 1996
- “Fixes: Of the Forward Discount Puzzle” (with A. Rose), *Review of Economics and Statistics*, 1996
- “Exchange Rate Economics: What’s Wrong with the Conventional Approach?” (with M. Taylor) in J. Frankel, G. Galli and A. Giovannini (eds.) The Microstructure of Foreign Exchange Markets, NBER, University of Chicago Press, 1996
- “Economic Models of Speculative Attacks and the Drachma Crisis of May 1994” (with C. Kramer), *Economies Review*, Vol. 7, Supplement 1, pp. 591-600, March 1996
- “Bubbles, Noise and the Trading Process in Speculative Markets” (with T. Ito and C. Kramer), in *International Capital Markets: Developments, Prospects and Policy Issues*, International Monetary Fund, August 1995
- “Mexican Foreign Exchange Market Crises from the Perspective of the Speculative Attack Literature” (with C. Kramer), in *International Capital Markets: Developments, Prospects and Policy Issues*, International Monetary Fund, August 1995
- “Fixing Exchange Rates: A Virtual Quest for Fundamentals” (with A. Rose), *Journal of Monetary Economics*, Vol. 36, pp. 3-37, 1995
- “Issues Concerning Nominal Anchors for Monetary Policy” (with M. Mussa), in T. Balino and C. Cottarelli (eds.) Frameworks for Monetary Stability, International Monetary Fund, 1994
- “An Evaluation of Recent Evidence on Stock Market Bubbles” (with R. Hodrick and P. Kaplan), in R. Flood and P. Garber, Speculative Bubbles, Speculative Attacks and Policy Switching, MIT Press, 1994
- “Exchange Rate Regime Choice” (with N. Marion), in P. Newman (ed.) The New Palgrave Dictionary of International Finance, 1994
- “Two-Tier Foreign Exchange Markets” (with N. Marion), in P. Newman (ed.) The New Palgrave Dictionary of International Finance, 1994
- “Macroeconomic Policy, Speculative Attacks and Balance of Payments Crises,” in The Handbook of International Economics, F. Van Der Ploeg (ed.), Basil Blackwell Publishers, 1994
- “Macroeconomic Policy, Speculative Attacks and Balance of Payments Crisis”(with R. Agenor). Revised version of 1992 paper, in F. Van Der Ploeg (ed) The Handbook of International Macroeconomics, Basil Blackwell, 1994
- “What is Policy Switching?” *Finance and Development*, September 1992
- “The Linkage Between Speculative Attack and Target Zone Models of Exchange Rates: Further Results” in M. Miller and P. Krugman (eds.) Exchange Rate Targets and Currency Bands, Cambridge University Press, 1992
- “A Theory of Optimum Currency Areas: Revisited” (with J. Aizenman), *Greek Economic Review*, G. Tavlas (ed.), 1992
- “Speculative Attacks and Models of Balance-of-Payments Crisis” (with P.R. Agenor and J. Bhandari), *International Monetary Fund Staff Papers*, Vol. 39, pp. 357-94, June 1992
- “Linkages Between Speculative Attack and Target Zone Models of Exchange Rates” (with P. Garber), *The Quarterly Journal of Economics*, Vol. 106, No. 4, pp.1367-72, November 1991
- “An Empirical Exploration of Exchange Rate Target Zones” (with D. Mathieson and A. Rose), Supplement to the *Journal of Monetary Economics*, pp. 7-66, Autumn 1991
- “Testable Implications of Indeterminacies in Models with Rational Expectations” (with R. Hodrick), *Economics Perspectives*, Vol. 4, no.2, Spring 1990
- “Monetary Policy Strategies” (with P. Isard), *International Monetary Fund Staff Papers*, Vol. 36, pp.

612-32, 1989

- “Evolution of Exchange Rate Regimes” (with J. Horne and J. Bhandari), *International Monetary Fund Staff Papers*, Vol. 36, 1989
- “Risk Neutrality and the Spread in a Two-Tier Foreign Exchange Market” (with N. Marion), *Economics Letters*, 1987
- “Optimal Price and Inventory Adjustment in an Open Economy Model of the Business Cycle” (with R. Hodrick), *Quarterly Journal of Economics*, 1986
- “Bubbles, Process Switching and Asset Price Volatility” (with R. Hodrick), *Journal of Finance*, July 1986
- “Real Aspects of Exchange Rate Regime Choice” (with R. Hodrick), *Journal of International Economics*, November 1986
- “Central Bank Intervention in a Rational Open Economy: A Model with Asymmetric Information” (with R. Hodrick), in J. Bhandari (ed.) Exchange Rate Management Under Uncertainty, MIT Press, 1985
- “Exchange Rate Dynamics, Sticky Prices and the Current Account” (with C. Engle), *Journal of Money Credit and Banking*, August 1985
- “Multi-Country Tests for Price Level Bubbles” (with P. Garber and L. Scott), *Journal of Monetary Economics*, 8, pp. 329-40, 1984
- “Collapsing Exchange Rate Regimes: Some Linear Examples” (with P. Garber), *Journal of International Economics*, August 1984
- “Exchange Rate and Price Dynamics with Asymmetric Information” (with R. Hodrick), *International Economic Review*, October 1984
- “Gold Monetization and Gold Discipline” (with P. Garber), *Journal of Political Economy*, February, 1984. Reprinted as Chapter 10 in R. Aliber (ed.) The Reconstruction of International Monetary Arrangements, MacMillan, 1987
- “Exchange Rate Regimes in Transition: Italy 1974” (with N. Marion), *Journal of International Money and Finance*, December 1983
- “A Model of Stochastic Process Switching” (with P. Garber), *Econometrica*, May 1983
- “Process Consistency and Monetary Reform: Some Further Evidence” (with P. Garber), *Journal of Monetary Economics*, pp. 279-295, 1983
- “On the Equivalence of Solutions in Rational Expectations Models” (with E. Burmeister and P. Garber), *Journal of Economic Dynamics and Control*, 1983
- “The Transmission of Disturbances Under Alternative Exchange-Rate Regimes” (with N. Marion), *Quarterly Journal of Economics*, February 1982
- “Activist Policy in the Open Economy,” A.E.A. Papers and Proceedings, *American Economic Review*, May 1982
- “Bubbles, Runs and Gold Monetization” (with P. Garber), in P. Wachtel (ed.) Crises in the Financial Structure, Lexington Books, 1982
- “Perfect Foresight and the Stability of Monetary Models” (with E. Burmeister and S. Turnovsky), *Econometrica*, August 1981
- “Explanations of Exchange-Rate Volatility and Other Empirical Regularities in Some Popular Models of the Foreign Exchange Market,” in Vol. 15, supplement to *Journal of Monetary Economics*, Autumn 1981
- “An Economic Theory of Monetary Reform” (with P. Garber), *Journal of Political Economy*, February 1980
- “A Pitfall in Estimation of Models with Rational Expectations” (with P. Garber), *Journal of Monetary Economics*, July 1980
- “Market Fundamentals Versus Price Level Bubbles: The First Tests” (with P. Garber), *Journal of Political Economy*, August 1980
- “An Example of Exchange Rate Overshooting,” *Southern Economic Journal*, July 1979
- “Exchange Rate Expectations in Dual Exchange Markets,” *Journal of International Economics*, February 1978

“Backward Looking and Forward Looking Solutions to Monetary Models of Inflation with Rational Expectations” (with P. Garber), *Economics Letters*, 1, 1978
“Exchange Rate Expectations in Dual Exchange Markets,” *Journal of International Economics*, February 1978
“Growth, Prices and the Balance of Payments” *Canadian Journal of Economics*, May 1977

Authored and Edited Volumes

Speculative Bubbles, Speculative Attacks and Policy Switching (with P. Garber), MIT Press, 1994
Papers in Honor of Michael Mussa (Mussafest). *IMF Staff Papers* Vol.52, September 2005.
IMF Staff Papers, Editor, Vol 47 No1 – Vol 55 No. 4, including Annual Research Conference Special Issues.

Comments and Reviews

Comment on Krugman and Miller (with M. Spencer), Supplement to *JME*, 1992
“Monetary Policy Strategies: A Correction” (with P. Isard), *International Monetary Fund Staff Papers*
Comment on Baillie paper, Supplement to *Journal of Monetary Economics*
Comment on Cukierman paper, Supplement to *Journal of Monetary Economics*
Comment on Frankel and Meese paper NBER Macroeconomics Annual 1987
Comment on Singleton paper Carnegie-Rochester Conference Volume, Supplement to *Journal of Monetary Economics*
Comment on Sachs and McKibbin paper NBER Conference Volume, J. Frenkel (ed.)
“Stochastic Process Switching and Inflation: A Comment on Real Exchange Rate Overshooting and the Output Cost of Bringing Down Inflation: Some Further Results,” in J. Frenkel (ed.) Exchange Rates and International Macroeconomics, University of Chicago Press, 1984
“Comment on: Real Exchange-Rate Overshooting and the Output Cost of Bringing Down Inflation,” *European Economic Review*, 18, 1982
“Review of: Bank Credit, Money and Inflation in Open Economies,” *Journal of Monetary Economics*, August 1978

GRANTS

National Science Foundation: SES79-2608 with P. Garber
National Science Foundation: SES-8319460 with R. Hodrick
Lynde and Harry Bradley Foundation Grant, 1986
Sanwa Monograph Competition, 1996

PROFESSIONAL ACTIVITIES

Research Associate, National Bureau of Economic Research 1979-97
University of Virginia Sesquicentennial Associate, 1981
Columbia Futures Center Fellow, 1984
Research Associate, Georgetown University Center for International Economic Policy
Research Professor, Dartmouth College

EDITORIAL POSITIONS

Editor, *IMF Staff Papers*, 2000-present
Associate Editor, *International Journal of Finance and Economics*, 1995-present
Associate Editor, *International Journal of Finance and Money*, 1995-present
Associate Editor, *Journal of Money, Credit and Banking*, 1983- present
Co-Editor, *American Economic Review*, 1989-93
Co-Editor, *Journal of International Economics*, 1983-1987

ANTOINE GERVAIS
CURRICULUM VITAE

January 2013

EDUCATION

Ph.D. Economics, University of Maryland, 2009

M.A. Economics, University of Toronto, 2004

B.B.A. Finance and Economics, Université du Québec à Montréal, 2003

ACADEMIC EXPERIENCE

University of Notre Dame, Department of Economics, Assistant Professor, 2010 –present

WORKING PAPERS

Trade and Growth: A Gravity Approach [Under review]

Product Quality, Firm Heterogeneity and Trade Liberalization [Under review]

Product Quality, Firm Heterogeneity and International Trade [Under review]

PROFESSIONAL ACTIVITIES

U.S. Census Bureau, Special Sworn Status Researcher, 2007 – present

Conference Presentations

NBER International Trade and Investment winter meeting (SIEPR, Stanford University), 2012.

REFEREEING

American Journal of Agricultural Economics, B.E. Journal of Economic Analysis & Policy, Canadian Journal of Economics, Economic Letters, Emerging Markets Finance and Trade, European Economic Review, Journal of Economic Growth, Journal of International Economics, Quarterly Journal of Economics, Southern Economic Journal, World Development and Peterson Institute for International Economics

THOMAS A. GRESIK
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Managerial Economics and Decision Sciences, Northwestern University, 1987.

M.S., Social Sciences, California Institute of Technology, 1982.

B.A., Mathematics and Economics with Departmental Honors, Northwestern University, 1981.

ACADEMIC EXPERIENCE

Instructor, Fourth GIST Summer School: Mechanism Design and its Applications to International Trade and Investment, University College Dublin and CEPR, May 2012.

Visiting professor, Joint Graduate Instruction Centre. Faculty of Economic Science, University of Warsaw and Warsaw School of Economics. EU Human Capital Operational Programme, May/June 2010.

Professor, Department of Economics, University of Notre Dame. 2004 – present.

Professor, Department of Finance, Mendoza College of Business, University of Notre Dame. 2000-2004.

Associate Professor of Economics, Department of Economics, The Pennsylvania State University. 1991-2000.

Assistant Professor of Business Economics, Washington University, St. Louis. 1985-1991.

PUBLICATIONS

"The rate at which a simple market converges to efficiency as the number of traders increases: An asymptotic result for optimal trading mechanisms" with Mark A. Satterthwaite. June 1989. *Journal of Economic Theory* (48):304-332. Reprinted in *Bargaining with Incomplete Information*. Edited by P. Linhart, R. Radner, and M. Satterthwaite. Academic Press, 1992.

"The efficiency of linear equilibria of sealed-bid double auctions." February 1991. *Journal of Economic Theory* (53):173-184. Reprinted in *Bargaining with Incomplete Information*. Edited by P. Linhart, R. Radner, and M. Satterthwaite. Academic Press, 1992. "Efficient bilateral trade with statistically dependent beliefs." February 1991. *Journal of Economic Theory* (53):199-205.

"*Ex ante* efficient, *ex post* individually rational trade." February 1991. *Journal of Economic Theory* (53):131-145. Abstract printed in *Zentralblatt für Mathematik*, 1991. Reprinted in *Bargaining with Incomplete Information*. Edited by P. Linhart, R. Radner, and M. Satterthwaite. Academic Press, 1992.

"*Ex ante* incentive efficient trading mechanisms without the private valuation restriction." October 1991. *Journal of Economic Theory* (55):41-63.

"Incentive compatible regulation of a foreign-owned subsidiary" with Douglas R. Nelson. May 1994. *Journal of International Economics* (36):309-331.

"Incentive-efficient equilibria of two-party sealed-bid bargaining games." January 1996. *Journal of Economic Theory* (68):26-48.

"Regulation of multinational firms with two active governments: A common agency approach" with Eric W. Bond, January 1996. *Journal of Public Economics* (59):33-54.

"Competition between asymmetrically informed principals" with Eric W. Bond, September 1997. *Economic Theory* (10):227-240.

"Arm's-length transfer pricing and national welfare." In *Advances in Applied Microeconomics*, v. 8, edited by Michael R. Baye, JAI Press, 1999.

"The strategic effects of batch processing," with Edward C. Mansley. August 2001. *International Economic Review* (42):697-728.

"The taxing task of taxing transnationals." September 2001. *Journal of Economic Literature* (39):800-838. Reprinted in *Petroleum Industry Regulation within Stable States*, Solveig Glomsrød and Petter Osmundsen eds., Ashgate Press, 2005. Translated into Japanese by Professor Shoji Yamada of Nanzan University and published in *The Nanzan Journal of Economic Studies* (20), June 2005.

- "Rationing rules and European Central Bank auctions." November 2001. *Journal of International Money and Finance* (20):793-808.
- "Tax competition and foreign capital," with Ronald Davies. March 2003. *International Tax and Public Finance* (10):127-145.
- "Transfer pricing in vertically integrated industries," with Petter Osmundsen. June 2008. *International Tax and Public Finance* (15):231-255.
- "Introduction to the special section on multinational taxation and tax competition," with Juergen von Hagen. January 2010. *European Economic Review* (54):80-81.
- "Formula apportionment vs. separate accounting: A private information perspective." January 2010. *European Economic Review* (54):133-149.
- "The effects of statistically dependent values on equilibrium strategies of bilateral k -double auctions." May 2011. *Games and Economic Behavior* 72:139-148.
- "Efficient delegation by an informed principal," with Eric Bond. Fall 2011. *Journal of Economics and Management Strategy* 20:887-924.
- "Assessing the normative differences between formula apportionment and separate accounting," in *Fundamentals of International Transfer Pricing in Law and Economics*, W. Schön and K. Konrad, eds., Springer-Verlag Berlin Heidelberg, 2012.

PROFESSIONAL ACTIVITIES

- Norwegian Center of Taxation, Affiliate Member, 2012 – present.
- 68th IIPF Congress, Dresden, Germany, Program Committee, 2012.
- 2011 SAET Meetings, Faro, Portugal, Program Committee, 2011.
- NSF/NBER Decentralization Conference, Dublin, Ireland, co-organizer with James Bergin, 2010.
- Conference on Multinational Taxation and Tax Competition, Amsterdam, The Netherlands, organized conference and co-edited special section of the *European Economic Review*, 2008.
- 1999 Summer Econometric Society Meetings, University of Wisconsin, Program Committee, 1999.
- NSF/NBER Decentralization Conference, Pennsylvania State University, Organizer, 1997.

EDITORIAL POSITIONS

- Associate Editor, *Group Decision and Negotiation*, 1995 – present.
- Associate Editor, *International Tax and Public Finance*, 2004 – present.
- Associate Editor, *European Economic Review*, 2005 – 2012.
- Co-editor, *Journal of Economic Behavior and Organization*, 2012 – present.

REFEREEING

Academy of Management Review, American Economic Review, Canadian Journal of Economics, Econometrica, Economic Design, Economic Inquiry, Economic Letters, Economic Theory, European Economic Review, Games and Economic Behavior, Group Decision and Negotiation, International Economic Review, International Journal of Industrial Organization, International Tax and Public Finance, Journal of Economic Behavior and Organization, Journal of Economic Theory, Journal of Economics and Management Science, Journal of International Economics, Journal of Law, Economics, and Organization, Journal of Public Economic Theory, Journal of Public Economics, Management Science, National Tax Journal, RAND Journal of Economics, Review of Economic Studies, Review of International Economics, Southern Economic Journal and the National Science Foundation.

DOCTORAL STUDENTS

- Pennsylvania State University*
- Markku Stenborg, committee (Ministry of Finance, Finland)
- Onsong Shin, committee (Korean Board of Audit and Inspection)
- Edward Mansley, chair (CDC)
- Jane Livingstone, committee (LSU)
- Ronald Davies, chair (Oregon)

University of Notre Dame
Huyen Pham, chair (Analysis Group, Dallas)

ANDREAS HAGEMANN
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, University of Illinois, 2012.

Diplom, Economics, Universität Regensburg, 2006.

ACADEMIC EXPERIENCE

Assistant Professor, Department of Economics, University of Notre Dame. 2012 – present.

PUBLICATIONS

"A simple test for regression specification with non-nested alternatives." January 2012. *Journal of Econometrics* (166):247-254

REFEREEING

Bernoulli, Journal of Econometrics, Journal of the American Statistical Association, Regional Science and Urban Economics

DAN HUNGERMAN
CURRICULUM VITA

January 2013

EDUCATION

Ph.D. in Economics, May 2005, Duke University, Durham, NC

B.A. in Economics, May 2000, *summa cum laude*, Miami University, Oxford, OH

ACADEMIC EXPERIENCE

Stepan Family Associate Professor of Economics, Notre Dame, 2011- present

Research Associate, National Bureau of Economic Research, 2011- present

Associate Professor, Department of Economics, Notre Dame, 2011- present

Assistant Professor, Department of Economics, Notre Dame, 2005-2011

PUBLICATIONS

“Season of Birth and Later Outcomes: Old Questions, New Answers,” forthcoming at the *Review of Economics and Statistics* (with Kasey Buckles)

“Substitution and Stigma: Evidence on Religious Competition from the Catholic Sex-Abuse Scandal,” forthcoming at the *American Economic Journal: Economic Policy*

“The Power of the Pill for the Next Generation,” the *Review of Economics and Statistics* 94 (2012), 37-51. (with Elizabeth Oltmans Ananat)

“Christian Scholarship in Economics at American Research Universities,” *Faith & Economics* 58 (2011), 8-10.

“Rethinking the Study of Religious Markets,” in *The Oxford Handbook of the Economics of Religion*, edited by Rachel McCleary (Oxford: Oxford University Press, 2010), 257-275.

“Crowd Out and Diversity,” *Journal of Public Economics* 93 (2009), 729-740.

“The Church vs. the Mall: What Happens When Religion Faces Increased Secular Competition?” *Quarterly Journal of Economics* 123 (2008), 831-862. (with Jonathan Gruber)

“Race and Charitable Church Activity,” *Economic Inquiry* 46 (2008), 380-400.

“Faith-Based Charity and Crowd Out During the Great Depression,” *Journal of Public Economics* 91 (2007), 1043-1069. (with Jonathan Gruber)

“Are Church and State Substitutes? Evidence from the 1996 Welfare Reform,” *Journal of Public Economics* 89 (2005), 2245-2267.

WORKING PAPERS

“The Effect of Education on Religion: Evidence from Compulsory Schooling Laws,” Working paper, 2011. Revise and resubmit at the *Journal of Labor Economics*

“Does Church Attendance Cause People to Vote? Using Blue Laws’ Repeal to Estimate the Effect of Religiosity on Voter Turnout,” Working Paper, 2007. (with Alan Gerber and Jonathan Gruber) Revise and resubmit at the *British Journal of Political Science*

“Do Religious Proscriptions Matter? Evidence from a Theory-Based Test,” Working paper, 2011.

“Public Goods, Hidden Income, and Tax Evasion: Some Non-standard Results from the Warm-Glow Model,” Working paper, 2011.

GRANTS

Principal Investigator, \$61,094 Grant from the John Templeton Foundation, 2012

Principal Investigator, \$8,000 internal Seng Awards, 2011

Principal Investigator, \$165,461 Grant from the NICHD, 1R03HD057362-01A2, 2009-2011

Principal Investigator, \$46,650 Grant from the John Templeton Foundation, 2009

Principal Investigator, \$150,000 Grant from the NICHD, 1R03HD058947-01A1, 2009-2011

Principal Investigator, \$3,000 internal Seng Award, 2011

Principal Investigator, \$148,426 Spiritual Capital Research Grant from the Metanexus Institute, 2006-2008

PROFESSIONAL ACTIVITIES

Executive committee of the Association for the Study of Economics, Religion, and Culture
Executive committee of the Association of Christian Economists

REFEREEING

The American Economic Journal: Economic Policy, The American Economic Review, The Eastern Economic Journal, Econometrica, The Economic Journal, Economic Inquiry, Economica, Economics Letters, Education Economics, Health Economics, The Journal of Economic Dynamics and Control, The Journal of Economic Literature, The Journal of Human Resources, The Journal of Labor Economics, The Journal of Law & Economics, The Journal of Political Economy, The Journal of Public Economics, The Journal for the Scientific Study of Religion, The Journal of Urban Economics, The National Tax Journal, Nonprofit and Voluntary Sector Quarterly, The Quarterly Journal of Economics, The Quarterly Journal of Political Science, Rationality and Society, The Review of Economics and Statistics, The Review of Religious Research, The Review of Social Economy, The Scandinavian Journal of Economics, The Scottish Journal of Political Economy, Social Choice and Welfare, The Southern Economic Journal, Social Forces, Sociology of Religion, The John Templeton Foundation, and the National Science Foundation.

RICHARD A. JENSEN
CURRICULUM VITA

February 2013

EDUCATION

Ph.D., Northwestern University, 1980.

B.A., Economics, Summa Cum Laude and Phi Beta Kappa, University of Kansas, 1971.

ACADEMIC EXPERIENCE

Gilbert F. Schaefer Chair in Economics: July 1, 2011 - present.

Chairperson, Department of Economics, University of Notre Dame: July 1, 2001 - June 30, 2003
and July 1, 2010 - present.

Chairperson, Department of Economics and Econometrics, University of Notre Dame:
July 1, 2003 - June 30, 2010.

Professor of Economics, University of Notre Dame: 2000 - present.

Gatton Endowed Professor of Economics: 1999 - 2000.

Professor of Economics, University of Kentucky: 1992 - 2000.

Director of Graduate Studies in Economics, University of Kentucky: 1991 - 1999.

Associate Professor of Economics, University of Kentucky: 1989 - 1992.

Assistant Professor of Economics, Ohio State University: 1980 - 1987.

REFEREED PUBLICATIONS

“The Potential Tradeoff Between Artisanal Fisheries Production and Hydroelectricity Generation on the Kafue River, Zambia,” with A. Deines, C. Bee, C. Katongo, and D. Lodge (forthcoming in *Freshwater Biology*).

“Startup Firms from Research in U. S. Universities,” in *Handbook of Research on Innovation and Entrepreneurship* (ed. Audretsch, D.B., O. Falck, S. Heblich and A. Lederer), 273-289, Edward Elgar, 2011.

“Patent Races,” The New Palgrave Dictionary of Economics, online edition, 2009.

“Strategic Debt and Patent Races,” *International Journal of Industrial Organization*, 887-916, September, 2004 (with D. Showalter).

“Multiplant Firms and Innovation Adoption and Diffusion,” *Southern Economic Journal*, 661-671, January, 2004.

“The Disclosure and Licensing of University Inventions: The Best We Can Do with the S**t We Get to Work With,” *International Journal of Industrial Organization*, 1271-1300, November, 2003 (with J. Thursby and M. Thursby).

“Innovative Leadership: First-Mover Advantages in New Product Adoption,” *Economic Theory*, 97-116, January, 2003.

“Transboundary Air Pollution, Aid, and Political Uncertainty,” *Journal of Environmental Economics and Management*, 93-112, January, 2002 (with P. Chambers).

“Strategic Intrafirm Innovation Adoption and Diffusion,” *Southern Economic Journal*, 120-132, July, 2001.

“Proofs and Prototypes for Sale: The Tale of University Licensing,” *American Economic Review*, 240-259, March, 2001 (with M. Thursby).

“Objectives and Characteristics of University TTOs: A Survey of Major U.S. Universities,” *Journal of Technology Transfer*, 59-72, January, 2001 (with J. Thursby and M. Thursby).

“Product Differentiation and Public Education,” *Journal of Public Economic Theory*, 69-93, January, 2001 (with W. Hoyt).

“Debt-for-Nature Swaps, Nash Equilibrium, and the Bargaining Outcome,” *Ecological Economics*, November, 1996 (with P. Chambers and J. Whitehead).

“Precommitment in a System of Hierarchical Governments,” *Regional Science and Urban*

- Economics*, 481-504, August, 1996 (with W. Hoyt).
- “Patent Races, Product Standards, and International Competition,” *International Economic Review*, 21-49, February, 1996 (with M. Thursby).
- “Government Revenue Collection and Time Consistency,” *Public Finance*, 57-71, March, 1994 (with E. Toma and M. Toma).
- “Sharing Cost Information: A Counterexample,” *Economic Theory*, 589-592, June, 1993.
- “Dynamic Patent Licensing,” *International Journal of Industrial Organization*, 349-368, September, 1992.
- “Innovation Adoption and Welfare Under Uncertainty,” *Journal of Industrial Economics*, 173-180, June, 1992.
- “Reputational Spillovers, Innovation, Licensing, and Entry,” *International Journal of Industrial Organization*, 193-212, June, 1992.
- “Debt in a Model of Tax Competition,” *Regional Science and Urban Economics*, 371-392, November, 1991 (with E. Toma).
- “Smuggling, Market Structure, and Camouflaging,” *Quarterly Journal of Economics*, 789-814, August, 1991 (with J. Thursby and M. Thursby).
- “Tariffs With Private Information and Reputation,” *Journal of International Economics*, 43-67, September, 1990 (with M. Thursby).
- “Information Capacity and Innovation Adoption,” *International Journal of Industrial Organization*, 335-350, November, 1988.
- “Information Cost and Innovation Adoption Policies,” *Management Science*, 230-239, February, 1988.
- “A Decision-Theoretic Approach to Innovation, Technology Transfer, and Trade,” *Review of Economic Studies*, 631-647, December, 1987 (with M. Thursby).
- “A Strategic Approach to the Product Life Cycle,” *Journal of International Economics*, 269-284, December, 1986 (with M. Thursby).
- “New Evidence on the Causes of Slave and Crew Mortality in the Atlantic Slave Trade,” *Journal of Economic History*, 57-77, March, 1986 (with R. Steckel).
- “Innovation Adoption and Diffusion When There Are Competing Innovations,” *Journal of Economic Theory*, 161-171, February, 1983.
- “A Conjectural Variation Approach to Strategic Tariff Equilibria,” *Journal of International Economics*, 145-161, February, 1983 (with M. Thursby).
- “Adoption and Diffusion of an Innovation of Uncertain Profitability,” *Journal of Economic Theory*, 182-193, October, 1982.
- “Mortality in the Atlantic Slave Trade: Statistical Evidence on Causality: Comment,” *Journal of Interdisciplinary History*, Autumn, 1982 (with R. Cohn).
- “The Determinants of Slave Mortality Rates on the Middle Passage,” *Explorations in Economic History*, 269-282, July, 1982 (with R. Cohn).

OTHER PUBLICATIONS

- “University Invention, Entrepreneurship, and Start-Ups,” with C. Chukumba (June 2005), National Bureau of Economic Research Working Paper No. 11475.
- “Patent Licensing and the Research University” (aka “Academic Effects of Patentable Research”), with M. Thursby (December, 2003; revised, June, 2004); National Bureau of Economic Research Working Paper No. 10758.
- Review of *Regulatory Takings: Law, Economics, and Politics*, William A. Fischel, in *Growth and Change* (Spring, 1996).
- Review of *Creative Marginality: Innovations at the Intersections of Social Sciences*, M. Dogan and R. Pahre, in *Growth and Change* (Winter, 1991).
- Review of *The Economics of Information and Uncertainty* (ed. J. J. McCall), in *Journal of Money, Credit, and Banking* (August, 1984).

“The Impact of Uncertainty, Information, Learning, and Rivalry on the Rate of Adoption of Innovations,” in *Telecommunications Policy Annual*, 1981 (ed. by J. Schement).
“Mortality Rates and the Slave Trader,” in *Essays in Economic and Business History* (1981, ed. by J. H. Soltow).

GRANTS

National Oceanic and Atmospheric Administration: “Forecasting Spread and Bioeconomic Impacts of Aquatic Invasive Species from Multiple Pathways to Improve Management and Policy in the Great Lakes,” September 1, 2009 - August 31, 2014 (Co-PI with D. Lodge), \$2,474,560.

Ewing Marion Kaufman Foundation: “University Research and Faculty Consulting,” June 1, 2006 - May 31, 2007, \$44,775.

Ewing Marion Kaufman Foundation: “How Effective Are Technology Transfer Officers In Achieving Their Objectives?,” September 1, 2006 - August 31, 2007, \$55,125.

Ewing Marion Kaufman Foundation and National Bureau of Economic Research: “University Invention, Entrepreneurship, and Start-Ups,” (with C. Chukumba), 2004 - 2005, \$10,000.

Sloan Foundation and National Bureau of Economic Research Grant: “Proofs and Prototypes for Sale: The Tale of University Licensing” (with M. Thursby), 1997-98, \$10,000.

NSF Grant No. IST-8510068, “A Decision-Theoretic Approach to Innovation and Technology Transfer,” principal investigator: July 1, 1985 - December 31, 1986.

NSF Grant No. IST-8208607, “Informational Aspects of Innovation Adoption and Diffusion,” principal investigator: July 1, 1982 - September 30, 1984.

EDITORIAL POSITIONS

Co-Editor, *International Journal of Industrial Organization*: 2004 - 2010.

Associate Editor, *International Journal of Industrial Organization*: 1993 - 2004.

Associate Editor, *Southern Journal of Economics*: 1997 - 2003.

HONORS, AWARDS, AND FELLOWSHIPS

Fellow, *International Journal of Industrial Organization*: 1997 - present.

NDEA Title IV Fellowship, Northwestern University: 1972-1974.

PROFESSIONAL ACTIVITIES AND SERVICE

Grant Evaluation Panels: Societal Implications of Nanoscale Science and Engineering, National Science Foundation (January, 2005; June, 2005; and January, 2006).

REFEREEING

American Economic Review, Economic Inquiry, Economic Journal, Economic Theory, Environmental and Resource Economics, European Economic Review, European Journal of Operations Research, Games and Economic Behavior, International Economic Review, International Journal of Industrial Organization, International Tax and Public Finance, Journal of Development Economics, Journal of Economics and Management Strategy, Journal of Economic Behavior and Organization, Journal of Economic Education, Journal of Economic Theory, Journal of Economics, Journal of Environmental Economics and Management, Journal of Finance, Journal of International Economics, Journal of Political Economy, Journal of Public Economics, Journal of Technology Transfer, Management and Decision, Management Science, National Science Foundation, Quarterly Journal of Economics and Business, Quarterly Journal of Economics, RAND Journal of Economics, Research Policy, Review of Development Economics, Review of Economic Studies, Review of International Economics, Scandinavian Journal of Economics, Social Science Quarterly, Social Sciences Research Council of Canada, Southern Economic Journal, Swedish Journal of Economics.

DOCTORAL STUDENTS

University of Notre Dame: Pablo Hernandez (Hollins University); Celestine Chukumba (InterSearchMedia).

University of Kentucky: Monica Greer (NIPSCo); Angela Ritzert (FDA);
Dean Showalter (Texas State); Alina Zapalska (U.S. Coast Guard Academy);
Paul Chambers (Missouri State).

**TERENCE JOHNSON
CURRICULUM VITA**

January 2013

EDUCATION

M.A., Ph.D., Economic, University of Maryland, College Park, 2011.

B.A., Mathematics, Economics and Political Science, Syracuse University, 2006.

ACADEMIC EXPERIENCE

Assistant Professor of Economics, Department of Economics, University of Notre Dame. 2011-Present.

WORKING PAPERS

“Matching Through Position Auctions,” Revise and Resubmit, *J. Econ. Theory*

REFEREEING

RAND Journal of Economics, Review of Economic Studies, AEJ: Micro, Journal of Economic Behavior and Organization

DOCTORAL STUDENTS

Huyen Pham (committee member)

JOSEPH P. KABOSKI
CURRICULUM VITA

November 2012

EDUCATION

Ph.D. (Economics), University of Chicago, 2001
M. A. (Economics), University of Chicago, 1998
B.S. (Chemical Engineering), Cornell University, 1994

ACADEMIC EXPERIENCE

David F. and Erin M. Seng Foundation Associate Professor of Economics, University of Notre Dame,
Department of Economics, 2010-
Associate Professor, Ohio State University, Department of Economics, 2010
Visiting Researcher, Federal Reserve Bank of Chicago, 2008
Visiting Professor, U. of Chicago, 2007
Assistant Professor, Ohio State University, Department of Economics, 2001-2010

PUBLICATIONS

“Trade Wedges, Inventories, and International Business Cycles,” with George Alessandria and Virgiliu Midrigan, *Journal of Monetary Economics*, forthcoming
“The Rise of the Service Economy.” with Francisco J. Buera, *American Economic Review*, 102 (October 2012): 2540-69
“The Impact of Credit on Village Economies.” with Robert M. Townsend, *American Economic Journal: Applied Economics*, 4 (April 2012): 98-133
“Scale and the Origins of Structural Change.” with Francisco J. Buera, *Journal of Economic Theory*, 147 (March 2012): 684-712
“A Structural Evaluation of a Large-Scale Quasi-Experimental Microfinance Initiative.” with Robert M. Townsend, *Econometrica*, 79 (September 2011): 1357-1406
“Finance and Development: A Tale of Two Sectors”, with Francisco J. Buera and Yongseok Shin, *American Economic Review*, 101 (August 2011): 1964-2002
“Technological Endowments and the Returns to Skill: New Evidence from the American Past.” with Trevon Logan, *Journal of Human Capital*, 5 (Summer 2011): 111-152
“U.S. Trade and Inventory Dynamics.” with George Alessandria and Virgiliu Midrigan, *American Economic Review Papers and Proceedings*, 101 (May 2011): 303-307
“Pricing to Market and the Failure of Absolute PPP.” with George Alessandria, *American Economic Journal: Macroeconomics*, 3 (January 2011): 91-127
“Inventories, Lumpy Trade and Large Devaluations.” with George Alessandria and Virgiliu Midrigan, *American Economic Review*, 100 (December 2010): 2304-39
“The Great Trade Collapse of 2008-09: An Inventory Adjustment?” with George Alessandria and Virgiliu Midrigan, *IMF Economic Review*, 58 (September 2010): 254-294
“Can Traditional Theories of Structural Change Fit the Data?” with Francisco J. Buera, *Journal of the European Economic Association* 7 (April 2009): 469-477
“Education, Sectoral Composition, and Growth.” *Review of Economic Dynamics* 12 (January 2009) 168-182
“Policies and Impacts: An Analysis of Village Level Microfinance Institutions.” with Robert M. Townsend, *Journal of the European Economic Association* 3 (March 2005): 1-50
“Factor Price Uncertainty, Technology Choice and Investment Delay.” *Journal of Economic Dynamics and Control* 29 (March 2005): 509-527

PROFESSIONAL ACTIVITIES

NBER Research Associate, 2012-

NBER Faculty Research Fellow, 2009-2012
Visiting Researcher, FRB Philadelphia, December 2010
Cowles Foundation, Visiting Faculty, October 2009
Visiting Researcher, FRB St. Louis, September 2009
Institute for Empirical Macroeconomics, Visitor, FRB Minneapolis, 2007, 2012
World Bank/Baneseft Consultant, 2005
UTDT Advances in Economics (Buenos Aires) conference, 2012, program co-organizer
Society for Economic Dynamics (Cyprus) conference, 2012, program committee
Midwest Macroeconomics Conference (Notre Dame) conference, 2012, program committee
NBER Growth Conference (San Francisco) conference, 2012, program co-organizer
ND/NU/MU/MSU Development Day conference, 2011, program co-organizer
Assessing the Impacts of Trade on Development (Notre Dame) conference, 2011, program organizer
Economics and Catholic Social Thought (Lumen Christi – University of Chicago) conference, 2009, 2010, 2011, 2012, 2013, program co-organizer
Innovations in Development Theory and Survey Data: Implications for Policy, (UTCC- Bangkok) conference, 2008, program co-organizer

EDITORIAL POSITIONS

Associate Editor, *Journal of Human Capital*, 2012 – present

REFEREEING

American Economic Review; American Economic Journal: Applied Economics; American Economic Journal: Macroeconomics; Bank of Switzerland Working Paper Series; Berkeley Economic Journal of Macroeconomics; Canadian Journal of Economics; Econometrica; Economic Inquiry; International Economic Review; Journal of Development Economics; Journal of Economic Dynamics and Control; Journal of Economic Growth; Berkeley Economic Journal of Globalization and Development; Journal of Human Capital; Journal of Monetary Economics, Journal of Money, Credit, and Banking; Journal of Political Economy; National Science Foundation; Quarterly Journal of Economics, Review of Economic Dynamics; Review of Economics and Statistics; Review of Economic Studies

DOCTORAL STUDENTS

2002: Rob Baumann, College of the Holy Cross (Committee Member)
2004: Xiaodai Xin, People's Bank of China (Committee Member)
2005: Junhee Lee, Bank of Korea (Committee Member)
Tang-Chih Lee, California State University, Hayward (Committee Member)
Tokhir Mirzoev, International Monetary Fund (Committee Member)
2006: Ranjan Shrestha, University of Montana (Committee Member)
Ranajoy Chaudhuri, Northern Arizona University (Committee Member)
2007: Taehyun Ahn, Korea Labor Institute (Committee Member),
Alejandro Cañadas, Mt. St. Mary's College (Committee Member)
2008: Marcelo Villafani (Committee Member), Franz Gomez (Committee Member)
2010: Min Qiang Zhao, Arizona State University/Xiamen Wise (Advisor)
Yasin Akcelik, Central Bank of the Republic of Turkey (Committee Member)
2011: Somasree Dasgupta, Berea College (Committee Member)
Adriana de la Huerta Charles River Associates (Committee Member)
2012: Luke Chicoine, Depaul University (Committee Member)
Manisha Goel, University of North Carolina (Committee Member)
Current students: Jason Rastovski (Committee Member), Eva van Leemput

WILLIAM H. LEAHY
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, University of Notre Dame, 1966.
M.A., Economics, University of Notre Dame, 1960.
B.A., Economics, University of Notre Dame, 1959.

ACADEMIC EXPERIENCE

Professor, Department of Economics, University of Notre Dame, 1975 – present.
Associate Professor, Department of Economics, University of Notre Dame, 1969 – 1975.
Assistant Professor, Department of Economics, University of Notre Dame, 1966 – 1969.
Instructor, Department of Economics, University of Notre Dame, 1963 – 1966.
Regional Economist, U.S. Department of Commerce, Summer 1964.
Price Economist, U.S. Department of Labor, Summers of 1962 and 1963.

PUBLICATIONS

Spatial Economic Theory (co-authored), The Free Press, 1970.
Urban Economics: Theory, Development, and Planning (co-authored), The Free Press, 1970.
Regional Economics: Theory and Practice (co-authored), The Free Press, 1970.
Perspectives on Poverty (co-authored), Praeger, 1973.
Deprived Urban Youth (co-authored), Praeger, 1975.
New Directions in Labor and Industrial Relations (co-authored), University of Notre Dame Press, 1981.

"Arbitration, Union Stewards, and Wildcat Strikes," *Arbitration Journal*, Vol. 24, No.1 (1969), p. 50-58.
(Co-author), "Urbanism, Dualism and Regional Disparities," *Land Economics*, Vol. XLVI, No.1
(February 1970), p. 82-85.
(Co-author), "Intra-Urban Dualism in Underdeveloped Countries," *Land Economics*, Vol. XLVI, No.5,
(February 1971), p. 486-489.
"Arbitration, Union Representative and Processing Grievances," *Arbitration Journal* (Spring 1971), p. 18-
28.
"Issues in Public Expenditures," *Review of Social Economy*, (March 1971), p. 112-118.
"Land Mark Cases Involving Union Representatives," *Personnel Journal* (April 1972), p. 241- 245.
"Arbitration and Insubordination of Union Stewards," *Arbitration Journal*, Vol. 27, No.1, March 1972,
p.18-28.
(Co-author), "A Schumpeterean View of the Regional Economy," *Growth and Change*, Vol. 3, No.4
(October 1972), p. 23-35.
(Co-author), "The Persistence of Poverty" in D. Dugan and W. Leahy, *Perspectives on Poverty* (Praeger:
1973).
(Co-author), "Poverty Reconsidered" in D. Dugan and W. H. Leahy, *Perspectives on Poverty* (Praeger:
1973).
(Co-author), "Dualism As a Factor in Regional and Urban Economic Integration," *Revue Tiers Monde*
(Paris, France: 1974), p. 315-325.
(Co-author), "On Goldfields, Libraries, Cities and Schumpeter," *The American Economist*, Vol. XVIII,
No.1 (Spring 1974), p. 142-145.
(Co-author), "Education and the Role of Urban Deprived Youth on Economic Development,"
International Journal of Social Economics, Vol. 2, No.1 (February 1975), p. 2-16.
"Grievance Over Union Business," *Arbitration Journal*, Vol. 30, No.3 (September 1975), p.191-199.
(Co-author), "A Note on Urbanism and Schumpeter's Theory of Development," *Growth and Change*, Vol.
7, No.1 (January 1976), p. 45-47.

- "An Economic Perspective on Public Employment Programs," *Review of Social Economy*, Vol. XXXIV, No.2 (October 1976), p. 189-200.
- (Co-author), "Urban Deprived Youth and Labor Force in Peru and Developing Countries," *International Journal of Social Economics*, Vol. 3, No.1 (1976), p. 14-24.
- "An Economic Analysis of Salary Impasse: The Fairfield Case," *Annual Report of the Indiana Education Employment Relations Board 1974-75*, (1976), p. 110-113.
- (Co-author), *Bargaining Under Economic Challenge* (Notre Dame: 1976), p. 1-69.
- "Fact-Finding Impasse Between the Lafayette School Corporation and Lafayette Education Association," *Annual Report of the Indiana Education Employment Relations Board 1975-76* (Indianapolis: 1976), p. 367-374.
- "Fact-Finding Impasse Between the Mishawaka Education Association and Mishawaka Board of School Trustees," *Annual Report of the Indiana Education Employment Relations Board 1975-76* (Indianapolis: 1976, p. 449-456.
- "Fact-Finding Between Muncie Community Schools and Muncie Teacher Associations," *Annual Report of the Indiana Education Employment Relations Board (1976-77)*, p. 290-300.
- "Some Reflections on Walter's Nutritional Determinants," *Journal of Comparative Urban Research*, Vol. 4, No.1 (1977), p. 74-77.
- "Wallace Metal Products and Upholsters Local 589," *Labor Arbitration Awards* (Commerce Clearing House: 1977), p. 4109-4115.
- (Co-author), *Horizons for Future Collective Bargaining* (Notre Dame: 1978), p. 1-68.
- "CountyLine Cheese and AMCBW," *Labor Arbitration Reports*, Vol. 69 (1978), p. 1088-1093.
- (Co-author), "Seniority in Collective Bargaining," *Midwest Monitor* (January-February 1978), p. 1-8.
- "Union Seniority Provisions and Discriminations," *Annual Proceedings Industrial Relations Research Association* (February 1979), p. 280-291.
- "Fact-Finding Impasse Between the Warsaw School Corporation and the Warsaw Education Association," *Annual Report of the Indiana Education Employment Relations Board* (July 1979), p. 332-340.
- "Hardware Wholesalers and Teamsters," *Industrial Relations Digest*, Vol. 10 (1979), p. 1-15.
- "North Vernon Forge and Metal Polishers Local 15," *Labor Arbitration Awards* (Commerce Clearing House: Chicago, Illinois, 1981), p. 3136-3140.
- "Rate of Pay for Set Up Work," *Summary of Labor Arbitration Awards* (April 15, 1981), p. 265-7.
- (Co-author), *Are Changes Ahead in Labor Relations* (Notre Dame: 1981), p. 1-67.
- (Co-author), *Evaluating Productivity Programs and Job Security* (Notre Dame: 1982), p. 1-59.
- (Co-author), *Proposals to Invigorate the Economy* (Notre Dame: 1984), p. 1-65.
- (Co-author), "Demand for Medical Services by Deprived Urban Youth," *The American Economist* (Spring 1984), p. 29-34.
- (Co-author) "The Effect of Past Practice on the Arbitration of Labor Disputes," *The Arbitration Journal* (December 1985), Vol. 40, No.4, p. 27-43.
- (Co-author), "Does Past Practice Protect Unions and Their Workers," *Labor Law Journal*, Vol. 37, No.9 (September 1986), p. 646-653.

BYUNG-JOO LEE
CURRICULUM VITAE
January 2013

EDUCATION

Ph.D, University of Wisconsin-Madison, Madison, Wisconsin, August 1988.
M.S., University of Wisconsin-Madison, Madison, Wisconsin, August 1986.
M.A., Pennsylvania State University, University Park, Pennsylvania, August 1984.
B.S., Seoul National University, Seoul, Korea, August 1982.

ACADEMIC EXPERIENCE

Associate Professor of Economics, University of Notre Dame, 1999-present.
Assistant Professor of Economics, University of Notre Dame, 1996-1999.
Assistant Professor of Economics, University of Colorado, 1988-1996.
Associate Director of the Center for Economic Analysis, University of Colorado, Fall 1992 - Summer 1993.

PUBLICATIONS

- “Uncovered Interest Parity: Asymmetric Responses,” International Review of Economics and Finance, Forthcoming, 2012.
- “Linkages Between Exchange Rate Policy and Macroeconomic Performance,” (with N. Mark and V. Sokolov), Pacific Economic Review, 2011, Vol. 16, No. 4, p. 395-420.
- “Uncovered Interest Parity: Cross-sectional Evidence,” Review of International Economics, 2011, Vol. 17, No. 2, p. 219-231.
- “A Multinomial Logit Approach to Exchange Rate Policy Classification with an Application to Growth,” (with J. Dubas and N. Mark), Journal of International Money and Finance, 2010, Vol. 29, No. 7, p.1438-1462.
- “Economic Fundamentals and Exchange Rates under Different Exchange Rate Regimes: Korean Experiences,” Journal of Applied Economics, 2007, Vol. 10, No. 1, p. 137-159.
- “Quantile Regression Analysis of the Wage Determinants in the Korean Labor Market,” (with M. Lee), The Journal of the Korean Economy, 2006, Vol. 7, No. 1, p.1-31, selected as the best paper of the year for JKE, and received award.
- “Exchange Rate Exposure Elasticity of Korean Companies: Pre- and Post-Economic Crisis Analysis,” The Journal of the Korean Economy, 2003, Vol. 4, No. 2, p.283-313.
- “Sample Selection Bias Correction for Missing Response Observations,” (with L. Marsh), Oxford Bulletin of Economics and Statistics, 2000, Vol. 62, No. 2, p.305-322.
- “Nested Logit Analysis of Missing Response Observation,” (with L. Marsh), Applied Economics Letters, 1998, Vol. 5, p.751-755.
- “Separability Test for the Electricity Supply Industry,” Journal of Applied Econometrics, Vol. 10, No. 1, January-March 1995, p.49-60.
- “Design and Analysis of Contingent Valuation Surveys Using the Nested Tobit Model,” (with C. Howe and L. Bennett), The Review of Economics and Statistics, Vol. 76, No. 2, May 1994, p. 385-389.
- “A Heteroskedasticity Test Robust to Conditional Mean Misspecification,” Econometrica, Vol. 60, No.1, January 1992, p. 159-171.

PROFESSIONAL ACTIVITIES

President and the President-Elect for the Korea-America Economic Association, 2011-2012

REFEREEING

Review of International Economics, World Development, Journal of Money Credit and Banking, Journal of International Money and Finance, Korea Development Review, Journal of Economics and Business,

Journal of the Korean Economy, Journal of Applied Econometrics, Review of International Economics, Econometrica, Econometric Theory, Econometric Reviews, Journal of Business and Economic Statistics, Journal of Econometrics, Journal of Quantitative Economics, Review of Economics and Statistics, and the National Science Foundation.

DOCTORAL STUDENTS

University of Colorado-Boulder

Main advisor: Suprijianto, Agus (1995), Yang, Doo Yong (1994)

Committee Member: Beck, James (1996), De Andrade, Luiz F. P. (1995), O'Reilly, Phillip F. (1995),
Bhatia, Sanjiv (1993)

University of Notre Dame

Main advisor: Chandrasekhar, Krishnan (2000), Nyce, Steve (2000) (co-Main Advisor)

Committee Member: Sokolov, Vladimir (2006), Chukumba, Celestine O. (2005), Lawson, Daniel (2005),
Neuman, Kevin (2004), Lopes, Mary (2003), Leaver, Eric (2003), Martinez, Gabriel (2002),
Sulemane, Jose A. (2001), O'Hare, Brian (2000), Cortez, Wily (1998), Raman, Jaishankar (1997).

**STEVEN LUGAUER
CURRICULUM VITA**

January 2013

EDUCATION

PhD Economics, Carnegie Mellon University, 2008
MS Economics, Carnegie Mellon University, 2005
MBA Economics and Finance, University of Miami (FL), 2003
BA Economics, University of Chicago, 1998

ACADEMIC EXPERIENCE

Assistant Professor of Economics, University of Notre Dame, 2008-present

PUBLICATIONS

Estimating the Effect of the Age Distribution on Output Volatility across the United States (2012) *Review of Economics and Statistics*
Demographic Change and the Great Moderation in an OLG Model with Matching Frictions (2012) *Macroeconomic Dynamics*
The Age Distribution and Business Cycle Volatility: International Evidence (2012) *Economics Letters*, with Michael Redmond
Combining EL and GMM Estimators: Asymptotics and Higher Order Bias (2011) *Statistics and Probability Letters*, with Roni Israelov
Estimating the Effect of Household Appliances on Female Labor Force Participation (2010) *Labour Economics*, with Daniele Coen-Pirani and Alexis León

PROFESSIONAL ACTIVITIES

Co-organizer, Midwest Macroeconomic Meetings, 2012

DOCTORAL STUDENTS

Clayton Sadler, Committee (expected graduation: May 2013)
Chadwick Curtis, Committee (2012, University of Richmond)

NELSON C. MARK
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, University of Chicago, 1983.

B.A., Economics with Highest Honors, University of California, Santa Barbara, 1983.

ACADEMIC EXPERIENCE

Acting Director for the Institute for Asia and Asian Studies, University of Notre Dame, January 2013—present

Alfred C. DeCrane Jr. Professor, Department of Economics and Econometrics, University of Notre Dame, Notre Dame, Indiana, 2003—present

Concurrent Professor of Finance, University of Notre Dame: 2003--present.

Research Associate, National Bureau of Economic Research, International Finance and Macroeconomics Program, 2001—present

Professor, Department of Economics, The Ohio State University, Columbus, Ohio, 1994—2003

Associate Professor, Department of Economics, The Ohio State University, Columbus, Ohio, 1989-1994

Assistant Professor, Department of Economics, The Ohio State University, Columbus, Ohio, 1983-1989

Visiting Scholar, Hong Kong Institute for Monetary Research, (2-3/2012)

Visiting Professor, City University of Hong Kong, (5-6/2008)

Visiting Staff, Kiel Institute for the World Economy, (3/2008)

Visiting Professor, Goethe University Frankfurt, (Winter semester 2007/2008 and Spring semester 2009)

Visiting Professor, City University of Hong Kong, (6/2006)

Visiting Scholar, International Monetary Fund (1994, 1995, 1997, 1998, 1999)

Visiting Scholar, Board of Governors of the Federal Reserve System, (7/96, 11/03)

Visiting Tinbergen Professor, Tinbergen Institute, Erasmus University, Rotterdam, The Netherlands, (8/12/96--10/5/96)

Erskine Fellow, University of Canterbury, Christchurch, New Zealand, (7/1/98--8/14/98)

Visiting Associate Professor of Business Economics, University of Chicago, (Winter 1990)

Visiting Professor of Business Economics, University of Chicago (Spring 1995)

Economist, U.S. Department of Energy, Washington, D.C., (Summer 1980).

PUBLICATIONS

"Changing Monetary Policy Rules, Learning, and Real Exchange Rate Dynamics," *Journal of Money, Credit, and Banking*, September 2009, 1047-1070.

"Endogenous Discounting, the World Saving Glut and the U.S. Current Account" with H. Choi and D. Sul, *Journal of International Economics*, 75, May 2008, 30—53.

"Exchange Rate Models Are Not As Bad As You Think," with C. Engel and K.D. West, *NBER Macroeconomics Annual 2007*.

"Dynamic Seemingly Unrelated Cointegrating Regressions," (with M. Ogaki and D. Sul), *Review of Economic Studies*, July, 72, 2005:797—820.

"Cointegration Vector Estimation by Panel Dynamic OLS and Long-Run Money Demand," (with D. Sul), *Oxford Bulletin of Economics and Statistics*, December, 65, 2003: 655—680.

"Price Level Convergence Among United States Cities: Lessons for the European Central Bank," (with S.G. Cecchetti and R. Sonora), *International Economic Review*, November, 43, 2002: 1081--1099.

"Nominal Exchange Rates and Monetary Fundamentals: Evidence from a Small Post-Bretton Woods Panel," (with D. Sul) *Journal of International Economics*, February, 53, 2001: 29--52.

"Asset Pricing Under Distorted Beliefs: Are Equity Returns Too Good To Be True?" (with S.G. Cecchetti and P-s Lam), *American Economic Review*, September, 90, 2000: 787--805.

"Rethinking Deviations from Uncovered Interest Parity: The Role of Covariance Risk and Noise," (with

- Yangru Wu), *Economic Journal*, November, 108, 1998: 1686--1706.
- "Exchange Rates and Fundamentals: Evidence on Long-Horizon Predictability," *American Economic Review*, 85,1 March 1995: 201--218. Reprinted in L. Sarno and M.P. Taylor eds., *New Developments in Exchange Rate Economics*, Edward Elgar, Cheltenham, UK (2001).
- "Testing Volatility Restrictions on Intertemporal Marginal Rates of Substitution Implied by Euler Equations and Asset Returns," (with S.G. Cecchetti and P.S. Lam), *Journal of Finance*, 49,1 March 1994: 123--152.
- "Testing the CAPM with Time-Varying Risks and Returns" (with J.N. Bodurtha Jr), *Journal of Finance*, 46,4 September (1991): 1485-1505.
- "Mean Reversion in Equilibrium Asset Prices" (with S.G. Cecchetti and P.S. Lam), *American Economic Review*, 80,3 June (1990): 398-418.
- "Time-Varying Betas and Risk Premia in the Pricing of Forward Foreign Exchange Contracts." *Journal of Financial Economics*, 22,2 December (1988): 335-354.
- "The International Transmission of Real Business Cycles," (with R. Cantor), *International Economic Review*, 29,3 August (1988): 493-507.
- "On Time Varying Risk Premia in the Foreign Exchange Market: An Econometric Analysis," *Journal of Monetary Economics*, 16,1 July (1985): 3-18.

PROFESSIONAL ACTIVITIES

- Co-organizer (with Linda Goldberg) for NBER Summer Institute International Finance and Macroeconomics Program 2008
- Co-organizer (with Fabio Ghironi) for NBER Summer Institute International Finance and Macroeconomics Program 2009
- Organizer, Midwest Macroeconomics Meetings, Notre Dame, May 2012

EDITORIAL POSITIONS

- North American Editor: *Pacific Economic Review*, 2011—present
- Associate Editor: *Journal of International Economics*, 1995—2010
- Associate Editor: *International Journal of Finance and Economics*, 1995—present
- Associate Editor: *Journal of Money, Credit, and Banking*, 2003—present
- Associate Editor. *Pacific Economic Review*, 2008—2011
- Associate Editor, *New Zealand Economic Papers*, 2008—present
- Editor: *Journal of Money, Credit and Banking*, 1997—1999
- Book Review Editor, *Journal of Money, Credit, and Banking*, 1991—1994
- Guest Editor for special issue of *International Journal of Finance and Economics*/9th International Conference on Macroeconomic Analysis and International Finance, May 2005

REFEREEING

Journal of Political Economy, *American Economic Review*, *Journal of Monetary Economics*, *Journal of Financial Economics*, *Review of Financial Studies*, *Journal of Finance*, *Review of Economics and Statistics*, *Journal of Economic Literature*, *Scottish Journal of Political Economy*, *Journal of International Economics*, *International Economic Review*, *Journal of International Money and Finance*, *European Economic Review*, *Journal of Applied Econometrics*, *Journal of Business*, *Journal of Financial and Quantitative Analysis*, *Journal of Money, Credit, and Banking*, *Southern Economic Journal*, *AREUEA Journal*, *The Royal Economic Journal*, *Journal of Business and Economic Statistics*, *Journal of Empirical Finance*, *Bulletin of Economic Research*, *Economic Inquiry*, *Journal of Asian Economics*, *Quarterly Journal of Economics and Finance*, *The Manchester School*, *Econometric Reviews*, *Empirical Economics*, *Journal of Asian Economics*, *Quarterly Review of Economics and Finance*, *Economic Development and Cultural Change*, *Economics Letters*.

DOCTORAL STUDENTS

Ohio State

Somchai Sujjapongse (Ph.D. 1990) Ministry of Finance, Government of Thailand
Frank M. Song (Ph.D. 1990) Cleveland State University
Jyh-lin Wu (Ph.D. 1990) Institute Faculty of International Economics, Taiwan
Donggyu Sul (Ph.D. 1992) Korean Research Institute
Weike Hai (Ph.D. 1993) Watson Wyatt Worldwide Research, Washington DC
Yangru Wu (Ph.D. 1993) Chinese University, Hong Kong
Tzu-Kuang Hsu (Ph.D. 1994) Taiwan Institute of Economic Research
Doo-Yull Choi, (Ph.D. 1994) South Korean Ministry of Labor
Jian Chen (Ph.D. 1995) Kenyon College, Gambier OH
Robert Sonora (Ph.D. 1998) University of Texas, Arlington
Ludmilla Fedina (Ph.D. 1999), Price-Waterhouse
Premalata Shenbagaraman (Ph.D. 1999), Clemson University
Chu-sheng Tai (Ph.D. 1999), National University of Singapore.
Mark Ruzbeh Parvin (Ph.D. 2000), National City Corporation
Christopher Cornell (Ph.D. 2000), Fordham University.
Chi-Young Choi (Ph.D. 2000), University of New Hampshire
Young-Kyu Moh (Ph.D. 2003), Tulane University
Horag Choi (Ph.D. 2003), University of Auckland
Raphael Solomon (joint with J. Peck, Ph.D. 2003), Bank of Canada
Young Se Kim (joint with M. Ogaki, 2004), University of North Texas

Notre Dame

Justin Dubas (2005), St. Norbert College
Vladimir Sokolov (2006), Moscow Higher School of Economics
James Young (2011, Benedictine College, Atchison, Kansas)
Chad Curtis (2012, University of Richmond)
Dhiraj Pant (2012, Independent Project Analysis)
Regan Deonanan (2012, University of the West Indies)

SARAH MILLER
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, University of Illinois, 2012.

B.S., Economics, Tulane University, 2006.

B.A., French, Tulane University, 2006.

ACADEMIC EXPERIENCE

Assistant Professor, Department of Economics, University of Notre Dame. Beginning 2014.

Robert Wood Johnson Foundation Health Policy Scholar, University of Michigan, 2012-2014.

PUBLICATIONS

"The effect of insurance on emergency room visits: An analysis of the 2006 Massachusetts health reform"
December 2012. *Journal of Public Economics*. 96(11-12): 893-908.

"The impact of the Massachusetts health reform on health care use among children." March 2012.
American Economic Review: Papers and Proceedings. 102(3): 502-507.

"The effect of the Massachusetts health reform on health care utilization" forthcoming, Winter
2012/2013. *Inquiry*.

REFEREEING

Journal of Public Economics, American Economic Journal: Economic Policy, Economic Inquiry, Regional Science and Urban Economics, Inquiry, The B.E. Journal of Policy and Analysis, Health Affairs

MICHAEL A. MOGAVERO
CURRICULUM VITA

January 2013

EDUCATION

Symposium on Experimental Economics, University of Arizona, 1989.
Post Doctoral Studies, Recent Developments in Applied Economics, University of Chicago, 1979.
Ph.D., Economics, University of Connecticut, 1979.
M.A., Economics, University of Connecticut, 1971.
B.A., Economics, Canisius College, 1970.

ACADEMIC EXPERIENCE

Director of Undergraduate Studies and Professor of Economics, University of Notre Dame, 2009- present.
Vice-President for University Planning, Institutional Research and Continuous Improvement, Edinboro University of Pennsylvania, 1996-2009.
Dean of the School of Science, Management and Technologies, Edinboro University of Pennsylvania, 1995 - 1997.
Dean of the School of Business, Dowling College, 1990 to 1995.
Professor of Economics and Management Sciences, Alfred University, 1986 – 1990.
Associate Professor of Economics and Management Sciences, Alfred University, 1980 – 1986.
Associate Professor of Economics, Niagara University, 1979 – 1980.
Assistant Professor of Economics, Niagara University, 1975 – 1979.

PUBLICATIONS

“Strategic Planning in a High-Performing Transit Authority: A Case Study of a Vibrant Rustbelt Community System”, 2008, Mass Transit

“Strategic Planning and Quality Improvement: Edinboro University’s Triangulated Institutional Effectiveness Program” with Dr. Erinn Lake Proceedings of the Middle States Association of Colleges and Universities Annual Meeting.

“A Case Study of Process Improvement at a Pennsylvania University” (with Erinn Lake) Quality Progress July 2000.

"Measuring the Excess Supply of Labor in Growing Rural Economies: The Allegany County Case" The Appalachian Development Review, 1990.

"Recycling Disabled Appliances to the Developing World: A Mutually Beneficial Example of International Cooperation, (with D. Szczerbacki and Alf Walle) Proceedings of the Institute for International Economic Competitiveness, August 1989.

"A Model for Determining the Economic Feasibility of Recycling" (with T. Rasmussen and D. Szczerbacki) Waste Alternatives, December 1988.

"Entrepreneurial Development for Public Assistance Recipients" (with D. Szczerbacki) Proceedings of the Association of Human Resources Management and Organizational Behavior, 1988.

"What's Happening in Allegany County? Full Employment and the Ability to Create Employment" Southern Tier Area Review, 1988.

"Economic Development Efforts and Strategy in Allegany County: A Year of Unprecedented Success" Southern Tier Area Review, 1987.

"Current Problems and Issues in Applied Public Finance" Proceedings of the National Tax Association, 1986.

"The Impact of Falling Oil Prices on the National Economy" The Southern Tier Area Review, Spring, 1986.

"Utilizing the Computer in the Operations Research Curriculum" Journal of the Consortium of Colleges of the Finger Lakes, Spring 1985.

"A Brief State of the Economy: March 1985" Southern Tier Annual Review and also reprinted in the

Alfred Sun, Spring 1985.

"Prospects for Continued Economic Growth" The Southern Tier Annual Review, Spring 1984.

"Prospects for Economic Recovery" The Southern Tier Annual Review, Spring 1983.

"Some Notes on the Use of Income Level Bias in Tax Expenditure Studies", The Journal of the New York State Economic Association, Fall 1982.

"Influences on Reaganomics", published in The Southern Tier Annual Review, Spring 1982.

THE COMMITTEE ON FEDERAL TAX POLICY "Taxing Business Enterprises: Tax Foundation, Inc., (New York), December 1977.

GRANTS AND FUNDED RESEARCH

Evaluation of One of Five National Demonstration Projects for Welfare Reform. Funded by the United States Department of Health and Human Services. (With D. Szczerbacki)

A six county solid waste recycling Plan for the Southern Tier West and Southern Tier Central Regional Planning Boards. (With D. Szczerbacki, H. Reed, and T. Rasmussen)

Village of Wellsville (with D. Szczerbacki) for \$534,105 from the United States Department of Housing and Urban Development, 1987.

Village of Wellsville (with D. Szczerbacki) for \$400,000 from the United States Department of Housing and Urban Development, 1990.

Accord Corporation with D. Szczerbacki for a welfare reform demonstration project, \$560,000. This was one of five national demonstration projects.

Oversaw the writing of an Economic Development Grant for C-E Pre-heater Co. in Wellsville, New York which assisted in bringing 175 new jobs to the Wellsville area, 1987.

Oversaw the writing of an Economic Development Grant for Dresser Rand in Wellsville, New York which assisted in bringing 250 new jobs to the Wellsville area, 1987.

ACCREDITATION EXPERIENCE

Member, Reaccreditation Team, Middle States Association of Colleges and Universities, Villanova University, 2011.

Member, Reaccreditation Team, Middle States Association of Colleges and Universities, The University of Puerto Rico-Mayaguez University, 2008.

Member, Reaccreditation Team, Middle States Association of Colleges and Universities, Strayer University, 2006.

Chair, Reaccreditation Team, Middle States Association of Colleges and Universities, State University of New York College at Purchase, 2004.

Coordinator, Edinboro University of Pennsylvania Reaccreditation Study, Middle States Association of Colleges and Universities, 2001-2003.

Member, Reaccreditation Team, Middle States Association of Colleges and Universities, State University of New York College at Buffalo, 2002.

Member, Reaccreditation Team, Middle States Association of Colleges and Universities, State University of New York at Plattsburgh, 2002.

Member, Reaccreditation Team, Middle States Association of Colleges and Universities, University of Baltimore, 1997.

Member, Reaccreditation Team, New York State Department of Education, Medger Evers College, 1993.

MICHAEL J. PRIES
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, Stanford University, 1999

B.A., Economics, *summa cum laude*, University of Notre Dame, 1993

ACADEMIC EXPERIENCE

Associate Professor of Economics, University of Notre Dame, 2007—present

Assistant Professor of Economics, University of Maryland, 1999-2007

PUBLICATIONS

“Persistence of Employment Fluctuations: A Model of Recurring Job Loss,” *Review of Economic Studies*, 71(1), January 2004, 193-215.

“Hiring Policies, Labor Market Institutions, and Labor Market Flows,” with Richard Rogerson, *Journal of Political Economy*, 113(4), August 2005, 811-839.

“Social Security Reform and Intertemporal Smoothing,” *Journal of Economic Dynamics and Control*, 31, January 2007, 25-54.

“Natural Rate of Unemployment,” *The New Palgrave Dictionary of Economics*, 2nd edition, 2008.

“Worker Heterogeneity and Labor Market Volatility in Matching Models,” *Review of Economic Dynamics*, 11(3), July 2008, 664-678.

“Search Frictions and Labor Market Participation,” with Richard Rogerson, *European Economic Review*, 53(5), July 2009, 568-587.

PROFESSIONAL ACTIVITIES

Program Committee, Midwest Macroeconomics Spring Meeting, 2012

REFEREEING

Journals: *American Economic Review*, *American Economic Journal: Macroeconomics*, *Contemporary Economic Policy*, *Economic Journal*, *Economics Letters*, *European Economic Review*, *International Economic Review*, *Journal of Development Economics*, *Journal of Economic Dynamics and Control*, *Journal of Economic Theory*, *Journal of the European Economic Association*, *Journal of Labor Economics*, *Journal of Monetary Economics*, *Journal of Political Economy*, *Journal of Public Economics*, *Labour Economics*, *Macroeconomic Dynamics*, *Quarterly Journal of Economics*, *Review of Economic Dynamics*, *Review of Economic Studies*, *Scandinavian Journal of Economics*

Agencies: Austria Anniversary Fund, National Science Foundation, Social Science and Humanities Research Council of Canada

DOCTORAL STUDENTS

University of Maryland

Andrew Figura, committee (2000, Federal Reserve Board)

Chad Syverson, committee (2001, University of Chicago)

Nihal Byraktar, committee (2002, World Bank)

Colin Doyle, committee (2003, Institute for Defense Analyses)

John Tsoukalas, committee (2003, Bank of England)

Martin Suster, committee (2003, National Bank of Slovakia)

Francisco Vásquez, committee (2004, International Monetary Fund)

Diego Sarávia, committee (2004, Pontifical Catholic University of Chile)

Fabiano Bastos, committee (2005, Bank of England)
Naomi Griffin (2005, Congressional Budget Office)
Andri Chassamboulli, committee (2005, Central European University)
Joe Nichols, committee (2005, Federal Reserve Board)
Manisha Singh, committee (2005)
Hyowook Chiang, committee (2005, Welch Consulting)
Cristian Pardo, committee (2005, St. Joseph's University)
Juan Contreras, committee (2006, Congressional Budget Office)
Ana María Oviedo, committee (2006, World Bank)
Gaobo Pang, committee (2006, Watson Wyatt Worldwide)
Eugênio Pinto, committee (2006, Federal Reserve Board)
Matthew Freeman, committee (2007, Cornell University)

University of Notre Dame

Julio Garín, chair ((2012, Univ. of Georgia, Terry College of Business)
Dhiraj Pant, committee (2012, Independent Project Analysis)
Clayton Sadler, chair (expected completion 2013)

KALI P. RATH
CURRICULUM VITAE

January 2013

EDUCATION

Ph. D., Johns Hopkins University, 1992.

M. A., Johns Hopkins University, 1988.

ACADEMIC EXPERIENCE

Associate Professor, Department of Economics, University of Notre Dame. 1998--present.

Assistant Professor, Department of Economics, University of Notre Dame.. 1991--1998.

PUBLICATIONS

"On Non--linear Extensions of the Perron--Frobenius Theorem," *Journal of Mathematical Economics*, 15, 59--62, 1986.

"A Direct Proof of the Existence of Pure Strategy Nash Equilibria in Games with a Continuum Of Players," *Economic Theory*, 2, 427--433, 1992.

"Some Refinements of Nash Equilibria of Large Games," *Games and Economic Behavior*, 7, 92--103, 1994.

"Representation of Finite Action Large Games," *International Journal of Game Theory*, 24, 23--35, 1995.

"The Nonexistence of Symmetric Equilibria in Anonymous Games with Compact Action Spaces," *Journal of Mathematical Economics*, 24, 331--346, 1995.

(Coauthors: Yeneng Sun and Shinji Yamashige).

"The Nonconvergence of a Class of Measurable Functions," *Real Analysis Exchange*, 21, 304--307, 1996.

"On the Representation of Sets in Finite Measure Spaces," *Journal of Mathematical Analysis and Applications*, 200, 506--510, 1996.

"Existence and Upper Hemicontinuity of Equilibrium Distributions of Anonymous Games with Discontinuous Payoffs," *Journal of Mathematical Economics*, 26, 305--324, 1996.

"On the Existence of Pure Strategy Equilibria in Games with a Continuum of Players," *Journal of Economic Theory*, 76, 13--46, 1997.

(Coauthors: M. Ali Khan and Yeneng Sun).

"Perfect and Proper Equilibria of Large Games," *Games and Economic Behavior*, 22, 331--342, 1998.

"Stationary and Nonstationary Strategies in Hotelling's Model of Spatial Competition with Repeated Pricing Decisions," *International Journal of Game Theory*, 27, 525--537, 1998.

"On a Private Information Game without Pure Strategy Equilibria," *Journal of Mathematical Economics*, 31, 341--359, 1999. (Coauthors: M. Ali Khan and Yeneng Sun).

"Two Stage Equilibrium and Product Choice with Elastic Demand," *International Journal of Industrial Organization*, 19, 1441--1455, 2001. (Coauthor: Gongyun Zhao).

"Nonminimal Product Differentiation as a Bargaining Outcome," *Games and Economic Behavior*, 42, 267--280, 2003. (Coauthor: Gongyun Zhao).

"Price Changes and Some Underlying Aspects of Measurement of Poverty," *Journal of Quantitative Economics*, 2, 25--43, 2004. (Coauthor: Manoj K. Panda).

- "The Dvoretzky-Wald-Wolfowitz Theorem and Purification in Atomless Finite-action Games," *International Journal of Game Theory*, 34, 91--104, 2006.
(Coauthors: M. Ali Khan and Yeneng Sun).
- "On Games with Incomplete Information and the Dvoretzky-Wald-Wolfowitz Theorem with Countable Partitions," *Journal of Mathematical Economics*, 45, 830--837, 2009.
(Coauthor: M. Ali Khan).
- "The Shapley-Folkman Theorem and the Range of a Bounded Measure: An Elementary and Unified Treatment," *Positivity*, forthcoming. (Coauthor: M. Ali Khan).
- "Large Games with a Bio-Social Typology," *Journal of Economic Theory*, forthcoming.
(Coauthors: M. Ali Khan, Yeneng Sun and Haomiao Yu).
- "Large Distributional Games with Traits," *Economics Letters*, forthcoming.
(Coauthors: M. Ali Khan, Haomiao Yu and Yongchao Zhang).

PROFESSIONAL ACTIVITIES

- Co-organizer and chair of a session at the SAET conference in Faro, Portugal, 2011.
Chair of a session at Probabilistic Impulses in Modern Economic Theory, National University of Singapore, 2011.
External examiner for a Ph. D. thesis submitted to National University of Singapore in 2011.

EDITORIAL POSITIONS

- Editorial Board, *Journal of Micro Economics*, 2011 – present.

REFEREEING

Asia--Pacific Journal of Operational Research (APJOR), Bulletin of Economic Research, Economic Modeling, Economic Theory, Games and Economic Behavior, International Economic Review, International Journal of Game Theory, International Journal of Industrial Organization, International Review of Economics and Finance, Journal of Applied Mathematics and Decision Sciences, Journal of Economic Theory, Journal of Public Economic Theory, Journal of Mathematical Economics, Mathematical Social Sciences, Mathematics of Operations Research, Oxford Economic Papers, Social Choice and Welfare, Zeitschrift fur Nationalokonomie.

National Science Foundation of USA

ERIC R. SIMS
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, University of Michigan, 2009.

M.A., Economics, University of Michigan, 2006.

B.A., Economics, Trinity University, 2003.

ACADEMIC EXPERIENCE

Michael P. Grace II Assistant Professor of Economics, Department of Economics, University of Notre Dame, 2012 – Present.

Research Professor, IFO Institute, Munich, Germany, 2012 – Present.

Faculty Research Fellow, National Bureau of Economic Research, 2010 – Present.

Assistant Professor, Department of Economics, University of Notre Dame, 2009-2012.

PUBLICATIONS

"News Shocks and Business Cycles" with Robert Barsky. April 2011. *Journal of Monetary Economics* (58):273-289.

"Confidence and the Transmission of Government Spending Shocks" with Ruediger Bachmann. April 2012. *Journal of Monetary Economics* (59):235-249.

"Information, Animal Spirits, and the Meaning of Innovations in Consumer Confidence" with Robert Barsky. June 2012. *American Economic Review* (102):1343-1377.

"Taylor Rules and Technology Shocks." July 2012. *Economics Letters* (116):92-95.

"News, Non-Invertibility, and Structural VARs." July 2012. *Advances in Econometrics* (28):81-136.

"Uncertainty and Economic Activity: Evidence from Business Survey Data" with Ruediger Bachmann and Steffen Elstner. Forthcoming, 2013. *American Economic Journal: Macroeconomics*.

WORKING PAPERS

"What Measure of Output Should be Targeted in Interest Rate Rules?" September 2012.

"Inflation Expectations and Readiness to Spend at the Zero Lower Bound: Cross-Sectional Evidence" with Ruediger Bachmann and Timothy Berg. August 2012.

"Reallocation and the Changing Nature of Economic Fluctuations" with Julio Garin and Michael Pries. September 2011.

"Permanent and Transitory Technology Shocks and the Behavior of Hours: A Challenge for DSGE Models." August 2011.

PROFESSIONAL ACTIVITIES

Excellence in refereeing award, *American Economic Review*, 2012.

Excellence in refereeing award, *Journal of Economic Dynamics and Control*, 2012.

Co-Organizer, IFO Institute Conference on Macroeconomics and Survey Data, 2012 – Present.

Program Committee, Midwest Macroeconomics Spring Meeting, 2012.

REFEREEING ACTIVITIES

American Economic Review; *Quarterly Journal of Economics*; *Journal of Political Economy*; *Review of Economics and Statistics*; *Journal of Monetary Economics*; *American Economic Journal: Macroeconomics*; *Economic Journal*; *B.E. Journals in Macroeconomics*; *Economics Letters*; *Energy Economics*; *Journal of Money, Credit, and Banking*; *Macroeconomic Dynamics*; *Journal of Human Resources*; *European Economic Review*; *Journal of Economic Dynamics and Control*; *Journal of International Economics*; *International Journal of Economic Theory*; *Journal of the European Economic Association*

Association; Journal of Macroeconomics; Review of Economic Dynamics; International Review of Economics and Finance; Journal of Economic Behavior and Organization; MIT Press

DOCTORAL STUDENTS

Regan Deonanan, committee (2012, University of the West Indies)

Julio Garin, committee (2012, University of Georgia)

Dhiraj Pant, committee (2012, Independent Project Analysis)

Sebastian Roelands, committee (expected completion 2013)

JAMES X. SULLIVAN
CURRICULUM VITAE

January 2013

EDUCATION

Ph.D., Economics, Northwestern University, 2002.

M.A., Economics, Northwestern University, 1997.

B.A., Economics, University of Notre Dame, 1993.

ACADEMIC EXPERIENCE

Associate Professor of Economics, University of Notre Dame, 2009-present.

Assistant Professor of Economics, University of Notre Dame, 2002-2009.

Visiting Assistant Professor, University of Chicago, Irving B. Harris School of Public Policy Studies, 2006-2007.

Visiting Scholar, University of Michigan, Gerald R. Ford School of Public Policy, National Poverty Center, 2004-2005.

PUBLICATIONS

Refereed Journals

“Winning the War: Poverty from the Great Society to the Great Recession” (2012), with Bruce Meyer, *Brookings Papers on Economic Activity*, forthcoming.

“Identifying the Disadvantaged: Official Poverty, Consumption Poverty, and the New Supplemental Poverty Measure” (2012), with Bruce Meyer, *Journal of Economic Perspectives*, 26(3), Summer, 111-136.

“Consumption and Income Poverty over the Business Cycle” (2011), with Bruce Meyer, *Research in Labor Economics*, vol. 32, 51-82.

“Further Evidence on Measuring the Well-Being of the Poor Using Income and Consumption” (2011), with Bruce Meyer, *Canadian Journal of Economics*, February, 44(1), pages 52-87.

“Changes in the Consumption, Income, and Well-Being of Single Mother Headed Families” (2008), with Bruce Meyer, *American Economic Review*, 98(5), December, 2221-2241.

“Borrowing During Unemployment: Unsecured Debt as a Safety Net” (2008), *Journal of Human Resources*, 43(2): 383-412.

“The Relationship between Income and Material Hardship” (2008), with Lesley Turner and Sheldon Danziger, *Journal of Policy Analysis and Management*, 27(1): 63-81.

“Welfare Reform, Saving, and Vehicle Ownership for the Poor: Do Asset Tests and Vehicle Exemptions Matter?” (2006), *Journal of Human Resources*, 41(1): 72-105.

“The Effects of Welfare and Tax Reform: The Material Well-Being of Single Mothers in the 1980s and 1990s” (2004), with Bruce Meyer, *Journal of Public Economics*, 88(7-8): 1387-1420.

“Measuring the Well-Being of the Poor Using Income and Consumption” (2003), with Bruce Meyer, *Journal of Human Resources*, 38(S): 1180-1220.

Conference Proceedings and Edited Volumes

“Consumption and Income Inequality and the Great Recession (forthcoming),” with Bruce Meyer, *American Economic Review Papers and Proceedings*, 2013.

“The Validity of Consumption Data: Are the Consumer Expenditure Interview and Diary Surveys Informative?” (forthcoming), with Adam Bee and Bruce Meyer, in *Improving the Measurement of Consumer Expenditures*, Christopher Carroll, Thomas Crossley, and John Sabelhaus, editors. University of Chicago Press in NBER Book Series Studies in Income and Wealth.

“Consumption and Income Poverty in the United States” (2012), with Bruce Meyer, in *Oxford Handbook of the Economics of Poverty*, Philip Jefferson, editor. Oxford University Press.

PROFESSIONAL ACTIVITIES

Co-founder, Lab for Economic Opportunities, University of Notre Dame, 2012-Present.

HONORS

Emerald Literati Network Awards for Excellence, Outstanding Author Contribution, for “Consumption and Income Poverty over the Business Cycle,” published in *Research in Labor Economics*, 2012.

National Tax Journal, Referee-of-the-Year Award, 2008

Center for Poverty Research, University of Kentucky, Emerging Scholars Program, 2004

The W.E. Upjohn Institute for Employment Research, Dissertation Award Winner, 2003

SPONSORED RESEARCH

National Bureau of Economic Research (co-PI, \$25,000), Research Grant, 2010

The Smith Richardson Foundation (co-PI, \$272,673), Research Grant, 2008-2010

Earhart Foundation (PI, \$6,236), Fellowship Research Grant, 2006

United States Department of Agriculture (co-PI, \$40,000), Research Development Grant, 2006

National Bureau of Economic Research (co-PI, \$25,000), Research Grant, 2006

Annie E. Casey Foundation (co-PI, \$50,366), Research Grant, 2005

The Smith Richardson Foundation (PI, \$60,000), Domestic Public Policy Research Fellowship Program, 2004

The W.E. Upjohn Institute for Employment Research (PI, \$5,000), Mini-Grant, 2003

DOCTORAL STUDENTS

Committee member

Adam Bee (U.S. Bureau of Census)

Celestine Chukumba (Pennsylvania St. University)

Luke Chicoine (Depaul University)

Sharon Hermes (U.S. General Accounting Office)

Daniel Lawson (Drew University)

Shawn Moulton (ABT Associates)

Thomas Murray (Fairfield University)

Kevin Neuman (Drew University)

Vladimir Sokolov (Higher School of Economics)

Lance Wescher (Covenant College)

REFEREEING

Journal Refereeing

American Economic Journal: Applied Economics, American Economic Journal: Economic Policy, American Economic Review, American Journal of Sociology, B.E. Journals in Economic Analysis & Policy, Canadian Journal of Economics, Contemporary Economic Policy, Demography, Economics of Education Review, Economic Inquiry, Economic Journal, Economics Letters, Industrial Relations, Journal of Applied Econometrics, Journal of Human Resources, Journal of Marriage and Family, Journal of Policy Analysis and Management, Journal of Political Economy, Journal of Public Economics, National Tax Journal, Quarterly Journal of Economics, Review of Economics and Statistics, Social Science Quarterly, Southern Economic Journal, U.S. Department of Agriculture Economic Research Service Report

Grant Refereeing

National Science Foundation, Association for Public Policy Analysis and Management, Research Grants Council of Hong Kong, U.S. Census Bureau, National Poverty Center, U.S. Department of Health and Human Services, Smith Richardson Foundation, U.S. Department of Agriculture

JEFF THURK
CURRICULUM VITA

January 2013

EDUCATION

Ph.D. Economics, University of Texas at Austin, 2010

M.S. Economics, University of Texas at Austin, 2006

B.A. Economics, Carleton College, *Magna cum laude*, 2001

ACADEMIC EXPERIENCE

Assistant Professor, University of Notre Dame, 2010-Present

PROFESSIONAL ACTIVITIES

Program Committee, Midwest Macroeconomics

Visiting Scholar, St Louis Federal Reserve Bank, 2010-Present

REFEREEING

International Economic Review, European Economic Review, Economic Inquiry

CHRISTOPHER J. WALLER
CURRICULUM VITA

January 2013

EDUCATION

Ph.D., Economics, Washington State University, 1985.
M.A., Economics, Washington State University, 1984.
B.S., Economics, Bemidji State University, 1981.

ACADEMIC EXPERIENCE

Senior Vice President and Research Director, Federal Reserve Bank of St. Louis, 2009 – present.
Professor of Economics, University of Notre Dame, 2011 – present, on leave.
Sam Cook Visiting Professor, Washington University-St. Louis, Fall 2012.
Gilbert F. Schaefer Chair of Economics, University of Notre Dame, 2003-2011.
Erskine Fellow, University of Canterbury, New Zealand, Summer 2006.
Professor and Carol Martin Gattton Chair, University of Kentucky, 1998 - 2003.
Associate Professor Economics, Indiana University, 1992 - 1998.
Assistant Professor, Indiana University, 1985 - 1992.

PUBLICATIONS

"Demographics, Redistribution and Optimal Inflation." (With James Bullard and Carlos Garriga) *Federal Reserve Bank of St. Louis Review*. (November/December 2012): 419-439.

"Sovereign Debt: A Modern Greek Tragedy." (With Fernando Martin) *Federal Reserve Bank of St. Louis Review*. (September/October 2012): 321-339.

"Price Level Targeting and Stabilization Policy." (With Aleks Berentsen). *Journal of Money Credit and Banking* 43(S2) (October 2011): 559-580.

"Independence + Accountability: Why the Federal Reserve is a Well-Designed Central Bank." *Federal Reserve Bank of St. Louis Review* 93(5) (September/October 2011): 293-302.

"Outside Versus Inside Bonds: A Modigliani-Miller Type Result for Liquidity Constrained Households." (With Aleks Berentsen). *Journal of Economic Theory* 146 (September 2011): 1852-1887.

"Random Matching and Money in the Neoclassical Growth Model: Some Analytical Results." *Macroeconomic Dynamics* 15 (Supplement 2) (September 2011): 293-312.

"Money and Capital." (With S. Borağan Aruoba and Randall Wright). *Journal of Monetary Economics*. Volume 58:2; (March 2011): 98-116.

"Introduction to the Macroeconomic Dynamics: Special Issues on Money, Credit, and Liquidity." (With Ed Nosal and Randall Wright). *Macroeconomic Dynamics* 15 (Supplement 1) (December 2010) 1-9.

"Intensive vs. Extensive Margin Tradeoffs in a Simple Monetary Search Model." (With Sébastien Lotz and Andrei Shevchenko). *Les Annales d'Economie et Statistique* 86 (April/June 2008): 138-148.

"Bargaining and the Value of Money" (With Guillaume Rocheteau and S. Borağan Aruoba). *Journal of Monetary Economics* 54:8, (November 2007): 2636–2655.

"Money, Credit and Banking" (With Aleks Berentsen and Gabriele Camera). *Journal of Economic Theory* 135 (July 2007): 171-195.

"Heterogeneity and Lotteries in Monetary Search Models" (With Sébastien Lotz and Andrei Shevchenko). *Journal of Money, Credit and Banking* 39 (March/April 2007): 703-713.

"Money and Risk Sharing" (With Robert Reed). *Journal of Money, Credit, and Banking* 38 (September 2006): 1599-1618.

"The Distribution of Money Balances and the Non-neutrality of Money" (With Aleks Berentsen and Gabriele Camera). *International Economic Review* 46 (May 2005): 465-487.

"Currency Competition in a Fundamental Model of Money" (With Gabriele Camera and Ben Craig). *Journal of International Economics* 64 (December 2004): 521–544.

- "The Distribution of Money and Prices in an Equilibrium with Lotteries" (With Gabriele Camera and Aleks Berentsen). *Economic Theory* 24 (November 2004):887-906. [Reprinted in *Recent Developments on Money and Finance*, G. Camera,ed., Berlin: Springer, 2006.]
- "Currency Portfolios and Currency Exchange in a Search Economy" (With Ben Craig). *Journal of Monetary Economics* 51 (May 2004): 671-689.
- "Central Banking in General Equilibrium" (With James Bullard). *Journal of Money, Credit, and Banking* 36 (February 2004): 95-113.
- "Comment on 'Search, Money and Capital: A Neoclassical Dichotomy' " *Journal of Money, Credit, and Banking* Vol. 35, No. 6 (December 2003, Part 2): 1111-1117.
- "A Jack of All Trades or a Master of One? Specialization, Trade and Money" (With Gabriele Camera and Robert Reed). *International Economic Review* 44 (November 2003): 1275-1294.
- "Can Monetizing Trade Lower Welfare? An Example" (With Gabriele Camera and Robert Reed). *Economics Letters* 81 (November 2003): 179-186.
- "Currency Restrictions, Government Transaction Policies and Currency Exchange" (With Elisabeth Curtis). *Economic Theory* 21 (January 2003): 19-42.
- "Corruption: Top Down or Bottom Up?" (With Roy Gardner and Thierry Verdier). *Economic Inquiry* 40 (October 2002): 688-703.
- "Policy Boards and Policy Smoothing" *Quarterly Journal of Economics* 115 (February 2000): 305-339.
- "A Search Theoretic Model of Legal and Illegal Currency" (With Elisabeth Soller Curtis). *Journal of Monetary Economics* 45 (February 2000): 155-184.
- "Dual Currency Economies as Multiple Payment Systems" (With Ben Craig). *Economic Review* Federal Reserve Bank of Cleveland, 36, 1, (2000): 2-13.
- "Comment on 'Assessing the Political Viability of Labor Market Reform: The Case of Employment Protection' " *Federal Reserve Bank of St. Louis Review*, vol. 81, 3, (May 1999): 89-91.
- "Central Banking as a Political Principal-Agent Problem" (With Michele Fratianni and Jürgen von Hagen). *Economic Inquiry* 35 (April 1997): 378-393.
- "A Benefit - Cost Analysis of Disinflation" (With Christopher Neely). *Contemporary Economic Policy* 15 (January 1997): 50-64.
- "Central Bank Independence, Economic Behavior and Optimal Term Lengths" (With Carl Walsh). *American Economic Review* 86 (December 1996): 1139-1153.
- "Performance Contracts for Central Bankers" *Federal Reserve Bank of St. Louis Review* (September/October 1995): 1-16.
- "A Simple Expository Model of Credit Rationing" (With Steve Lewarne). *Journal of Macroeconomics* 16 (Summer 1994): 539-546.
- "The Choice of a Conservative Central Banker in a Multi-Sector Economy" *American Economic Review* 82 (September 1992): 1006-1012.
- "A Bargaining Model of Partisan Appointments to the Central Bank" *Journal of Monetary Economics* 29 (June 1992): 411-428.
- "Discretionary Monetary Policy and Socially Efficient Wage Indexation" (With David VanHoose). *Quarterly Journal of Economics* 107 (November 1992): 1451- 1460.
- "From EMS to EMU" (With Jürgen von Hagen and Michele Fratianni). *Princeton University Essays in International Finance* No. 187 (June 1992).
- "Discretion, Wage Indexation and Inflation" (With David VanHoose). *Southern Economic Journal* 58 (October 1991): 356-367.
- "Bashing and Coercion in Monetary Policy" *Economic Inquiry* 29 (January 1991): 1-13.
- "Administering the Window: A Game Theoretic Model of Discount Window Borrowing" *Journal of Monetary Economics* 25 (March 1990): 273-287.
- "Generalized Neoclassical Optimization: Concave Indifference Surfaces and Free Disposal" (With L.E. Johnson and S. Vogt). *Rivista Internazionale Di Scienze Economiche E Commerciali* (International Review of Economics and Business) 37 (September 1990): 837-850.

"Macroeconomic Policy Games and Central Bank Politics" *Journal of Money, Credit and Banking* 21 (November 1989): 422-31.

"Islands, Indexation, and Monetary Policy" (with David VanHoose). *Economic Inquiry* 27 (October 1989): 705-18.

"Efficiency Wages, Indexation, and Macroeconomic Stabilization" *Economics Letters* 30 (1989): 125-28.

"Endogenous Wage Indexation and Optimal Monetary Policy With and Without a Balanced Budget" (with David VanHoose). *Journal of Economics and Business* 41 (February 1989): 21-31.

"Optimal Monetary Policy and Alternative Wage Indexation Schemes in a Model with Interest-Sensitive Labor Supply" (with David VanHoose). *Journal of Macroeconomics* 11 (Spring 1989): 163-180.

"Reputation Building in a Monetary Policy Game" *Journal of Macroeconomics* 9 (Summer 1987): 351-72.

"Deficit Financing and the Role of the Central Bank - A Game Theoretic Approach." *Atlantic Economic Journal* 15 (July 1987): 25-32.

PROFESSIONAL ACTIVITIES

Visiting Scholar at: Federal Reserve Bank of Cleveland, Federal Reserve Bank of St. Louis, Board of Governors, CIA, Economic Education Consortium, Washington University, University of Mannheim, University of Canterbury.

Plenary speaker, Workshop on Macroeconomic Dynamics, Sydney Australia, 2010.

Plenary speaker, Shanghai University Economics and Finance Macroeconomic Conference, June 2011.

EDITORIAL POSITIONS

Associate Editor, *Journal of Money, Credit and Banking* 2002-2011

Associate Editor, *European Economic Review* 2002-2012

Editorial Board, *Journal of Macroeconomics* 2001-Present

Editorial Board, *New Zealand Economic Papers*, 2009-Present

REFEREEING

National Science Foundation

American Economic Review

Journal of Political Economy

Econometrica

Quarterly Journal of Economics

Journal of Economic Theory

Review of Economic Studies

Review of Economics and Statistics

International Economic Review

Economic Journal

Journal of Monetary Economics

Journal of Money, Credit and Banking

Journal of International Economics

European Economic Review

Journal of International Money and Finance

American Political Science Review

Journal of International Money and Finance

Oxford Economic Papers

Canadian Journal of Economics

Berkeley Electronic Press Journals

Journal of Macroeconomics

Journal of Economics and Business

Open Economies Review

Economic Inquiry

Southern Economic Journal

Scandinavian Journal of Economics

Journal of Institutional and Theoretical Economics

International Journal of Economics

European Journal of Political Economy

Contemporary Economic Policy

Economics and Politics

Review of International Economics

Journal of Regional Science

Economics of Governance

Atlantic Economic Journal

Eastern Economic Journal

Quarterly Journal of Economics and Business

International Journal of Central Banking

e-economics

Canadian Social Sciences and Humanities Research

Council

DOCTORAL STUDENTS (Main Advisor)

Elisabeth Soller Curtis (First job: Drexel University)

Sandra Hanson McPherson (First job: Towson University)
Mahmoud Arassyi (First job: Beruit University)
Ammar Askari (First job: Marquette National Bank)

**ABIGAIL WOZNIAK
CURRICULUM VITA**

January 2013

EDUCATION

Ph.D., Economics, Harvard University, 2005

A.B., Economics, University of Chicago, with honors, 1998

ACADEMIC EXPERIENCE

Visiting Fellow, Department of Economics, Princeton University, 2008-2009.

Assistant Professor of Economics, Department of Economics, University of Notre Dame, 2005-present.

PUBLICATIONS

Griffin, John, David Nickerson, and Abigail Wozniak (with equal co-authorship). Forthcoming. "Racial differences in inequality aversion: Evidence from Real World Respondents in the Ultimatum Game." *Journal of Economic Behavior and Organization*.

Malamud, Ofer and Abigail Wozniak (with equal co-authorship). 2012. "The Impact of College Education on Geographic Mobility." *Journal of Human Resources*. 47(4): 913-950.

Wozniak, Abigail and Thomas J. Murray. 2012. "Timing Is Everything: Short-Run Population Impacts of Immigration in US Cities." *Journal of Urban Economics*, 72(July): 60-78.

Molloy, Raven; Christopher L. Smith and Abigail Wozniak (with equal co-authorship). 2011. "Internal Migration in the US: Updated Facts and Recent Trends," with Raven Molloy and Christopher Smith. *Journal of Economic Perspectives*. 25(3): 173-196.

Molloy, Raven and Abigail Wozniak (with equal co-authorship). 2011. "Labor Reallocation over the Business Cycle: New Evidence from Internal Migration." *Journal of Labor Economics*. 29(4): 697-739.

Wozniak, Abigail. 2011. "Attitudes and Perceptions in the Labor Market for Less Skilled Black Men." *American Journal of Economics and Sociology*. 70(3): 811-844.

Abigail Wozniak. 2010. "Are College Graduates More Responsive to Distant Labor Market Opportunities?" *Journal of Human Resources*. 45(3): 944-970.

Abigail Wozniak. 2007. "Product Markets and Paychecks: Deregulation's Effect on the Compensation Structure in Banking." *Industrial and Labor Relations Review*. 60(2): 246-267.

PAPERS UNDER REVIEW

Abigail Wozniak. "Discrimination and the Effects of Drug Testing on Black Employment." *IZA Discussion Paper #6605*. (Under review.)

Buckles, Kasey, Ofer Malamud, Melinda Morrill, and Abigail Wozniak (with equal co-authorship). "The Effects of College Education on Health." *IZA Discussion Paper #6659*. (Under review.)

GRANTS

"Short-Run Population Impacts of Immigration in US Cities." Upjohn Institute Research Mini-Grant, 2009-2010, \$5000.

PROFESSIONAL ACTIVITIES

National Bureau of Economic Research (NBER), Faculty Research Fellow, 2010-present.

IZA (Bonn, Germany), Research Fellow, 2008-present.

IZA (Bonn, Germany), Research Affiliate, 2005-2008.

Organizer of accepted submitted sessions: American Economics Association meetings 2010, 2013.

REFEREEING

Regular reviews provided for *Quarterly Journal of Economics*, *Journal of Human Resources*, *Industrial*

and Labor Relations Review, Journal of Urban Economics, Regional Science and Urban Economics.

Occasional (one to three since 2005) reviews provided for *Review of Economic Studies, Review of Economics and Statistics, Economic Journal, Journal of Economic Behavior and Organization, Journal of the European Economic Association, Journal of Policy Analysis and Management, Economics of Education Review, Explorations in Economic History, Journal of Population Economics, Industrial Relations, Canadian Journal of Urban Research, Southern Economic Journal, Journal of Economic Development and Cultural Change, British Journal of Industrial Relations, American Journal of Economics and Sociology.*

Reviewing for Funding Agencies

National Science Foundation (2010), Social Sciences and Humanities Research Council of Canada (2007).

DOCTORAL STUDENTS (Role, PhD Year, Initial Placement)

University of Notre Dame

Shawn Moulton (Committee member, 2011, Abt Associates Cambridge, MA)

Thomas J. Murray (Committee member, 2011, Fairfield University)

Michael Jones (Committee member, 2012, University of Cincinnati)

Ning Jia (Chair, expected completion in May 2014)

Appendix P: Goals of the University and the College of Arts and Letters

University Vision and Goals

In an effort to achieve its overall aspiration of becoming a preeminent research university with a distinctive Catholic mission and an unsurpassed undergraduate education, the University of Notre Dame strives to meet five institutional goals:

1. Offer an unsurpassed undergraduate education
2. Become a preeminent research university
3. Ensure that the University's Catholic character informs all its endeavors
4. Create a sustainable culture of continuous improvement and service excellence to support the University's mission
5. Communicate strategically to internal and external constituents

College of Arts and Letters Goals

1. Advance research excellence
2. Develop a more sophisticated and intense undergraduate education
3. Become a more international college
4. Become a more collaborative college