

June 11, 2016

“Program Review of the Department of Economics”

Submitted by: James Caporaso, Committee Chair, University of Washington; Matthew Gentzkow, Stanford University ; Mari Ostendorf, University of Washington; and Mark Watson, Princeton University

Background

The Department of Economics Review Committee includes two University of Washington members (James Caporaso, Department of Political Science, Committee Chair and Mari Ostendorf, Department of Electrical Engineering) as well as two external members (Matthew Gentzkow, Professor, Department of Economics, Stanford University; and Mark Watson, Howard Harrison and Gabrielle Snyder Beck Professor of Economics and Public Affairs Department of Economics, Princeton University). The administrative representatives include Judith Howard, Divisional Dean for Social Sciences, College of Arts and Sciences; Patricia Moy, Associate Vice-Provost for Academic and Student Affairs, Office of the Provost; Rebecca Aanerud, Associate Dean, Academic Affairs and Planning, the Graduate School; Jason Johnson, Associate Dean, Undergraduate Academic Affairs; Augustine McCaffery, Senior Academic Program Specialist, the Graduate School; and Peter Johnson, Associate Professor, Department of Environmental and Occupational Health Sciences, and Graduate School Council Representative.

The Review Committee held a number of preliminary meetings to review the nature of the charge and to familiarize ourselves with basic procedures and aims of the review process. Our first meeting took place with Augustine McCaffery on March 7 to discuss the nature of the charge letter. In addition to McCaffery, Caporaso, and Ostendorf, also present were Judith Howard, Jason Johnson, and Fahad Khalil (chair, Department of Economics). Professors Gentzkow and Watson took part by way of a conference call. The meeting’s agenda included an overview of the committee’s charge, a discussion of the unit-defined questions, the College’s perspective on the review process (Howard), the Undergraduate Academic Affairs perspective (Johnson), and an open question and answer period. Mainly, we discussed the goals of the review committee and the focus on evaluating the quality of the undergraduate BA and BS degrees as well as the Ph.D. program. On May 4 Ostendorf and Caporaso met and this was followed by a meeting with the chair of the Economics Department, Fahad Khalil on May 6. On May 9 Ostendorf and Caporaso met with Augustine McCaffery to discuss and prepare for the upcoming site visit. While these meetings were transpiring, the administration and the Department of Economics made available to us numerous reports and background material. The comprehensive self-study by the Economics Department, along with other materials, was made available on Catalyst on April 13.

The committee requested and received several other reports, including the Annual Report of the Undergraduate Program (2015), the UW Challenge and Academic Engagement Study, the Department of Economics Report (2015), and the 2011 Department of Economics Strategic Plan.

The site visit started with a working dinner on Wednesday May 11. The committee members got acquainted with one another and discussed our mission. While the internal and external members were not acquainted with one another before the visit, it's fair to say that we had an agreeable chemistry and quickly felt that we could work together as a productive team. We went over the site visit agenda in some detail and decided where to focus our questions and energies. At that time, we learned that the external members had requested additional information, and they forwarded what they had received to the internal members.

The site visit was comprehensive, detailed, and informative from the perspective of the committee. We met at different times with many of the faculty (separately by rank: assistant professors, associate professors, and full professors), the Department Program Evaluation Committee, graduate students, undergraduate students, principal lecturers, department staff, the outreach committee, the graduate program committee, the undergraduate program committee, and all of the representatives of the administration mentioned in the first paragraph under "Overview". Those who wanted to meet with us individually were accommodated. Groupings of faculty by rank helped to elicit concerns that were shared by individuals in a certain rank. While a healthy range of opinions was voiced over the two days, we thought that there were a number of identifiable dimensions around which they clustered. This helped to provide a clear structure for our report which started to take shape by the second day of the visit. We include the site visit agenda as an appendix to this report.

Overview

The last review of the Department of Economics took place in 2005 ("The Tolnay Report"). The title, "A Department at a Crossroads", gave a hint of what was at stake at that time. While this report recognized considerable progress since the previous report in 2000, it also suggested that the process of rebuilding and strengthening had not been fully realized. The 2005 committee made a number of suggestions to provide the Economics Department with the resources to maintain their growing undergraduate majors and their Ph.D. program. The report also proposed a collaborative plan by the Department and the University for hiring at the assistant professor and tenured associate levels in order to strengthen the faculty in place and to advance beyond the level of performance at that time.

We organize the balance of the report as follows: progress since last review; highlights of the department; resources and resource needs; challenges; and the future. We have attempted to address all the major concerns of the charge letter, the self-study, and any other relevant guidance we have received.

Progress Since the last Department Review

As mentioned above, the 2005 report was titled “A Department at a Crossroads”. Our committee agrees that the “crossroads” in question have been successfully transited, the Department is on more solid footing today, and substantial initiatives have been undertaken to move the Department into a new phase. It has emerged from the difficulties reflected upon in the 2000 report (“A Department at Risk”) and 2005 report (“A Department at a Crossroads”) and moved into a more productive period in which it hopes to improve further its regional, national, and global positions. We see significant improvements and indications that the Department is moving in healthy directions. We attempt to detail these strengths, the continuing challenges to the Department, and what can be done by and for the Department to enable it to bring its potential to full fruition in the years ahead.

Hiring. In its strategic plan (2011-2016) the Department placed primary emphasis on the hiring of excellent faculty members, noting also that these hires should build on existing strengths and also build connections to the rest of the university. Also, the strategic plan set 25 faculty members plus three lecturers as the desired number to make the Department competitive. Many faculty were lost (sixteen) and gained (eight) from 2000 to 2011. This made an orchestrated hiring on several fronts an important challenge from 2011 to the present. The department succeeded in hiring ten new faculty between 2012 and 2016: Dennis O’Dea (lecturer), Rachel Heath (empirical micro and development), Jihung Lee (econometrics), Mu-Jeung Yang (macro, international), Xu Tan (applied micro), Jing Tao (econometrics), Pat Bajari (empirical microeconomics), Yanqin Fan (econometrics), Fabio Ghironi (macro/international), and Quan Wen (applied micro). There are many excellent people in this group and their fit within the department and the university at large is commendable. The Department desires to excel in econometrics, micro theory, international macroeconomics as well as empirical micro. The hiring of Pat Bajari is important in that he will be the cornerstone of the strategy to strengthen the field of empirical micro. Building on existing strengths, the administration has been supportive in hiring to strengthen these areas. These points are covered under “Faculty and Research” below.

One of the concerns addressed in the 2005 report concerned the overall level of productivity of the economics faculty due in part to a relatively large number of unproductive faculty. This situation has considerably improved, due to retirements, new hires, and continuing improvement of core faculty members. Data compiled by the department chair shows that the rate at which Department faculty are publishing in prominent journals is similar to that of strong peer Departments such as Penn State, UC Davis, and Ohio State.

Undergraduate Programs, BA, BS and Ph.D. The Department has two major undergraduate programs leading to a BA or a BS. The BA is less technically specialized and is designed for students who want to acquire the tools of economics and some substantive background as preparation for jobs in both public and private sectors. The BA degree may also be useful for those who want to enter graduate school in political science, public policy, or law. The BS is more technically specialized, requires more in terms of math and statistics courses, and is best thought of as preparation for Ph.D. work in economics or related fields in finance and statistics.

The educational aims of both programs are clear, and in both cases the curriculum is logically linked to what happens after the degree is granted. The undergraduate degree has blossomed in terms of economics majors, so much so that steps had to be taken to make economics a competitive major (i.e. students have to apply to enter and not all qualify). The number of majors increased dramatically from less than 500 (in 2000) to almost 1000 in 2009. The competitive major has allowed student numbers to stabilize between 700 and 750. We view this to be a healthy situation, satisfying the strong demand for the economics major at the same time that faculty and staff are not overwhelmed by the sheer numbers.

The Ph.D. program accepts about 18-20 graduate students per year and typically has about 100 students (cumulative) in process of working toward the Ph.D. Students are in general quite satisfied with the Ph.D. program, finding it challenging but rewarding. The combination of rigorous methodological requirements (math and statistics) along with substantive specializations in applied micro, econometrics or international economics works quite well in terms of intellectual satisfaction and training for academic or research positions. Placements have been impressive and include positions at the IMF, World Bank, Bank of Japan, Ministry of Finance (Seoul), University of North Carolina and University of Kansas (Appendix J of Self-Study). However, the increase in TA salaries without an increase in the budget has caused a shortfall and presents a challenge for staffing large undergraduate classes as well as a problem with regard to support of graduate students. This is a problem to be dealt with under the Challenges section.

Connections to the University of Washington and the Community. Consistent with the Tolnay Report, we did not find the Department of Economics to be insular. To the contrary, the Department makes the development of connections to the rest of the University community a priority. In their 2011 Strategic Plan, the Department stated that the pursuit of multidisciplinary connections with the rest of the university was one of their top three goals. Our assessment is that the Department has made substantial strides toward making that goal a reality. A number of faculty members have adjunct status in other departments and no less than ten faculty throughout the university (from other units) have adjunct status in Economics. Several additional faculty members from Economics serve in a variety of capacities in the Jackson School and other units, teaching cross-listed courses and serving on dissertation committees. There are connections to CSSS, computer sciences, the Evans School of Public Policy, Health Sciences, and Political Science (where Rachel Heath co-organizes a Forum on Political Economy and Economics, which serves as a graduate seminar with the Political Science Department). In addition, Eric Zivot co-directs a Master Program in Computational Finance and Risk Management and Hendrik Wolff is associated with a program on the environment. Perhaps the most important part of inter-disciplinary or multi-disciplinary cooperation takes the form of research collaboration. There is a considerable amount of research collaboration both within the Department and between Economics and other departments; examples include Fan with Bio Statistics, Lawarree with Electrical Engineering, Eicher with Statistics, and Tan with the Information School.

There are other areas where the Department of Economics has improved which we discuss in a separate set of comments in the section on Highlights of the Department. We do this because we

want to emphasize that the Department has strengths not just in relation to its own past, but also in relation to other departments in the profession today.

Highlights of the Department

Were we to walk in with no knowledge of the past, the committee would judge this to be, quite simply, a strong department.

Faculty and Research. The Department has a core of dedicated, productive faculty doing research close to the frontier. The total size of the Department remains small, and not all members are part of this core, but those who are have created what we see as a critical mass and a foundation for further building.

Perhaps most exciting is the energetic and entrepreneurial group of junior faculty. As part of a small Department, they have not all had senior mentors close to them in either subject matter or methodology. But they have responded to this challenge creatively, exploring new research areas, collaborating among themselves, and striking out to build connections with the broader university community. An example is a group of junior faculty interested in machine learning and high-dimensional data. They have formed a reading group involving UW faculty and students, as well as scientists from Amazon. They have reached out to related researchers in statistics and computers science, and one of them is co-authoring a paper with a junior faculty member in the statistics Department.

The recent senior hires are also an obvious highlight. The strength and prominence of their research is clear. What was less obvious to the committee at the start of the review was how dedicated they would be to investing in the department. A common scenario is for mid-level economics Departments to hire prominent senior faculty only to find that they remain largely independent and provide only modest contributions of public goods. We see quite the opposite in a number of this Department's recent hires: dedicated advising of students, investment in faculty recruitment, and major contributions to the Department's culture and intellectual environment. This is true despite the fact that one of the faculty in question has only a 50 percent appointment.

Finally, the Department is anchored by a dedicated group of long-time senior faculty. Because not all members of the Department remain active, those who are have had to carry more than their share of administrative and advising responsibilities. Despite this, they have continued making important research contributions and publishing in leading journals.

Spread through these groups is an impressive group of female faculty. These include one of the Department's most prominent and successful senior members, as well as half of its current junior members. The share of women faculty is low throughout the economics profession, and while we would like to see the Department continue to increase this share, we see the degree of gender diversity it has achieved as a significant strength relative to peer institutions.

In the previous report, the Department set the goal of being ranked 20th among US economics departments. The Department has not reached that goal, but it has secured a strong position

among the next tier (roughly ranks 20-40). The Department included in its self-study a comparison to 12 peer schools based on recent publications. The conclusion was that the Department currently ranks in roughly the middle of this group, and compares favorably to a number of strong competitors (such as Indiana, the University of Virginia, the University of North Carolina, and the University of Illinois). We concur with this assessment.

Undergraduate Education. The committee was impressed by the quality of the undergraduate program. Our conversations with students, lecturers, and administrators from this program was one of the real bright spots of our visit. Although we do not have the data to make a detailed comparison, we suspect the Department is a standout among its peers in this regard.

Students report high levels of satisfaction on surveys, and those we talked to were overwhelmingly positive about their experience. They found the quality of the education they received to be high. They also conveyed a sense of ownership in the Department, with the community of fellow majors forming an important network and part of their identity. Through the Economics Undergraduate Board, the students have built many important pieces of the program independently. The students we talked to were a fairly select group, but other data support the sense that satisfaction and strong community ties run deep.

Students' success in university honors, independent research, and subsequent career and graduate school placements also testify to the quality of the education they are receiving.

Though more remains to be done, the program has made steady progress on improving diversity. The share of women in the major is relatively high. The share of under-represented minorities is lower, but it has been growing, and a number of initiatives are under way that the committee is optimistic will increase it further.

We see the implementation of a competitive major with a serious writing requirement for entry as a very positive step. Communication skills are critical to success in both the academic and non-academic careers economics majors typically pursue. The emphasis on writing seems to have not only shifted the composition of incoming students toward those with stronger communication skills, but also increased the incentives for students to invest in these skills while at the UW.

All of these successes have been achieved despite a number of challenges: a rapid increase in the number of economics majors; an increasing share of students needing assistance with written and oral communication; greater demands on staff due to the implementation of an exam for entry to the major; and either constant or falling resources on a number of dimensions.

We would like to especially commend two groups of people who seem to us to be the lynchpin of the undergraduate program: the lecturers teaching in the introductory sequence and leading the diversity efforts, and the staff in charge of academic advising. We found these individuals remarkably talented, knowledgeable, and dedicated to their students. We suspect it is largely due to their efforts and creativity that the department has been able to so successfully meet the challenges it has faced in undergraduate education.

Graduate Education. The graduate program is also strong. The quality of incoming students, the courses and advising they receive, and their subsequent placements are all at the level we would expect from a Department at this rank.

The small size of the Department (and still smaller number of active faculty) make this a real achievement. We would note that the number of incoming graduate students is similar to that of top departments that might have twice as many active faculty. This burden has been taken up by a small set of faculty members who successfully advise large numbers of students every year. It has also required some creativity on the part of students in seeking out connections and opportunities in the wider university community.

The committee sees these wider links as a bright spot. The UW has great strengths in areas such as computer science, statistics, business, and public policy, and these areas dovetail with a number of exciting research areas within economics. Both the students and their advisors seem to have played important roles in reaching out to take advantage of these resources.

We were encouraged to hear that many students present their research regularly in internal workshops. In our experience, such internal presentations are critical, both for receiving feedback and practicing communicating one's work.

The current success has been achieved against a backdrop of significant resource constraints. The committee was impressed by the way the students have forged ahead in spite of the resulting teaching and work demands, and by the effort of the department leadership to find and allocate scarce resources in a way that would shield the students as much as possible.

Other Highlights. A unique strength of this department relative to its peers is the strong ties it is building in the wider Seattle area. The committee sees the potential for further developing these ties as the most exciting opportunity on the horizon.

One part of this opportunity is relationships with large local employers such as Amazon and Microsoft. Many such firms are building top-caliber economics groups internally. Amazon, for example, now employs roughly a hundred PhD economists, including a number who would easily earn tenure-track positions at highly-ranked economics departments. The Department has already capitalized on this in making a joint senior appointment, offering the potential for collaboration with local firms to senior and junior recruits, facilitating graduate student collaboration with private sector economists including joint reading groups and seminars, and helping both undergraduate and graduate students find private sector internship and employment opportunities. All these efforts have great potential going forward.

A second part of this is the longer-term relationships with alumni and local supporters that have been built through the Economics Visiting Committee. This has been a huge benefit to undergraduates, providing a network of mentorship and internship opportunities. It has provided the Department critical support in times of limited resources. And it is a tangible demonstration of the value that the department provides to the local community.

The committee was profoundly impressed by the talent and professionalism of the Department's staff. Each individual we met seemed not only eminently capable but also deeply dedicated to their job. The working environment seems positive and collegial. And -- perhaps most importantly -- the staff seem to feel genuinely valued and respected by the faculty.

Finally, many of the strengths above ultimately rest on the Department's outstanding leadership. The committee sees both the current chair and the broader group of senior faculty leaders as capable, hard-working, and deeply committed.

Resources and Priorities for investing in the Department

Given its existing resources, the Department is overachieving. In this section we highlight areas where additional investments are likely to generate high returns.

Faculty size. The Department currently has 23 tenure-track faculty, and the number of research-active faculty is lower. The Department's faculty size is low relative to its historical average size and to the size of peer departments.¹ The average peer department has 33 tenure-track faculty, and UW has 4 fewer faculty than the next lowest peer department.

Bringing the Department up to its full strength is a high-return investment. The additional faculty would (i) alleviate the excess Ph.D. student advising burden shouldered by many of the existing faculty (and reduce the "will I be able to find an advisor" anxiety we heard from the graduate students), (ii) add resources to the large undergraduate program, (iii) provide teaching resources for the Master's program under consideration, and (iv) create the intellectual critical mass necessary for the future success of the Department.

The evidence suggests that additional faculty resources will be spent wisely. The Department's recent junior and senior hires and offers have been excellent. Their strategic plan for future faculty recruiting, focusing on empirical microeconomics and industrial organization, is sound. Indeed, given its proximity to research departments at Amazon and Microsoft and the connections already established, the UW Department is uniquely situated to become a potential powerhouse in these research areas.

TA support. This is a crisis. As we understand it, the level of stipend support per TA has increased significantly, while the Department's overall TA budget has remained constant. Maintaining the number of existing TAs requires an increase in the TA budget of approximately 25%. Without this infusion of resources, the number of TAs will shrink, and this will have unfortunate consequences for both the undergraduate and graduate programs.

The quality and quantity of undergraduate instruction will suffer. We were told that contingency plans were being developed to eliminate sections of Economics 200 and 201 (Principles of Economics). UW undergraduates would need to replace these courses with similarly labeled, but inferior, courses at local community colleges, or with alternative general education courses from other UW departments. Assigning fewer TAs to existing courses will inevitably change the

¹ The self-study report compared the UW department to 12 peer departments (number of tenure track faculty in parentheses): UT-Austin (30), UNC (28), Penn State (37), UCSD (38), UCSB (32), UCD (29), UIUC (30), OSU (28), UVa (31), MSU (49), Indiana (27), and Maryland (32).

nature of graded assignments. Multiple-choice questions will replace essays. Writing assignments will go by the wayside, a significant casualty given the Department's recent success and emphasis on writing in the undergraduate program.

Fewer graduate students will be supported by the TA budget. This will make it more difficult to attract the best graduate students to the UW, force existing students to find employment opportunities outside the university, and provide less classroom training experiences. The potential interruption of TA support was the most important concern we heard from graduate students.

Administration of the Undergraduate Program. The size of the undergraduate program has increased substantially over the past decade. It is now a competitive major, requiring an admissions process. The fraction of international students in the program has increased. And yet the advising and administration resources devoted to the undergraduate has remained constant. We were impressed with the accomplishments of the existing advising/administrative staff (1.75 FTEs), and the thoughtful explorations of initiatives to improve diversity of the majors. We were also impressed by the list of additional advising that would be possible with additional staff.² Data provided by the Department implied that similar departments at UW have 3 FTE positions devoted to undergraduate administration and advising.

We were likewise impressed with the "RTW" exam used as part of the selection process for the competitive major, but we note that administering and grading the exam is costly. Resources to convert this pen-and-paper exam into an online exam would streamline the admissions process.

Master's Program. The Department is considering a new fee-based Master's program in Economics. The proposed program has a solid intellectual foundation and we anticipate large enrollments. In the medium-to-long run, tuition revenues should substantially exceed marginal costs, leading to "profits" that can be used by the Department and university for other purposes. That said, short-run development costs will be needed to establish the program and resources will be needed for this purpose.

Faculty Teaching Loads. The standard teaching load for UW tenure-track economics faculty is 4 quarter-courses per year. Teaching loads in economics have trended down over the past twenty years, and while we have not examined data from peer institutions, our sense is that research-active faculty at UW teach more than their peers. We have asked the Department to collect the relevant data and make it available to the UW administration. Successful recruiting and retention require competitive teaching loads.

Space. Perhaps the most difficult resource issue is the amount of physical space allocated to the Department. Offices will be needed for new faculty. Capitalizing on synergies with industry will require office space for short-term visitors. Graduate students do not have a lounge/common space for casual interaction. Economic students do not have a computational lab.

² Data provided by the Department implied that similar departments at UW have 3 FTE positions devoted to undergraduate administration and advising.

Challenges

The Department raised four broad challenges in the questions that they posed in the self-study report, which are addressed in this section and/or in the section to follow on future directions. In addition, we outline other challenges/opportunities on which the Department should actively work in the coming years. For the most part, the Department is well aware of these issues, and in many cases has already started exploring solutions.

Connections with the local economy. From the self-study: *“How can the graduate program respond to and take advantage of the evolving strengths in the department and the opportunities in the vibrant local economy?”*

This question impacts the Department much more broadly than the graduate program, and the opportunities extend beyond connecting with local industry. The Economics Department has a tremendous opportunity to establish itself as a leader in the empirical micro area if it takes advantage of opportunities for partnering both with industry and with areas of strength within UW. This will be a key issue for the future, as discussed in the next section.

The opportunities with local industry are evident in the strong connections with Amazon through a joint faculty appointment, industry leaders teaching courses, and growing numbers of graduate students working in industrial internship positions. In the future, other possibilities might include having top industry researchers on dissertation committees, leveraging industry connections to build fee-based continuing education programs, and fundraising to support workshops, a distinguished lecture series, student activities, or possibly an endowed chair. While there are concerns about faculty having joint industry-academic appointments leading to advice that this model should be used sparingly, it seems to have been extremely successful with the appointment of Pat Bajari, who has been active in making connections for junior faculty to colleagues in Amazon and who has been a major force in faculty recruiting. Prof. Bajari is thoughtful about the challenges of divided loyalty and intellectual property concerns, and he will be a great resource in building a strategy for moving forward. Another concern is that graduate students are spending extended periods working in industry (beyond summer internships) due to limited TA funding. As the self-study notes, there are many benefits to students getting some industry experience, but it can also be a distraction and delay graduation. The Department should consider creating a committee that would develop guidelines for students working with industry and for the faculty who are supervising them.

There are also opportunities to strengthen empirical work in the department by leveraging strengths within the University of Washington. The UW is very strong in the areas of machine learning and data science, with potential collaborators in several different departments. The University has also made substantial investments in computing through the eScience Institute. The newer faculty seem to be aware of many of the opportunities and are actively pursuing

collaborations that may lead to outside funding for graduate fellowships. Such initiative should be encouraged. In addition, the Department might consider inviting speakers from other departments to give talks in a seminar series aimed at building broader awareness of relevant work at UW.

Declining State support. From the self-study: *“How to address needs in a time of dwindling State support?”*

The problem of declining State support is an issue facing all departments at the University of Washington. The Economics Department is already doing exceptionally well in working with its Visiting Committee, and these activities should be encouraged but they cannot make up for the current gap in TA funding. As noted above, internships at local industries offer a great opportunity for students to get an industry perspective in their graduate experience, but it can be a distraction for some students so guidelines are needed. The professional MS course and/or short courses seem like a valuable additional mechanism to raise funds and at the same time support local industry, as will be discussed further in the next section.

Changing demographics. From the self-study: *“How to continue to provide a quality undergraduate education given the challenges posed by a strong demand for the economics major and the changing composition of students wishing to major in economics?”*

There has been a huge growth in demand for the major, which resulted in the Department moving to a competitive admissions process. In 2014-2015, roughly 60% of the applicants were admitted. The percentage of international students in the major has risen from 8% in 2007 to 59% now, which contrasts with 15% for UW Seattle undergraduates overall. In the process, the students became more quantitatively oriented, and the percentage of BS (vs. BA) degrees increased from 22% in 2007 to roughly 40% today. A consequence of the dramatic increase in percentage of international students seems to be a change in classroom dynamics. The self-study and individual faculty mentioned a need to change their teaching methods to be less interactive and involve less group-oriented work. In addition, the international students are said to require more time from Department advising staff. Even without this extra burden, the Department is short-handed in terms of advising staff relative to other College departments with similar size majors.

Until recently, the admissions process relied entirely on grades in math, statistics and introductory economics classes, which likely contributed to the tendency for students to be more quantitatively oriented. In order to admit more students who are good analytical thinkers and communicators, the Department introduced a “Reading comprehension, analytical Thinking and Writing skills” (RTW) test as an additional requirement for admissions. The undergraduate committee has done a thorough study of the impact of the test, and the Review Committee was left with the impression that it is well run and has had a positive impact. Currently, the RTW test score is mainly used to establish a minimum competency for admission. The Department should consider giving this test an even greater weight to move towards more holistic admissions decisions that could address issues of diversity as well as reverse the trend toward less interactive teaching. The fact that UW Seattle has only 15% international students at the undergraduate level

calls into question the imbalance in Economics. Finally, since the exam has proved valuable, and the Department runs the exam itself, it should ensure that there is appropriate funding available to pay students who help with administering and grading the test.

Diversity. In terms of gender diversity, the Department is doing well. The undergraduate program is half women, and the graduate program is slightly above the national average for Economics programs. The percentages of female lecturers (60%) and tenure-track faculty (39%) are both well above the national average. There is an active new Women in Economics group. One concern is that half of the women in the tenure-track faculty are at the assistant professor level, which raises the issue of the importance of mentoring (discussed further below) and the challenge of incorporating senior women in leadership positions without overburdening them with too many service roles. This is particularly a concern for highly productive researchers active in their professional societies, who are highly valued as mentors and have much to contribute as leaders. In terms of underrepresented groups, only one full-time (non-tenure-track) faculty member identifies as a member of an ethnic minority, and only 3% of the undergraduates identified as a member of an under-represented minority. The percentage doubles to 6% if counted based on eligible students, since half the undergraduates are international. This number falls short of the nationwide average for economics (14%) and the number of eligible enrollments at UW (13%). As would be expected because of the narrow pipeline, numbers are also low at the graduate level. To address this issue, the Department created a Diversity Committee in 2015. The committee is pursuing a variety of initiatives and actively working on gathering data to identify the key bottlenecks and develop new strategies. We applaud their efforts and encourage the Department to support their initiatives. The Department should also consider providing limited travel support for taking advantage of recruiting/networking opportunities associated with the American Economic Association (Committee on the Status of Women in the Economics Profession and Committee on Status of Minority Groups in the Economics Profession).

Mentoring junior faculty. Assistant professors represent the future of the Department and mentoring them to maximize their potential and minimize problems in the tenure process is very important to any department, but especially so for Economics in its effort to rebuild. While some junior faculty were happy with their mentors, others expressed concerns about getting mixed messages from more senior faculty related to where to publish and whether to pursue collaborative research. The chair should ensure that all junior faculty have someone to whom they can talk, especially when they feel they are getting conflicting advice. This will be especially useful if the mentor is someone who can work with the chair to mediate or clarify the concerns. The collaborative efforts of the junior faculty were viewed by the committee as a strength of the Department and should not be discouraged. Additional concerns were raised about the lack of useful feedback in the annual review of progress. It may be helpful to look at models in other departments for group discussion of progress of both assistant and associate professors in order to determine whether there are constructive suggestions for improvement that could be communicated in the annual chair's review letter. The assistant professors, in particular, would be best served if the faculty collectively takes responsibility for mentoring.

Communication. Some of the concerns raised by faculty to whom we talked indicate that more communication from Department leadership and more discussion of matters at full faculty meetings would be useful. For example, some faculty thought that a decision had already been made to move forward with the fee-based MS program in 2017 even though it was still in the planning stage. One person mentioned feeling that “decisions were made in a smoke-filled room.” The Review Committee was convinced that decision-making was thoughtful and founded in analysis of data, and one reason for these perceptions is that junior faculty are being sheltered from a lot of Department service. However, the Department could improve morale by having more intermediate updates and expand involvement of some underutilized faculty.

The Future.

Hiring and strengthening of faculty. While important strides forward have been made, the Department needs to consolidate its gains and continue to improve so that past achievements do not dissipate. The period 2000 to 2011 was characterized by great change which saw the loss of sixteen tenure-track faculty members and the hiring of eight. The 2011 strategic plan recognized the dire position of the Department and boldly proposed hiring twelve FTE tenure-track faculty members and three senior lecturers over a period of five years. With support from the University administration, ten new faculty were acquired. However, three retired, one did not get promoted, and one full-time member took a part-time appointment. Thus the Department feels, rightly in our opinion, that it needs to make additional hires to level up to twenty-five full time members, the number it considers necessary to function among its peers (who average thirty-three faculty members). The composition of the faculty and the distribution of sub-field strengths are important in addition to the faculty size. The self-study emphasizes the continuing need to hire in the target fields of econometrics, macro-international, and applied micro theory. Since the 2011 strategic plan, the Department has stressed that the success of the way forward rests on concerted use of scarce resources to strengthen a limited number of areas, rather than trying to be an omnibus department. The biggest priority is to strengthen empirical micro, a task where the Department has significant advantages due to the hiring of Pat Bajari. Bajari and Yanqin Fan were instrumental in the hiring of DongJae Eun from MIT so significant progress has already been made in this area. Additional advantages lie in the strengths of the UW in machine learning as well as the regional commercial connections afforded by many vibrant local firms.

Strengthening Ties to Seattle Area. There are already good linkages between the Economics Department and firms in the Seattle area: Microsoft, Amazon, and Zillow. Students who earn Ph.D.s may be hired by local firms and at least one faculty member holds a high position in Amazon. Connections go both ways. Several economists with national reputations have joined the UW faculty as affiliate professors and have taught courses in the department. Classroom interaction has served to create opportunities for the department’s students to be employed by local corporations. Several faculty interviewed expressed the view that the Department needs to approach employment and internships with caution, since for both students and faculty loyalties

and energies could be divided and lead to slow progress toward the Ph.D. or, in the case of faculty, to shouldering less than desired amount of work within the department, and not incidentally, creating more work for those who do not engage in these outside opportunities. Department leadership must be sensitive to the degree of involvement, university guidelines on outside consulting should be respected, and issues related to the distribution of work should be taken seriously. However, we hasten to add that nearly all the comments on developing connections to regional firms were positive (no one suggested that they be discouraged rather than moderated). We mention these concerns in the same cautionary spirit in which the interviewees discussed them.

Declining State Support. This problem is addressed above under “Challenges”. We return to it here because of the role that it will play in the years ahead. Because of its ties to the business community in Seattle, the Department of Economics is better positioned to diversify its sources of funding than some other departments. It is no secret that the state is cutting back on university funding in many if not all areas. Recent increases in TA salaries, well-deserved as they are, were not met with additional funds from the legislature. This initiates a cycle of unwelcome processes—a decline in the number of TAs leading to inadequate staffing of courses which in turn creates difficulties recruiting graduate students, all of this making the UW a less desirable place for faculty to teach. Without dramatizing what hopefully is a temporary setback, we point this out as one aspect of a difficult financial environment in the years ahead. The Department is already wisely using its Visiting Committee, described in the self-study as “an engaged group of diverse business leaders who volunteer their time and assets to provide leadership, funding, teaching assistance, advocacy, and community connections to the department.” (p. 21, Self-Study) The Visiting Committee is important in building alumni networks and helping to raise money.

One specific proposal to raise funds is to create a fee-based master program in Economics. Several senior faculty (Lawarree, Wen, and Zivot) are already working to make this new degree a reality. It appears that the demand for the Master degree is already present in the Seattle area. Rapid increases in enrollment at the undergraduate level, particularly by students from emerging market countries, accounts for part of this increase in demand. Perhaps the financial crisis has also added to the upward trend in enrollees in Economics. Whatever the sources, there seems to be significant support for a fee-based program among the faculty as well as demand for such a program among present and prospective student populations. It would mean additional teaching of courses, and probably some additional hires, though existing faculty have the expertise to teach the courses. Courses in methods, data analytics, and substantive specializations in economics would be part of the new curriculum. The UW is a first-rate public university and Seattle and the UW have a good presence in Asia, one regional focus of recruitment. A professional Master degree would provide the tools and knowledge of economics to facilitate the acquisition of jobs in the local, national, and global economy.

Highlights and Recommendations

- Since the last report in 2005, the Department of Economics has made good progress on strengthening the research program and increasing the number of productive faculty with excellent hires.
- Consistent with our overall positive evaluation, we recommend that the next review of the Economics Department take place in ten years.
- Consistent with the previous report, we find the undergraduate and graduate programs are generally successful.
- The undergraduate program has faced the challenge of dramatic growth and demographic changes in part by moving to a competitive major and by introducing the RTW test (reading, analytical thinking, and writing skills) as a requirement for admission to the major. These changes have been carefully considered and were reviewed in a positive way by the Review Committee.
- The Department has had the support of the University in hiring, but in other regards it is resource-constrained. The report outlines several areas where university investment in the Department are expected to yield substantial returns. The top priorities identified are additional faculty hiring and TA support necessary to staff undergraduate courses.
- The Department recognizes that this is a time of declining state support and the university is unlikely to fund all of the areas recommended here. The Department has an active Visiting Committee that helps with fund-raising as well as student mentoring, but additional resources will be needed. The development of a fee-based Masters program could provide an additional source of revenue, and it represents a good mechanism to build connections with local industry. Seed funding from the University to address the added teaching load would get the program off to a strong start.
- The Department's strategy for future hiring is to emphasize the empirical micro area, including both junior and senior hires. The committee supports this strategy which builds on the strengths of the UW and the region. The UW could become a leader in this area if it moves quickly.
- The Department is doing well in terms of representation of women among the faculty and students. Efforts are needed to increase the numbers of students from other underrepresented groups, but the department diversity committee is taking good steps by analyzing the choke points to formulate a strategy.
- The department has hired outstanding junior faculty. They are proactive about seeking research collaborations, and they show great promise as the future of the Department. Perhaps because the Department has been in a stage of transition, they sometimes get mixed messages about priorities. The senior faculty should collectively take ownership of mentoring to ensure the success of the new faculty.
- The Department leadership has been thoughtful about hiring and program initiatives. However, more communication with all faculty is needed to foster a broader commitment to the Department. This goes beyond the point above about the need for mentoring junior faculty. Faculty at different ranks voiced the desire for broader and more inclusive communication.