Memorandum from Katie Ullman, Associate Dean of the Graduate School

The Department of Economics faces several challenges, from financial to high student to faculty ratio, but they have created "a very positive framework for change." To improve research productivity and impact, they have developed a strategic plan, endorsed by reviewers, to nucleate research interest areas around three main areas: globalization, inequality, and sustainability. Recommendations include increasing faculty numbers (three hires have taken place since the review but more are needed), revitalizing their Ph.D. program, and increasing student diversity.



March 2, 2017

Ruth V. Watkins Senior Vice President for Academic Affairs 205 Park Bldg. Campus

RE: Graduate Council Review Department of Economics

Dear Vice President Watkins:

Enclosed is the Graduate Council's review of the Department of Economics. Included in this review packet are the report prepared by the Graduate Council, the Department Profile, and the Memorandum of Understanding resulting from the review wrap-up meeting.

After your approval, please forward this packet to President David Pershing for his review. It will then be sent to the Academic Senate to be placed on the information calendar for the next Senate meeting.

Sincerely,

David B. Kieda Dean, The Graduate School

Encl.

XC: Thomas N. Maloney, Chair, Department of Economics Cynthia Berg, Dean, College of Social and Behavioral Science

> The Graduate School 201 Presidents Circle, Room 302 Salt Lake City, Utah 84112-9016 (801)581-7642 FAX (801)581-6749 http://www.gradschool.utah.edu

The Graduate School - The University of Utah

GRADUATE COUNCIL REPORT TO THE SENIOR VICE PRESIDENT FOR ACADEMIC AFFAIRS AND THE ACADEMIC SENATE

September 6, 2016

The Graduate Council has completed its review of the **Department of Economics**. The External Review Committee included:

Nancy Folbre, PhD Professor Emerita of Economics University of Massachusetts, Amherst

Perry Mehrling, PhD Professor, Department of Economics Barnard University

Michael Reich, PhD Professor, Department of Economics University of California, Berkeley

The Internal Review Committee of the University of Utah included:

Brenda Bowen, PhD Associate Professor Department of Geology and Geophysics

Adrienne Cachelin, PhD Associate Professor Environmental and Sustainability Studies

Janet Theiss, PhD Associate Professor Department of History This report of the Graduate Council is based on the self-study submitted by the Department of Economics, the reports of the external and internal review committees, and the Department Chair's and College Dean's responses to the internal and external committee reports.

DEPARTMENT PROFILE

Program Overview

The Department of Economics at the University of Utah continues to be committed to a pluralistic approach to the study of economics that links quantitative empirical research to economic theory applied to policy questions at the local, national and international levels. It continues to attract superior faculty and graduate students through a distinctive research mission described in the self-study:

"applied, policy-relevant research that is informed by a broad, pluralistic, and critical consideration of economic theory"

This shared mission is responsible for a cohesive spirit reported in the self-study and in the external and internal reviews. The Department is experiencing financial challenges currently and the reports indicate that it does not have the resources to sustain its operations. Specifically, the self-study points to too few faculty for the number of students, as well as staffing gaps that graduate students fill, resulting in poor research productivity and undergraduate curriculum sacrifices.

Given this resource challenge, the Department has initiated the first steps of their Globalization, Inequality and Sustainability Plan outlined in the self-study; this is a workable plan that builds from existing strengths toward a revitalized future. It deserves full support from the University.

Faculty

The Department of Economics currently includes 16 tenure-line faculty, 14 tenured and 2 junior faculty (one junior faculty member was being reviewed for promotion and tenure in 2015-16). In addition, there are 3 career-line faculty (2.5 FTE) on staff. While the faculty has considerable diversity with regard to national origin (with faculty from the US, Turkey, Germany, Romania, India, Pakistan, China, and Sweden), they do not currently have diversity with regard to domestic (US born) underrepresented status. This is an issue that needs attention.

Having recently lost four faculty members, and with an older faculty (associate professor average age is 49, and full faculty average age is 61) the Department has made offers to 3 new hires during the past year.

The research activity of the faculty is reflected in journal articles, books and book chapters, research reports and policy papers, and research presentations. Peer-reviewed article production averages just under one article per faculty member per year. While research is a part of the departmental culture, metrics of faculty productivity demonstrate that efforts need to be taken to improve both the research productivity and the impact of the research (e.g., citations). The faculty seem to provide a positive and supportive community supportive of junior faculty developing their scholarship, and the faculty benefit from the formal mentoring program through the College of Social and Behavioral Science.

The Department conducted a strategic planning exercise over the last year and identified several goals for the research mission of the Department: (1) Organizing research and hiring efforts around the themes of globalization, inequality, and sustainability; (2) Enhancing the research culture in the Department through a new productivity policy; (3) Expanding efforts in the area of applied policy research and engaging students (at all levels) in these projects, and identifying new resources to support this aspect of the Department's work.

The Department teaches a very large number of students with a very small number of faculty, who are also compensated less than their peers at other institutions. New hires, of course, command market-level salaries, and the department is currently conducting searches, so the most relevant comparison data will very soon be available. Importantly, as the Department upgrades, faculty will be increasingly recruited by other institutions, and implementing a proactive retention policy will become important. Valued faculty whose energy the Department needs for its plan to rebuild should not be forced to spend precious time and energy generating an outside offer.

The total number of faculty falls well below what one would expect in a department of this size. The Department has an overall plan for faculty hires and continues to work to sketch in the all-important details. But there is concern that this plan will not be supported by administration. The Department needs to feel that its current efforts to rebuild for the longer term future are not doomed to failure before they even begin.

In this regard, the external reviewers had concerns about the current emphasis on crossdisciplinary hiring programs such as the Transformative Excellence Program. Given the core needs of the Department, such an emphasis risks imposing significant costs relative to likely benefits. Recruitment and hiring costs are high, and this department needs to be allowed to prioritize its own urgent rebuilding needs.

Students

<u>Undergraduate Program</u>: Undergraduate enrollments have rebounded to their pre-recession numbers. The Economics Department had 425 majors in 2014-15 and graduated 240 students. Approximately 40% of these students transfer in from Salt Lake Community College (SLCC). Between 16% and 24% of them are women in any given year, slightly lower than the average for Economics departments nationwide. As of Fall 2015 about 18% were minority students, slightly lower than the University of Utah departmental average of 23%. The department is involved in a national pilot program to increase student diversity in Economics.

In the internal review students indicated that the undergraduate program does not require enough math and does not enforce prerequisites, so that quantitative courses are not rigorous enough to prepare them for admission to the department's own MStat program. They identify the greatest problem as lack of interaction with regular faculty, who teach very few of the undergraduate courses. At the same time, they note that the graduate student instructors are good teachers, very knowledgeable, and since many are international students, they bring a multiplicity of perspectives to the classroom. This issue was prominent in the last Graduate Council review and a solution clearly requires increasing the faculty-student ratio either by hiring more faculty or admitting fewer students or both.

Students also comment that it is hard to get appointments with advisors and that there is not good communication with students regarding internship opportunities, career paths, and networking with alumni. Although the Department has begun to address the problem of the advisor-student ratio with the addition

of two part-time advisors, including a bridge advisor, for undergraduate and graduate students, they simply do not have enough hours in the day to get in all the students who want to see them. This makes it difficult to mentor students about prerequisites and course sequencing, which are important for their success in the major. A peer advisor would be a useful addition.

<u>Graduate Program</u>: In 2014-15, the department had 70 master's students (granting 33 master's degrees) and 64 PhD students (granting 2 doctoral degrees). In response to the last review, the Department has increased the number of women graduate students. Between 2011-14, women comprised on average 34% of the PhD students. In Fall 2015, women made up 31% of master's students, 10 points higher than in 2008. International students comprise about 30% of master's students and about half of PhD students. Currently, 16% of master's students and 13% of doctoral students are minority students.

According to the external report, graduate students appreciate the distinctive heterodox approach of the Department, noting that the mandatory inclusion of political economy and the critical perspectives they gain in their coursework are rare. Several graduate students turned down better offers from other institutions to come to Utah because of its unique program. Like the undergraduates, they would like more formalized relationships with faculty earlier in their program to facilitate their research, as well as better communication with faculty. Reports indicate some reticence on the part of the doctoral students to approach faculty for guidance on research, which, given the international diversity of the PhD students, may in part be due to diverse cultural approaches regarding the professor/student relationship. They are only vaguely aware of the new program coming in Fall 2016 to organize departmental research groups combining faculty and graduate students around the core themes of sustainability, inequality, and globalization.

PhD students teach extensively, which provides experience useful on the job market but lengthens time to completion of degree. The TA stipends are not competitive, and students often have to take on second jobs. The chair is trying to address student concerns by having students teach the same course year after year to minimize preps and by developing a system for sharing syllabi. Since the last review, the Department has made significant progress in reducing the time to completion for PhD students, but the self-study identifies this as an ongoing problem. Despite the chair's report indicating that graduation rates are on par with national trends, the incoming Director of Graduate Studies plans to tackle the issue by focusing first on getting students who have been in the program for more than six years to finish. Recognizing that it is taking doctoral students too long to define a research topic and find a dissertation advisor, the Department is implementing changes to the PhD program.

<u>Curriculum</u>

The Economics Department offers BA, BS, MA, MS, and PhD degrees. It also participates in the interdisciplinary Master of Statistics (MStat) program and confers an MStat degree in Econometrics. With its very high ratio of undergraduate and graduate students to faculty, the Department finds it challenging to staff graduate courses and to assign regular faculty to teach core undergraduate courses.

<u>Undergraduate Program</u>: The issue of course sequencing and enforcement of prerequisites was a key concern in the last Graduate Council review that has not been fully addressed. To address the problem of insufficient training in quantitative methods and the need for more career mentoring, the Department has created a new statistical emphasis with a two-semester course sequence that involves

applied research work with local non-profits. It is hoped that the new budget paradigm de-emphasizing SCH will help with this problem. The Department has developed an online version of the major to get students through faster while working full time.

The undergraduate program is among the largest at the university. The students learn how to analyze systems, are exposed to a wide breadth of perspectives and analytical skills, and practice critical thinking. It is a relatively short major, which allows many of the students to double major. The Department has recently established a new "Transcripted Emphasis in Statistical Analysis," an online major, and is emphasizing undergraduate internship opportunities. A major concern with the undergraduate program is the lack of exposure and opportunities for interaction with Economics faculty. It is possible (and perhaps common) for undergraduates in the program to never have taken a class from a professor, as PhD students do the majority of the teaching.

<u>Master's Programs:</u> The master's program focuses on training professional economists to work in the public and private sectors. Most students are employed locally in government agencies or companies. Thus, scheduling classes to fit work schedules is a major challenge. There is little overlap in courses for master's and PhD students because of different levels of math required. Many master's program classes are taught by PhD students. According to faculty with whom reviewers met, the MStat program is facing challenges due to growing demand for statistics training specific to different fields with varying levels of math requirements. The program needs to be more flexible, but its complex governance structure across colleges and departments makes adaptations difficult.

The master's program has been run with minimal additional cost to the Department on the basis of existing faculty and staff resources and serves a local student population that largely works full time. The Department also participates in the interdisciplinary Master of Statistics (MStat) program. The purpose of the program is to provide training for work in applied statistics relating to problems in economic theory and forecasting. The MStat degree is part of an intercollege and interdepartmental program that also offers specialization in Biostatistics, Educational Psychology, Mathematics and Sociology. There is significant concern that the existence of this program and the role of the Economics Department within it may be in serious threat. Other departments (e.g., Mathematics, School of Computing) are lobbying to have their own statistics courses within the program, which could cut off the involvement of Economics within the program.

<u>Doctoral Programs</u>: The creation of research groups around the three-field emphasis on equity, sustainability, and globalization is intended to revitalize the PhD program and link student and faculty research interests to cross-college and university interests. The Department has implemented a set of changes to streamline progress through the PhD program that will begin in Fall 2016. These include matching students with a faculty mentor in the first year; requiring second- and third-year students to participate in a research team with faculty that will meet regularly; requiring students to present a research abstract for a paper by third year that could become the basis for a dissertation project; and systematizing student progress tracking.

The doctoral program trains graduate students in standard methods and research practices of academic and professional economists. The Department has plans for making important changes in the organization of the PhD program, particularly to address the need for more explicit direction for how students are to identify a major advisor, a graduate committee, and a research project that can be completed in a reasonable timeframe. The current model of PhD support is primarily through teaching;

students are expected to develop and teach undergraduate courses throughout their program. The compensation for teaching is the minimum required stipend to qualify for the Graduate Tuition Benefit, and thus students also seek outside employment to make a living wage.

The external review suggests changes to the graduate and undergraduate curriculum that will aid in stabilizing and bettering each program. Specifically, there is a recommendation to enhance the sequence of the major curriculum to allow for advanced majors to take more rigorous technical material. The Department Chair indicates that they are aware of this betterment, but working students and transfers from community colleges are not able to sequence courses ideally. In addition, the Department is working to accommodate students with increased online offerings and coordinating efforts with Economics faculty at SLCC.

Program Effectiveness and Outcomes Assessment

Assessment is heavily reliant on student evaluations, but there was not a clear protocol for how these assessments are used to improve teaching or course content.

The self-study references assessment being diffused through both the Graduate School and Undergraduate Studies with the establishment of expected learning outcomes and assessment instruments. These outcomes and assessment measures should be developed soon and should align with the Department's new focus areas of sustainability, inequality, and globalization.

The recently-adopted changes in the PhD program, including the follow-up practices on regular progress reports, will hopefully ameliorate the problem of doctoral students being in the program for so many years.

The master's program does a good job meeting the needs of local residents and employees in both private and public sectors who are seeking to upgrade their qualifications. The list of master's projects and these attests to the range of faculty expertise.

External reviewers indicate that the undergraduate program is acceptable, producing a very large number of graduates. But the business model has been under strain for a long time, and is incompatible with the new Globalization, Inequality and Sustainability Plan. Upgrade of the undergraduate program has natural synergies with the Plan.

Facilities and Resources

There is significant concern within the Department about the possibility of not having the resources needed to grow the faculty and help the program thrive.

Until recently the Economics Department was housed on the third floor of Orson Spencer Hall (OSH). In March 2016, they moved to temporary quarters in the "old" law school, while OSH is rebuilt. They plan to move to a new building by Fall 2018. In the short run, being housed in the former law school will present some major challenges. Advisors will be physically distant from the rest of the department, which may cause confusion for students. Faculty will be doubled up in offices, which may make student consultation and research collaboration somewhat more difficult. These temporary facilities might also

create challenges for faculty recruitment over the next two years. The timing of implementing recommendations from this review process may need to be extended, as it will be difficult (and perhaps impossible) for the Department to make the needed changes during this time "in limbo." There is a need to localize physical resources (copiers, printing).

The current staff complement consists of one administrative manager, one academic coordinator, one executive secretary, one full-time advisor, and one half-time "bridge" advisor. The advising staff are overburdened and need a strategy to reduce the need for one-on-one student advising. The undergraduate curriculum should be streamlined so that there is not such a demand for advising.

COMMENDATIONS

- 1. The chair, Tom Maloney, is providing excellent leadership for the Department, and staff support has improved greatly since the last review.
- Faculty, graduate and undergraduate students recognize and value the Department's pluralistic approach to Economics. The enhancement of quantitative curriculum in the undergraduate program and the new plan to organize research around the themes of sustainability, inequality, and globalization are promising efforts to improve the rigor of the program and enhance its profile within the University.
- 3. The Department has done a good job of recruiting female students and internationally diverse faculty and graduate students.
- 4. The Department is to be commended for its recent creative solution of long-standing tension with the Business School, leading to commitment to a new transcripted emphasis in Business Economics and Analytics.
- 5. The Department is to be commended for taking concrete steps to encourage all faculty to be engaged in creative research.
- 6. The Department's vision for its own upgraded future—focused on areas of excellence in globalization, inequality, and sustainability—combines both imagination and a realistic sense of the possible.

RECOMMENDATIONS

 Faculty Numbers: Loss of faculty and growth in enrollment have created a problem with the number of student credit hours taught by regular faculty members. The extremely high students: faculty ratio needs to be lowered by either adding teaching faculty or reducing the number of students served. A couple of new hires will get the Department up to 19 faculty, but this is still small relative to the number of students served. This must be addressed immediately.

- 2. Faculty Research: There is a strong desire for the new hires to relieve the teaching overload; however, care must be taken not to overburden them with teaching, so that they can focus on developing their research. Actions should be taken to address the lackluster faculty research productivity. There appear to be two separate issues, one linked to reporting and perception of faculty productivity (e.g., why are career-line faculty not included in Academic Analytics?), and a second based on the reality of productivity. Faculty claim that the low citation rates are due to the super-specialized subfields that they work within that are not highly studied and therefore not significantly cited. The recommendation is for the faculty and Department to find ways to quantify and demonstrate the impact of research outcomes if they are not traditional publications and citations.
- 3. PhD Program: The current culture of exploiting the PhD students as undergraduate instructors creates problems in many ways: they lack teaching mentorship and guidance, feedback, and are undercompensated for their work, which requires them to seek outside employment. As a result of the multiple demands on their time, the time to complete the PhD is very high for some students. PhD students additionally need more formal guidance about the process and appropriate timeline for identifying a major advisor and a graduate committee. Significantly, the stipend should be increased to a more competitive level (~\$18k per academic year) so that PhD students do not need to seek additional outside employment.
- 4. Undergraduate Program: While there is a strong community among the faculty and PhD students, this does not extend to the undergraduates. There appear to be very few opportunities for undergraduates to interact with each other and with graduate students and faculty. It is seemingly common for students to graduate from the program having never had a class taught by a faculty member. The students voiced a desire for more mathematical rigor in the undergraduate program; some felt they would not be competitive for graduate programs such as the one in their own department.
- 5. Co-Curricular Activities: Years of financial struggle have strained the intellectual life of the Department. Building on the Globalization, Inequality and Sustainability Plan, the external review recommends a co-curricular program of regular seminar visits to bring in external scholars of interest to current faculty and graduate students, and improved web presence to make current and future faculty research efforts more visible outside the Department.
- 6. Diversity: The Department needs to address the issue of lack of diversity with regard to domestic (US born) minorities and the lack of gender balance in the student population.

Submitted by the Ad Hoc Committee of the Graduate Council:

Ryan E. Smith (Chair) Associate Professor, School of Architecture

Isabel Dulfano Associate Professor, Department of Languages and Literature

Cedric Feschotte Associate Professor, Department of Human Genetics

Elizabeth Tashjian (Undergraduate Council Representative) Associate Professor, Department of Finance College Name College of Social & Behavioral Science

Department Name Economics

Program Name All

Faculty Headcount

		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
With Doctoral Degrees Including MFA and Other Terminal Degrees	Full Time Tenured Faculty	16	16	15	14	14	14	14
	Full Time Tenure Track	4	4	4	4	4	4	2
	Full Time Career Line/Adjunct Faculty	1	1		1	1	2	4
	Part Time Tenure/Tenure Track	1		1	2	2	1	
	Part Time Career Line/Adjunct Faculty	1	0	0	0			3
	Total	23	21	20	21	21	21	23
With Masters Degrees	Full Time Tenured Faculty	0	0	0	0	0	0	
	Full Time Tenure Track	0	0	0	0	0	0	
	Full Time Career Line/Adjunct Faculty	0	0		0	1	1	1
	Part Time Tenure/Tenure Track	0		0	0	0	0	
	Part Time Career Line/Adjunct Faculty	0	1	1	1			
	Total	0	1	1	1	1	1	1
	Full Time Tenured Faculty	0	0	0	0	0	0	
Degrees	Full Time Tenure Track	0	0	0	0	0	0	
	Full Time Career Line/Adjunct Faculty	0	0		0	0	0	
	Part Time Tenure/Tenure Track	0		0	0	0	0	
	Part Time Career Line/Adjunct Faculty	0	0	0	0			
	Total	0	0	0	0	0	0	
Total	Full Time Tenured Faculty	16	16	15	14	14	14	14
Headcount Faculty	Full Time Tenure Track	4	4	4	4	4	4	2
	Full Time Career Line/Adjunct Faculty	1	1		1	2	3	5
	Part Time Tenure/Tenure Track	1		1	2	2	1	
	Part Time Career Line/Adjunct Faculty	1	1	1	1			3
	Total	23	22	21	22	22	22	24
Cost Study		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Direct Instructio	onal Expenditures	3,400,461	3,218,537	3,228,697	3,302,632	3,387,430	3,529,252	3,399,463
Cost Per Stude	nt FTE	4,785	4,504	4,765	4,702	4,577	4,679	4,954
FTE from C	Cost Study	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Full-Time Salar	Full-Time Salaried		19	18	17	20	19	23
Part-Time or Auxiliary Faculty		2	2	1	1	1	3	9
Teaching Assistants		10	9	10	9	7	8	11
Funding		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Total Grants		129,873	60,217	85,816	97,879	135,009	65,886	162,736
State Appropriated Funds		2,599,593	2,415,059	2,460,025	2,474,634	2,556,786	2,750,969	2,486,209
Teaching Grants		0	0	0	0	0	0	0
Special Legislative Appropriation*								
Differential Tuit	ion*							

Α.

Student Credit Hours and FTE

		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
SCH	Lower Division	7,818	8,310	8,079	8,034	8,157	8,313	7,740
	Upper Division	10,624	9,592	9,033	9,872	10,794	10,976	10,415
	Basic Graduate	831	1,083	894	989	1,104	988	654
	Advanced Graduate	1,088	1,275	1,249	1,122	1,065	1,237	968
FTE	Lower Division	261	277	269	268	272	277	258
	Upper Division	354	320	301	329	360	366	347
	Basic Graduate	42	54	45	49	55	49	33
	Advanced Graduate	54	64	62	56	53	62	48
FTE/FTE	LD FTE per Total Faculty FTE	12	14	14	15	13	13	8
	UD FTE per Total Faculty FTE	17	16	16	19	17	17	11
	BG FTE per Total Faculty FTE	2	3	2	3	3	2	1
	AG FTE per Total Faculty FTE	3	3	3	3	3	3	2

Enrolled Majors

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Undergraduate Pre-Majors	80	62	56	52	34	42	40
Undergraduate Majors	417	405	374	442	429	425	440
Enrolled in Masters Program	38	44	35	33	47	70	58
Enrolled in Doctoral Program	60	65	61	55	58	64	55
Enrolled in First Professional Program							

Degrees Awarded

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Undergraduate Certificate							
Graduate Certificate							
Bachelors	254	273	231	214	205	240	271
Masters	14	13	16	29	21	33	17
Doctorate	8	11	11	6	6	2	7
First-Professional							



Memorandum of Understanding Department of Economics Graduate Council Review 2015-16

This memorandum of understanding is a summary of decisions reached at a wrap-up meeting on November 30, 2016, and concludes the Graduate Council Review of the Department of Economics. Ruth V. Watkins, Senior Vice President for Academic Affairs; Cynthia Berg, Dean of the College of Social and Behavioral Science; Thomas N. Maloney, Chair of the Department of Economics; David B. Kieda, Dean of the Graduate School; and Katharine S. Ullman, Associate Dean of the Graduate School, were present.

The discussion centered on but was not limited to the recommendations contained in the review summary report presented to the Graduate Council on September 6, 2016. At the wrap-up meeting, the working group agreed to endorse the following actions:

Recommendation 1: Faculty Numbers: Loss of faculty and growth in enrollment have created a problem with the number of student credit hours taught by regular faculty members. The extremely high students: faculty ratio needs to be lowered by either adding teaching faculty or reducing the number of students served. A couple of new hires will get the Department up to 19 faculty, but this is still small relative to the number of students served. This must be addressed immediately.

The size of faculty (and student: faculty ratio) impinges on many of the recommendations and there was an agreement on the need for growth. Progress in hiring has already been made, with three new faculty added since the review took place. One senior faculty member will soon start phased retirement. Of the new hires, one was recruited with support from the Faculty Hiring Initiative in the Office for Equity and Diversity, and the Department is currently participating in two Transformative Excellence Program searches, with optimism that an economist may emerge among the top candidates. The Senior Vice President recommended continuing to leverage these hiring strategies. She indicated that the Department may win support from the college committee that prioritizes hiring proposals if it candidly presents the Department's current challenges and plans for rebuilding. This will be recognized as an opportunity, and an important one university-wide, due to the central nature of economics to many fields. In addition, she indicated that she understands that some central resources from her office will be needed to address salary funds to support the research active faculty in the Department according to disciplinary standards. Although resource uncertainties make it impossible to make a firm commitment to funding levels or timelines, a partnership between the Department, College and campus leadership can be formed to address these issues over time. Opportunities for increased collaboration with other colleges and departments need to be explicitly included in the Department's strategic plan. The conversation also touched on the possibility that career-line faculty may be used strategically to deal with instructional needs (such as for large electives).

Memorandum of Understanding Department of Economics Graduate Council Review 2015-16 Page 2

Recommendation 2: Faculty Research: There is a strong desire for the new hires to relieve the teaching overload; however, care must be taken not to overburden them with teaching, so that they can focus on developing their research. Actions should be taken to address the lackluster faculty research productivity. There appear to be two separate issues, one linked to reporting and perception of faculty productivity (e.g., why are career-line faculty not included in Academic Analytics?), and a second based on the reality of productivity. Faculty claim that the low citation rates are due to the super-specialized subfields that they work within that are not highly studied and therefore not significantly cited. The recommendation is for the faculty and Department to find ways to quantify and demonstrate the impact of research outcomes if they are not traditional publications and citations.

New initiatives are already revitalizing faculty research, including a research productivity policy and annual faculty review by a related committee. The Chair and Department are commended for moving things in the right direction. A new system of workshops centered on the three central research themes of the Department has also been instituted and provides a new venue to promote increased collaboration and engage graduate students in research. The Graduate School looks forward to learning how this new structure supports the Department's research goals. With respect to the demands on faculty as a whole, there was a discussion of whether establishing large hybrid-style online classes might serve to reduce time invested in teaching. Development of this may require some adaptation by U Online, something the Senior Vice President expressed willingness to advocate. Issues with tracking productivity (e.g., using Academic Analytics) were discussed, but whatever these criteria, faculty should be incentivized to be ambitious about visibility and strive to make an impact with their research. The Chair mentioned two strategies to gain higher visibility that, in turn, would lead to more highly-cited research: a mentoring emphasis on careful consideration of placement of publications, and providing travel funds so that research gains visibility at conferences.

Recommendation 3: PhD Program: The current culture of exploiting the PhD students as undergraduate instructors creates problems in many ways: they lack teaching mentorship and guidance, feedback, and are undercompensated for their work, which requires them to seek outside employment. As a result of the multiple demands on their time, the time to complete the PhD is very high for some students. PhD students additionally need more formal guidance about the process and appropriate timeline for identifying a major advisor and a graduate committee. Significantly, the stipend should be increased to a more competitive level (~\$18k per academic year) so that PhD students do not need to seek additional outside employment.

The Department recognizes that PhD students have borne an overly heavy (although they would not say exploitive) teaching load and several changes are being implemented to alleviate this situation. For example, second-year students will serve as teaching assistants, not lead instructors. This ties well into the strategy of increasing class size to be sure that undergraduates get increased, direct exposure to faculty, with TAs leading smaller discussion groups and, similarly, would tie into offering larger hybrid online courses. Although time-to-completion has been in line with national standards, there are significant numbers of outliers and being vigilant about timely completion is a priority. Again, this meshes very nicely with new

Memorandum of Understanding Department of Economics Graduate Council Review 2015-16 Page 3

research productivity initiatives in the Department. Specifically, research workshops now organized around the themes of labor/well-being, globalization, and environment provide an opportunity to promote mentoring and expedite the connection between graduate students and faculty advisors. The Department has also created new documents to guide PhD students through the expected coursework and milestones. Stipend levels remain a concern and fixing this requires new resources. Ideas discussed were fundraising (including corporate sponsors) and obtaining research grants that can support research assistants.

Recommendation 4: Undergraduate Program: While there is a strong community among the faculty and PhD students, this does not extend to the undergraduates. There appear to be very few opportunities for undergraduates to interact with each other and with graduate students and faculty. It is seemingly common for students to graduate from the program having never had a class taught by a faculty member. The students voiced a desire for more mathematical rigor in the undergraduate program; some felt they would not be competitive for graduate programs such as the one in their own department.

The Department aims to have the full undergraduate core sequence taught by tenure-line and long-term career-line professors in larger classes, with an increased number of sections run by teaching assistants. Mathematical rigor has been bolstered by the addition of two new emphases: Statistical Analysis and Business Economic Analytics. These provide a creative solution that allows the Department to cater to the needs of different students. The Department has also commendably increased the number of Honors theses recently and recognizes the potential of using their newly-structured research areas to create further emphases in the future. To address the need for a strong undergraduate community, the Department is encouraged to adopt a variation of strategies taken in other departments. For instance, Biology offers weekly seminars on approachable topics. These seminars pair faculty members with small groups of undergraduates, facilitating connections between students and faculty as well as drawing students into the field and potentially into research down the road. The Department is encouraged to develop and use more quantitative, direct measurements of program outcomes success and student career outcomes.

Recommendation 5: Co-Curricular Activities: Years of financial struggle have strained the intellectual life of the Department. Building on the Globalization, Inequality and Sustainability Plan, the external review recommends a co-curricular program of regular seminar visits to bring in external scholars of interest to current faculty and graduate students, and improved web presence to make current and future faculty research efforts more visible outside the Department.

Outside speakers have already been visiting and more are being scheduled. Also, importantly, work-inprogress talks are being held on a regular basis, with the expectation that both types of activities will continue to increase as the new research group structure is fully implemented. Due to time constraints, the web presence of faculty research efforts was not discussed at this meeting. Clearly, though, this medium is vital for communication both with colleagues (whether at the University of Utah or in peer departments) and with current and prospective students. Continual improvement in web presence is a worthwhile priority for the Department. Memorandum of Understanding Department of Economics Graduate Council Review 2015-16 Page 4

Recommendation 6: Diversity: The Department needs to address the issue of lack of diversity with regard to domestic (US born) minorities and the lack of gender balance in the student population.

The Department is taking concrete steps to increase student diversity, including hiring a diverse faculty member and making use of resources available in the Graduate School Diversity Office. They are also participating in a nationwide study on this issue and hope to access best practices that they can adopt to increase the recruitment of women. The Department has also worked with Salt Lake Community College, where 40% of their majors come from, to create a capstone class that will create a smooth transition to the U. The Department should explore campus resources that may be of further help in the future, including ACCESS U and the Women's Enrollment Initiative.

Overall, the Department has created a very positive framework for change. They are now vested in carrying out this vision, which is endorsed by those present, as well as by the external and internal review teams and the Graduate Council.

This memorandum of understanding is to be followed by regular letters of progress from the Chair of the Department of Economics to the Associate Dean of the Graduate School. Letters will be submitted until all of the actions described in the preceding paragraphs have been completed. In addition, a three-year follow-up meeting will be scheduled during AY 2018-19 to discuss progress made in addressing the review recommendations.

Ruth V. Watkins Cynthia Berg Thomas N. Maloney David B. Kieda Katharine S. Ullman

David B. Kieda Dean, The Graduate School March 3, 2017