

REVIEW OF

Department of Economics

University of Maryland – Baltimore County

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Review Team

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Before answering the questions tasked to the review team, we thought it necessary to comment on the overwhelming sense of collegiality and the high morale found among all stakeholders: students, staff, faculty, and administrators. It was unexpected and quite welcomed.

Please comment on the appropriateness of general goals and specific objectives of the program. How are they being met?

The goals of the department of economics are consistent with peer institutions: “The mission of the Department of Economics is to produce and disseminate knowledge about economics and to use economic analysis to address public policy issues.” This goal could be enhanced by stressing the quality and scholarly excellence of the knowledge produced in the department and the innovations in the disseminated work. Currently, these objectives are met by having a faculty who produce research which appears in well-regarded, peer reviewed scholarly outlets such as journals, book monograph series, and other products and disseminated in the classroom via instruction and on scholarly exchanges such as working paper series, conferences, and other media. The existing evidence shows both a high level of research output and a commensurate rate of dissemination of the work. The work of the faculty is cited by other scholars in the discipline and contributes to the economics literature more generally.

What is the students’ perception of the quality of the program and their evaluations of the faculty’s teaching and mentoring?

We did not speak to transfer students, who are a sizable portion of the undergraduate population for the university and this program. The undergraduate students we met spoke highly of the program and believed that it offered a good undergraduate curriculum. They felt that the professors were very good at alerting them to opportunities and lauded the communication from the department and instructors. The students wanted a better and more purposeful sequence of courses and were desirous of more elective courses in applied fields such as development, health, and other related topics. The students also wanted additional options in econometrics and applied econometrics and perhaps more didactic training in software programming for empirical analysis.

Are the proposed directions of growth of the program consistent with the nature, mission and overall plans and priorities of the College and the University? Please comment on the overall quality of the program relative to its aspirational peers.

The program has goals that are consistent with the university’s goals for growth and expansion, although the exact nature of the college and university plans remain unclear. The department has goals to leverage cooperation with computer science, data science, and information systems to expand offerings at the undergraduate and graduate level. This is consistent with the university’s objectives to leverage UMBC’s strength and reputation in STEM. The department is also looking to expand in faculty in the data science space, again consistent with the objectives of the university (we note that this is also the product of fundraising efforts in the department who have secured an endowed chair position). The designation of the program as a STEM area adds to the university’s focus in the area and should allow the department to be better positioned to be featured in UMBC’s strategic vision going forward. It is important that future leadership of the university see the enrollment strength, innovation, quality of undergraduate students, and research faculty as key to the university’s academic mission. The

department has suffered due to college and university neglect of the unit, which has led it to have a smaller faculty size than optimal, and also a lack of a strategic plan for the unit.

What is the quality of the curriculum? Do teaching materials and pedagogical methods reflect state of the art within particular areas?

The department offers two undergraduate degrees at present, and the financial economics degree functions as a quasi-business degree for students seeking to work in aligned fields such as finance, accounting, and other business professions. This program also attracts students interested in becoming economists and/or pursuing graduate degrees in economics and aligned fields. The overall course sequence and nature of the curriculum is standard for an economics program. The materials used to teach are standard for a program of this quality—broadly comparable to the curriculum at top-20 public university economics departments in the United States. Some of the material could leverage faculty expertise in areas such as public choice, international economics, sports economics, economic history, economics of education, etc. but this is also standard for an economics curriculum. The materials do reflect the current state of the field, and some instruction uses cutting edge technology (spurred by the pandemic) of flipped classrooms, recorded lectures, and other approaches. The department may wish to add more coursework with learning objectives to improve student communication, such as a department writing requirement, which would help students navigate the space between the analytical skills in most of the economics curriculum and the ability to communicate analytical results and concepts to a broad audience. Little written communication is currently part of the curriculum. The next frontier would be to incorporate a variety of learning styles into the classroom instruction. We note that the department may want to create an accelerated undergraduate degree for the students who want to pursue graduate study in economics, which would minimize the business-oriented requirements in the current financial economics degree.

At the graduate level, the curriculum is appropriate for a program of its size (the cohorts are traditionally small) and are tailored to the needs of the students in the program. The options that graduate students have to take courses outside of the department, in addition to the capstone research project, suit the needs of the students and the goals of the program appropriately.

Considering the program’s assessment of student learning outcomes, discuss ways the faculty might most effectively “close the loop” by enhancing its use of the outcomes of assessment to improve teaching and learning.

Assessments: The department has used assessments in specific sections to evaluate the quality of instruction and the value-added of the curricular options. The use of these measures to “close the loop” should proceed in three directions. First, the areas where there are gaps between expectations and student outcomes suggest that curricular goals are not being met, but it could also suggest that the assessment is not appropriate to evaluate the learning objective. Re-analysis should be tried to see if the gaps are due to term/instructor specific variation. (At present, the assessment process is not comprehensive over a given offering of a course.) Second, focus groups with students should be part of the program. This should include students enrolled in the assessed courses in addition to students who have completed the courses but were not in the assessment data. Third, the purpose of particular objectives should be defined clearly in the curriculum and highlighted as used in specific courses, and lessons devoted to it should be altered and re-assessed in a continual process of development and refinement. For example, if an outcome is to read graphs clearly, then the instruction should clearly

define how a particular exercise does that and why it is important for the course (beyond its own learning outcome) and how it facilitates understanding of economics. This can be done in several ways to see the type of graphs traditionally used in economics are an impediment to the learning objective's success.

Is the level of scholarly work by faculty members in the program suitable for this program? Does the program as operating or planned provide sufficient opportunities for continued growth in quality of scholarship, creativity of faculty, and research opportunities for students?

The level of scholarly output of the economics department is adequate for a unit which has a 3/2 teaching load. In addition, the de facto expectation of one scholarly paper per year (generally peer-reviewed journal articles for economics) is a good and reasonable level of scholarship. However, as the university strives to maintain its R1 status, this level of output might need to be enhanced. As discussed at other points in this report, teaching expectations will need to be reevaluated and access to needed databases will be needed. One untenured professor pointed out that there are no collaborative agreements with any of the other universities in the area to share data, computing software or other scholarly infrastructure necessary to do serious research. The faculty are to be commended for having a very serious and highly regarded journal housed in the department.

Please comment on the adequacy of program's facilities for fulfilling its goals.

As mentioned above, the facilities are in need up an upgrade which could be done at virtually no cost if collaborative agreements could be reached concerning cost sharing with other economics departments in the area including College Park, UMB, Towson, etc. The department would be benefitted by having more support staff. The burden of doing class scheduling every semester is a job which requires a full-time person dedicated to that task alone. Currently, this duty is stretching the limited resources of the department too thin and putting an undue burden on the staff. Finally, the department does not have a dedicated computer lab for students. Given the STEM mission of the university, this is a net-gain for all units on campus and would allow for greater collaboration between faculty and students and between faculty across campus.

Given your review, do you think the program resources are being used effectively? Are there other ways you can suggest for them to be used? Are there additional ways the program might generate revenue?

The program is doing a great deal with not many resources. As mentioned at other points in this document, one resource which needs consistent overview is human resources. The funding of new faculty members (senior and junior) has not been continuous which leads to an imbalance in the ratio of junior to senior members of the department. Other resources which would be helpful relate to datasets, programming software and hardware, and time for adequate teaching, research and service.

To what extent does or should the program collaborate with other units of the University?

The issue of collaboration has been addressed at other points in this document also. The department is remarkably collaborative. The work done to contribute to the doctorate offered by Public Policy is commendable. In addition, the work with computer science and accounting appears to be seamless. The collaboration with other units in the area but not on campus is a chance for cost free externalities.

With regard to any resources identified as needed in the self-study or the external evaluation, which one is most urgent and/or most likely to benefit the program and how?

As mentioned in this document above, the most pressing need is for faculty members. The office of the dean has suggested its support towards helping to fill an endowed chair for the department. However, there needs to be a strategic plan going forward which can add some stability to the department by planning on X number of new hires (junior or senior) over the coming years. There are several faculty members who have windows of service which are short, thus, there will be vacancies which need to be filled in addition to new hires.

ECONOMICS DEPARTMENT QUERIES

Please evaluate the current state of the econometrics/quantitative/empirical training UMBC economics majors receive and provide recommendations for strengthening this aspect of the undergraduate and graduate curriculum.

The department's current training in econometrics is in a state of flux. The department currently offers a sequence that does not meet the student demand for additional skills in econometrics. The department also faces a problem of not being able to offer all of the needs in-house, leaving students to depend on some prerequisite coursework in the statistics department. The graduate level training appears to meet student demand, but it is a bit unclear how the graduate students transition from their coursework to the capstone project, and how much of the coursework informs the capstone project. The department may wish to move to a more clearly defined set of courses for students in the econometrics area by (1) providing its own in house coursework in introductory statistics and data analysis, perhaps with a focus on basic programming skills and (2) a two semester sequence of econometrics which would walk through the substantive and conceptual issues in a thorough way, leaving students better prepared to do analytical work [such a two-semester sequence could cover, say, the entirety of the Woolridge textbook, which is the current standard among undergraduate programs]. Additional coursework could be offered that is programming language-specific, but this should not be the focus of the coursework. This could be offered as part of a combined degree program and graduate certificate in applied econometrics or one with data science/computer science/information systems.

Please evaluate lines of communications between faculty and students. What useful information do our students not get (or not get easily) that faculty and advisers should be supplying?

Students are satisfied with the program at present but better alignment to (a) career opportunities and (b) preparation for graduate study could be achieved. It is unclear whether the current faculty advising model works since the bulk of students are in the Financial economics degree program. The graduate program appears to have better lines of communication because it is a small program that appears to provide a great value-added to the students. The department could facilitate some career connections by forming a LinkedIn group and development of additional career-focused student clubs.

Regarding collaboration with other units (Question I on the standard list of questions), please comment in particular on the extent to which the Economics Department should endeavor to collaborate further with the Computer Science, Information Systems, and Math/Stat Department at UMBC in establishing a joint Data Science/Data analytics entity. Please comment further on the role of UMBC's Center for Social Science Scholarship in fostering data science initiatives and collaborations. Please comment on the value

of collaboration with the Data Science Master's in Professional Studies program. Please comment on the value of initiatives sponsored by UMBC's Office of Institutional Advancement and UMBC's Office of Enrollment Management to develop financial education outreach to non-majors through FINC 150 and FINC 300 course offerings.

Existing discussions with other units are ongoing, and the assessment of student demand in these areas is high. The current accounting certificate is one example of a program that could be enhanced by better integration with CS/IS/DS. In the current market, the department should consider coursework that would lead to transcript-able programs which would credentialize students in specific areas and provide skill-based tools. The current outreach of the FINC 150 and FINC 300 appears promising, but coursework on financial education and/or literacy is different from more programmatic coursework that would lead to marketable skills for students. Collaboration with other units should be consistent with (1) existing faculty and lecturer expertise and skill, (2) robust student demand as exemplified by marketing and other data on prospects for robust and sustained enrollments, and (3) the ability to add value above and beyond existing programs. The marketplace in these areas is highly competitive, and some thought to online or hybrid collaboration which leverages the UMBC brand in STEM would be advisable. This would complement the program's recent STEM designation and tie the department more closely to the brand that UMBC has developed.

One area that should receive considered attention is the new endowed chair that will combine economics and data science. This investment should be expanded and supported with additional faculty growth and curricular development that build sustained programs in the area, and lead to new sources of revenue for the department. The focus should not neglect the fact that the local area is heavily tilted towards government positions and related areas, and data science combined with economic training should be marketable to a wide variety of students with strong analytical skills.

Please assess the success of the Sloan funded program to develop an undergraduate pipeline for under-represented minorities to enter post-baccalaureate and doctoral programs in economics.

The department has a great reputation for producing URM students who go on to top-ranked PhD programs in economics and related fields. The department currently has alums in PhD programs at MIT, Harvard, Brown, and other prestigious economics departments. The current Sloan grant funds those initiatives by providing non-faculty mentors, which are key to the way that economics programs operate today with a new push to predoctoral programs and other post-baccalaureate, pre-PhD programs. The continuation of this program with central support would allow the program to be sustained. This would be an important goal for the program as they have established a reputation. It could also be possible that the department could highlight this program and leverage it for fundraising opportunities. The current support from the Sloan foundation will expire, and while fundraising strategies are developed the department should seek support from NSF and other aligned organizations which could sponsor students or provide additional non-faculty mentors.

Please comment on whether further faculty hires should be new PhD's versus more senior assistant professors or associate and full professors. Please comment on the extent to which faculty searches should focus on particular fields or on the most promising overall candidate available.

The department faculty is currently too small and not aligned to the needs of the unit. The students spoke of the need for more applied micro-economic coursework, and the faculty felt that more

macroeconomic coursework was needed. First, the faculty must decide which areas the department will focus in for its faculty recruitment. It is unclear whether the faculty has identified the areas where coverage is non-existent and where (1) there is student demand for coursework and (2) there is an academic priority for the unit to have faculty expertise in the area. For example, an IO economist may be a good addition to the department, but it is unclear if they would teach high demand courses or if the department sees a need for a presence in this area. After this process, the department should then focus on filling out the faculty ranks as the market develops. The current size and composition of the department poses problems for future growth, ability to meet demand for courses, and the elevation of research activity in the unit. Given the needs for growth and stability, the department should prioritize senior assistant hires and senior faculty hires as these candidates could prove easier to recruit and, more important, retain.

The department also needs to work diligently to develop young faculty and to have institutional support to do so. This includes two specific areas—better support for the immigration issues of international faculty (who are 80% of assistant professors) and a more transparent and useful family leave policy. These types of work-life issues must be addressed by the department and the university if UMBC is to attract and retain the faculty strength it needs.

It has recently been announced that UMBC has been classified as an R1, Very High Research Intensive University compared with its previous R2 (High Research Intensive) status. Please comment on what implications this change in status has for publication and research expectations as well as the teaching and advising workload for tenure and tenure track faculty in UMBC's Economics department.

There is a great deal of excitement (and some apprehension) about the move to R1 status. The senior administration has not developed firm plans for how to retain and enhance this recent designation. There are several changes that should take place to enhance this move and to ensure that the actual faculty experience aligns to the R1 designation. First, the department's teaching load will need to meet the peer-set, which has changed with the designation to R1. It will be difficult to attract faculty with the current 2-3 teaching load, as this is uncommon among other R1 economics departments. Second, serious revisions in the research expectations of faculty are likely needed. The current norm in the department is more or less one publication per year. This is a decent level of output, but moving to R1 should cause a new focus on both quality of outlet and productivity. Faculty should be encouraged to engage in a more ambitious and higher-profile research projects. This will require additional resources for research, research assistance, and central funding for research. Faculty should also enhance the research grant portfolio, particularly from federal sources such as the NSF, NIH, USDA, and DOD, as well as private foundations. Third, more institutional support should be provided in the area of professional development, travel, and other activities which are typically funded for faculty at R1 institutions. Larger and annual sources of research funding for faculty, larger startup packages for new faculty, support for research expenditures, and other items will need to be priorities for the department and university going forward. Commensurate with this, the university should actively engage in advancement activities to find philanthropic support for faculty research, nominate faculty for external awards, and publicize the research accomplishments of faculty members.