Department of Economics
SUNY-Stony Brook
Strategic Plan: 2010-2020

What is now known as the "great recession with jobless recovery," still affecting us, has brought great challenges to higher education as well as many opportunities. This is especially true for our department of economics, given the growing interest in our programs at the graduate and undergraduate levels. At the graduate level, our PhD program was established in 1969 and currently attracts students from more than 15 nationalities. Currently, it is one of the fastest growing programs in the university in terms of the number of applicants and it has placed our graduates in top academic and government institutions as well as the private sector. We have also recently started an MA program that already has attracted considerable attention among students, given its unique characteristics that make it appealing to students from different fields. At the undergraduate level, we are the third largest major on campus, and an increasing number of students from other majors are interested in taking our classes.

The next ten years are a great opportunity to put the department of economics at Stony Brook back where it belongs, among the top departments in our country and, certainly, among the top programs offered at public schools. While we know that it is hard to reach that level, we also know that it is possible. In fact, the department of economics at Stony Brook was in the elite group in the not so distant past. As shown by Laband (1985), Stony Brook Economics was ranked among the top 30 departments of economics in the world during the 1980s according to many different criteria. We know that we can regain that position, since we are lucky to already have an excellent group of researchers, who publish in top journals in the profession and beyond, and who are recognized as individuals making a difference in their fields.

As most other areas in the sciences and humanities, economics has historically been divided into different fields of study. This view, while continuing to play some role in the decisions ahead, will slowly change towards a more integrated view in which fields fall into broader categories. The integration of fields into one of these broad categories depends on the type of questions they answer, the tools used to answer them, and the government policies they are affected by.

Our strategic plan focuses on the three broad areas that we believe will be driving the more influential research in the profession during the decade we have started. The identification of these areas comes after a detailed analysis of the strengths by field of the top 100 economics departments in the United States. Most of them are strong at least in one of the fields that compose these areas, but our advantage will be the articulation of the traditional fields in meaningful areas that exploit the synergies of the fields, while lend themselves to formulate more clear advantages of the interdisciplinary interactions that will make these areas even stronger in an institution like Stony Brook. The areas we plan to emphasize are: Strategic Thinking in Markets and Organizations, Macroeconomic Dynamics and Policy, and Empirical Studies of the interactions between individuals, firms, and the government. We are well positioned to be among the departments leading the push in these areas, with experts in all of them, and a small

but productive group of young researchers who are already regarded as making important contributions. In what follows, we present these key areas along with the objectives we expect our faculty to reach.

1. ***Strategic Thinking in Markets and Organizations***: An economy is the result of a multitude of agents interacting in complex ways. These agents are often active participants in the laying out of the rules and regulations set to provide the framework in which they interact. Microeconomic Theory, Game Theory, Political Economy and Industrial Organization have traditionally analyzed these interactions. As many areas of our economy become more complex, see for example the financial sector or the health care industry (where doctors, patients, hospitals, and insurance companies interact in complex ways), we will benefit more and more from the strategic perspective to understand how agents behave. In addition, strategic thinking will help us understand how to regulate interactions to benefit the economy, the society and the individuals. We are extremely well positioned to excel in this area with some of the best game theorists and microeconomic theorists in the world.

   As a matter of fact, the department enjoys a well earned reputation for excellence in game theory, after more than two decades (21 summer conferences) of organizing the most important conference in game theory in the world through the Center for Game Theory in Economics which was established in 1989. This conference takes place on the Stony Brook campus every summer. It has obtained 22 straight years of full funding from the NSF and it has attracted eight Nobel laureates in economics, including our own Robert Aumann, Nobel prize winner in 2005. Moreover, it has introduced to the profession the many different areas where strategic thinking is important. It is important to emphasize that this area also naturally lends itself to interesting interdisciplinary interactions with areas as varied as applied mathematics, computer science, political science, ecology and evolution, and biology, where advances in the understanding of how agents behave strategically and the solution concepts from game theory have many important applications. In fact, our graduate course in this area attract PhD students from several departments in the sciences and social sciences and our summer conferences is also attended by faculty members in these departments.

   - In this area, we expect our faculty to continue to publish in the best journals in the profession.
   - We also expect the faculty in this area to continue obtaining support from institutions like the National Science Foundation in order to organize the yearly conference, as well as to support some graduate students in the department.
   - Finally, we expect this group to exploit the interdisciplinary connections with the aim of answering key unresolved questions, such as the resolution of international conflicts and the working of complex organizations and regulated markets.

2. ***Macroeconomic Dynamics and Policy***: Macroeconomists try to understand the effect that the complex interaction of agents mentioned above has on the main aggregate variables driving our modern economies and in particular on prices (of goods, services, and housing), growth, inflation, and unemployment. In addition, macroeconomists try to evaluate the effects of different economic policies and to establish the links between different markets. The recent financial crisis has in fact fostered an enormous amount of research that tries to understand the link between financial markets, the housing markets and the real economy. To do this, we need sophisticated general equilibrium models, which can account for the feedback effect that individual decisions have on key aggregate variables. These models also account for the dynamics of decision making and the uncertainties in the markets analyzed, while they do not forget that individual agents are responsible for the decision making given their preferences and constraints. We have an excellent group of specialists in macroeconomic dynamics and its interaction with financial markets, which is well positioned to lead this fascinating and growing area of work. This field is highly technical, and will become even more so in the next decade, but our researchers are precisely trained in such a way. Therefore, we expect them to excel as the field requires more complexity in the models used to analyze an ever expanding set of interactions between agents.

    - In this area we expect our faculty will continue to publish in the top journals in their fields.
    - In light of the current crisis, we expect our group to work on high quality research that will deepen our understanding of the effectiveness of the government response to the financial meltdown, the interaction between the burst of the housing bubble and the stock market crash, as well as the slow growth in US employment.
    - The faculty in this area should also be able to obtain research grants, from NSF as well as some other government agencies, which will allow them to support the projects mentioned above as well as some graduate students.
    - An important objective in the next decade is also to start organizing a conference in Macroeconomic Dynamic Analysis and to invite keynote speakers in the field. This way, we aim to become a hub that will attract researchers to a bi-yearly meeting that will allow us to gain visibility in this field.

3. ***Empirical studies of the interaction between individuals, firms, and the government***: This is the area that encompasses the largest number of traditional fields. Depending on whether we are interested in policies that affect individuals, firms, or parts of the government, the analysis falls into the type of topics covered by labor and health economics, public economics and public finance, development economics, demographic economics, and also the empirical applications of industrial organization. We should also not forget the important methodological contributions offered by econometricians, who provide practitioners with the tools to perform the empirical analysis. All these fields use similar tools and models, and rely heavily on econometric techniques to model

and explain the behavior of individuals and how they respond to policies set up by all branches and levels of government. While we do not have a large number of faculty members in each of these traditional fields, if considered as a group, we are at least positioned, given our excellence in research and leadership in some subfields, to attract talented researchers. This would allow us to be a reference research group among top public graduate programs in the country. This area of research has many natural interdisciplinary connections with the health sciences, medicine, applied math and statistics, and even computer science when applying state-of-the-art econometric techniques. We believe, given our current strengths in this area, that we can become in the time span of this plan, a reference department in this area of research.

- In this area we expect our faculty to continue to publish in the top journals in their fields. Interestingly, our faculty has also been able to publish in the top journals in all the sciences (Nature and Science), and we expect they will continue to do so.
- We also aspire to start a center in Applied Econometrics, which is one way of defining this area of work and will be highly interdisciplinary. While there are other centers of this type in other institutions, they have not been based on the idea of the interaction between fields, and they are usually dominated by one or two fields. Therefore, there is an opportunity to start a type of center that would become known for the interactions between colleagues that share the tools and data used for their work. The research Center in Applied Econometrics should be a reality within 4 years of the implementation of this strategic plan. This center will complement with a more empirical perspective, the Center for Study of Working Class Life that the department already hosts, which organizes every two years, the most important international conference on issues regarding the study of class in our society.

- We expect that the faculty in this area will continue to obtain research grants from public and private institutions, but target more long-term and larger grants, which will support high quality research as well as some graduate students in the department. A majority of the grants submitted will have an important interdisciplinary component. External support should help the center mentioned above organize a conference with some regularity and invite prominent outside speakers. Note that there are similar centers in other public universities like the University of Michigan, attracting considerable external funding from private and public institutions. In fact faculty members in our department have obtained sub-grants from some of these centers.

Our vision is to strengthen these areas, and the payoff will be to build a department that can consistently attract, in the next decades, very talented faculty. This would allow us to place our graduate program in the top 30 in the country and in the top 10-15 among public universities.

We would obviously also attract excellent PhD and MA students, and provide a world-class education to our undergraduate students. In fact, we expect the enrollment to increase even more as we can offer more classes and a better educational experience that will include more advising. At the same time, we expect to influence the profession and benefit the university and our society with a better quality of education.

We start a decade with major economic challenges that require high quality interdisciplinary research. The department of economics is determined to contribute towards this goal and be a leader in the field and contribute to the excellence of the College of Arts and Sciences and Stony Brook University.

References

Laband, David N. (1985): "An Evaluation of 50 "Ranked" Economics Departments: By Quantity and Quality of Faculty Publications and Graduate Student Placement and Research Success," *Southern Economic Journal*, Vol. 52, No. 1, pp. 216—240.