

### CHARACTER ISSUES



### Learning to Lose a Leg: Casualties of PhD Economics Training in Stockholm

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Abstract, Keywords, JEL Codes

THE SWEDISH ECONOMIST ASSAR LINDBECK HAS RECENTLY expressed concern that PhD programs are not educating enough "two-legged" economists. In the late 1980s Robert Eisner, president of the American Economic Association, appointed the Commission on Graduate Education in Economics (COGEE), to evaluate the state of economics graduate education in the United States. The commission delivered its recommendations in 1991 in a report that include an oft-quoted concern about graduate programs generating "too many *idiots savants*, skilled in technique but innocent of real economic issues" (Krueger et al. 1991, 1044-1045). Around the same time many European universities were introducing

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<sup>&</sup>lt;sup>1</sup> The members of the commission were Professors Anne Krueger (chair), Kenneth J. Arrow, Olivier Jean Blanchard, Alan S. Blinder, Claudia Goldin, Edward E. Leamer, Robert

"US-style" graduate programs. This adoption of US practices has in many ways lead to improvements but also to some problems.<sup>2</sup> Today, protests and concerns about the state of graduate education in economics can be heard all over Europe.<sup>3</sup>

In both the previous American debate, and the current European one, a central issue is the balance between the teaching of standard modes of research and the teaching of how to really understand and address public policy issues. When Assar Lindbeck said that PhD programs are not educating enough "two-legged economists" (Lindbeck 2001, 32), he meant economists "who both master analytical techniques and have a feel for real-world problems." The risk, according to Lindbeck, is that many young economists go on to apply the techniques in a mechanical way—lacking economic insight and failing to cultivate economic intuition. Another concern is that the "one-legged" economists are retreating from the public debate, allowing lobbyists to advance socially harmful positions. For example, Skedinger and Johansson (2004) demonstrate the lack of participation by economics professors in the public debate over globalization.

If too many economists are "one-legged," a central question must be whether that condition is a result of self-sorting or of reshaping. Do economics PhD programs attract students interested in the social sciences and public debate, or do they attract students with a prime interest in technique?

We surveyed all graduate students enrolled in the Stockholm Doctoral Program in Economics (SDPE) in October 2001. The program includes all of the PhD candidates in economics at the Stockholm School of Economics and Stockholm University. The SDPE is a good representative of

Lucas, John Panzar, Rudolph G. Penner, T. Paul Schultz, Joseph E. Stiglitz, and Lawrence H. Summers.

<sup>&</sup>lt;sup>2</sup> See Frey and Eichenberger (1993) for a discussion of traditional differences between European and American economics.

<sup>&</sup>lt;sup>3</sup> Under the banner "autisme-économie" a protest movement began among French economics students in June 2000. This has been followed by other petitions, like the so-called "Cambridge Proposal," and has resulted in the Post-Autistic Economics network. See http:\\www.paecon.net for further information. Also, throughout Europe, there is a growing network of Hayekian students, organized around policy think tanks, research institutes, and certain university departments.

<sup>&</sup>lt;sup>4</sup> In terms of admission there are two separate programs; one at Stockholm University and one at the Stockholm School of Economics. However, the compulsory first-year courses are taken jointly by students in both programs, and students can also choose courses given at both schools. There are no other PhD programs in economics in Stockholm.

a strong European program, which in the early 1990s implemented an American-style research character.<sup>5</sup> Though minor in scope, our survey is in the same spirit as the one conducted by David Colander and Arjo Klamer in the mid 1980s (Colander and Klamer 1987) which allows us to compare our results with some of theirs.

This article came about as a response to a debate among Swedish economists regarding the lack of policy and "real-world" interest among young economists. At the time, all four of us were enrolled in the PhD program at Stockholm University and we found the discussion rather simplistic. While established economists criticized graduate students for not participating in the policy debate, little attention was paid to the incentives in the PhD program for such engagement. We, therefore, formulated a short questionnaire to investigate whether the PhD students were "one-legged" at the time of admission to the program, or if they risked "losing a leg" in the process of becoming PhDs.

### THE SURVEY

The questionnaire is very brief and lacks depth. Nonetheless, the high response rate (73 percent) gives us a high level of confidence in the veracity of the limited results obtained.

During the month of October 2001, we sent the questionnaire by e-mail to the 95 graduate students (57 male and 38 female) active in the Stockholm Doctoral Program in Economics (SDPE). Of these, 69 (44 male and 25 female) responded to the questionnaire, i.e., 73 percent. This can be compared to a response rate of about 25 percent, considered normal, for the much more detailed survey used by Colander and Klamer (1987). Answers were treated confidentially. The survey and responses follow.

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<sup>&</sup>lt;sup>5</sup> The SDPE recruits students internationally and in this sense it is indeed a European, rather than Swedish program. Out of those enrolled in the program, one in four is not from Sweden. By "American-style" we mean a rather standardized two-year course-program and a thesis consisting of separate articles (rather than a monograph).

### Stockholm Doctoral Program in Economics—Survey

1. How many credits/points did you have in mathematics, statistics, and economics before you began at the SDPE? [Note: The Swedish academic year has two semesters, fall and spring. Studying full time for one semester gives the student 20 credits and hence, one academic year of study gives 40 points. This was explained in the e-mail sent out with the questionnaire.]

Answer: < 80 80 - 120 > 120 Responses (percentage): 13 (19) 26 (38) 30 (43)

2. How many credits/points did you have from courses in the social science and the humanities before you began studying at the SDPE? Please exclude those credits/points in economics that you reported in question (1) above.

Answer: < 20 20 - 60 > 60
Responses (percentage): 11 (16) 25 (36) 31 (45)
[Note: 2 non-respondents]

3. Have you ever written or co-authored a debate/policy article in economics since you enrolled in the SPDE?

Answer: Yes No Responses (percentage): 12 (17) 57 (83)

4. If not, why?

Answer
Not interested:
Lack of time/incentives:
Other:

Other + Lack of time:

Responses (percentage, of 57)
2 (3.5)
45 (79)
8 (14)
2 (3.5)

### If Other, please write a short explanation here:

Responses of 8 who answered 'Other':

- One answered: "Lack of contacts . . . Who would publish a debate article by a Ph.D. student?"
- One answered that they did not want to be "stamped" with a particular political label.
- Two wrote nothing, while four actually wrote some form of lack of time + just starting the program.

## 5. Are you an active member of a volunteer organization and/or political party?

Answer: Yes No Responses (percentage): 11 (16) 58 (84)

# 6. Why did you choose to begin a Ph.D. in economics? Please rank the following alternatives from 1 to 6 by putting a number in the box next to each statement, e.g., [2].

	Responses:	
<u>Answer</u>	Ranked 1st by	Ranked 6th by
[] My interest in math and/or statistics	0	10
[] My interest in the social sciences	45	3
[] Future career possibilities	10	0
[] My desire to serve in the community	8	10
[] To increase my earning potential	2	3
[] Other	6	13

[Notes: The ranked 1st numbers add up to 71 because two respondents marked two alternatives a first place ranking. Also a lot of people did not need and/or where reluctant to use all 6 numbers.]

### Highlights of the results follow:

- 81 percent of the respondents have studied more than one full-time semester in other subjects than the so-called core subjects.
- 45 percent of the respondents have studied more than three fulltime semesters, which is more than 1.5 years, in other fields within the social sciences and the humanities. This result should be judged

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in light of the fact that there are no formal requirements for such courses in order to be accepted to the SDPE.<sup>6</sup>

- 57 percent of the students had less than three years of full-time study in economics, mathematics, and statistics upon starting the graduate program. It is also noteworthy that there is no correlation—either positive or negative—between having a strong background in quantitative subjects and having studied a large number of courses in other subjects within the social sciences or humanities.
- 16 percent of the respondents were active members of a volunteer organization and/or political party, 17 percent of the respondents had during their time in the doctoral program published a debate article. Interestingly, there was only a one percent overlap between these groups meaning that at least 32 percent of the doctoral students exhibit some form of civic engagement. In terms of characteristics, this group of "active" students seems representative, with a slight overrepresentation of women, and a slight underrepresentation of foreign students. The does not seem to be the case that students with stronger mathematics backgrounds are less active. If anything, the students with strong backgrounds in both mathematics/statistics and social science/humanities are overrepresented in the group that has written debate articles.

<sup>&</sup>lt;sup>6</sup> The National Economy department website at Stockholm University describes the requirements as follows: "Qualified applicants meet one of the following two requirements: 1) Undergraduate degree from a Nordic university with 60 credits (three semesters of full-time study) in economics (including an undergraduate thesis) and 60 credits of undergraduate studies in other subjects. A qualified applicant has written a senior thesis in economics. Applicants are encouraged to take the Graduate Record Examination (GRE) General Test. 2) An undergraduate degree, BA, from a non-Nordic university with a major in economics and a senior thesis in economics. Applicants are strongly encouraged to take the Graduate Record Examination (GRE) General Test. Applicants who do not have Swedish, or English, as their native language must show proficiency in English to be considered for admission. We recommend such applicants to take the Test of English as a Foreign Language (TOEFL). Although not required a good background in mathematics or/and statistics is often helpful for successful completion of a PhD in economics." (Online: http://www.ne.su.se/education/graduate/qual.html)

<sup>&</sup>lt;sup>7</sup> The under-representation of foreign students is hardly surprising since it is clearly more difficult to engage in these activities during the first years in a new environment.

- Students who had not written debate articles were asked why. 80 percent said lack of time and/or incentives, while only 3 percent answered that they were not interested. Thus, it seems as if it is a lack of time and incentives, which lies behind the observed non-participation, not a lack of interest.
- As for the motivation to pursue a PhD in economics in the first place, 65 percent answered that they were primarily motivated by their interest in the social sciences. Second most important were career concerns (14 percent) and third was the "community interest." No one ranked their interest in mathematics and/or statistics as the primary reason for entering the graduate program in economics. Furthermore, the two alternatives which were ranked last by most of the respondents were "my interest in mathematics and/or statistics" and "other". Thus, it seems as if the typical doctoral student is primarily motivated by an interest in the social science, not so much an interest in mathematics or statistics per se.8

In terms of the questions raised in the introduction, this survey suggests that economics as a subject is not attracting "one-legged" students—quite the opposite.

### PARALLELS TO THE U.S. DEBATE

The survey results parallel the results from the 1985 survey of American graduate students done by Colander and Klamer (1987). As in their study, we find that students enter the program because they have an interest in understanding and contributing to society. As Colander and Klamer put it: "If graduate schools are graduating *idiots savants* who have no interest in policy, it is not because students enter graduate school with no

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<sup>&</sup>lt;sup>8</sup> As a point of speculation one could, based on our survey results, argue that students who choose economics rather than any other field in the social sciences do so because of the relatively greater emphasis on formal and quantitative work. After all, most have in their undergraduate studies encountered other approaches and have still chosen economics.

interest" (97).9 This statement is equally true for the Stockholm situation sixteen years later.

Our results on participation in policy debates, or in other issueoriented activities, are also similar to those reported by Colander and Klamer (1987). They report that the lack of time is the main reason for not pursuing their other (work related) interests. In our study 80 percent answer that it is lack of time and/or incentives, which keeps them from engaging in policy relevant side activities, while only 3 percent of the non-active students say that it is a lack of interest.

So how can it be that the perceptions of graduate students in a typical European PhD program in economics were so alike those of their American counterparts from 1985? One possible answer is of course that this is what graduate economics inevitably is like. Proper graduate education is about forgetting the questions you want to study so that you can focus on learning techniques and methods. This is certainly not the view of anyone concerned about economics being one-legged. Given that the findings of Colander and Klamer (1987) and others led to the American Economic Association appointing a commission on graduate education in economics, it also seems unlikely that this view was held by the "profession" in the U.S. at the time. Another possibility is that European schools forgot about the possible problems with the American programs they copied and did not pay much attention to the U.S. debate about graduate education.

It could also be that the "learning to lose a leg" syndrome will be short-lived. Maybe in the Stockholm case in October 2001, the process that generates expectations in those entering was yet to catch up to the character changes in the PhD programs. In the process of reviewing our paper for this journal, David Colander, who refereed the paper (and waived anonymity), wrote: "I have recently redone the survey that Arjo and I did . . . and in the new survey [of current PhD students] I find less cynicism and concern about mathematics" (Colander 2004; quoted with permission). One possible explanation for the difference from 1985 is that, now U.S. programs are less focused on technique, another is that the expectationsgeneration process has caught up, and the would-be two-legged economists are either being sorted out of the population or are entering PhD programs with a clearer understanding of what they are in for.

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<sup>&</sup>lt;sup>9</sup> The *idiots savants* reference is from Robert Kuttner (1985), who in summarising the views of Wassily Leontief and John Kenneth Galbraith writes: "Departments of economics are graduating a generation of idiots savants, brilliant at esoteric mathematics yet innocent of actual economic life" (Kuttner 1987, 77).

<sup>&</sup>lt;sup>10</sup> See Krueger et al. (1991) for references to why the commission was appointed.

### **CONCLUDING REMARKS**

Whether the above findings are a concern or not depends on one's view of what graduate education in economics should be about. If one is of the opinion that the primary goal of economics education is to teach students mathematics and econometrics for their own sake, then the fact that this is what students think is being done is nothing but encouraging. We do not, however, think that too many economists hold this view.

A much more common view is that, even though real-world problems and policy issues are considered important, one must first learn the tools, then apply them. We believe that such a view is dubious for at least three reasons. First, it assumes that the interest in real problems and policy can be put aside for years and then picked-up as if there was no interruption. Second, it implicitly assumes that there are no specific skills besides the model-building and statistical techniques that dominate the training program. Once you know those techniques you are automatically able to formulate and explore the meaningful and important questions. Third, and perhaps most important, is that graduate school is a socialization process through which students learn what is valued by the profession. If students, especially during their first years, are told to focus exclusively on technical crafts, their ability, interest, and regard for real-world issues and projects are bound to wane.

There have been no visible initiatives from the economics profession in Europe to evaluate European graduate programs and European graduate students in economics. Indeed, if there is a major difference between the debate in the US in the late 1980's and the recent discussions in Europe, it lies in the fact that, in Europe, the initiatives to discuss the contents of graduate education have come mainly from students. We think it is time for a European Commission on Graduate Education in Economics.

It is important to emphasize that the views expressed in this article should not be interpreted as if we believe that one must choose between rigorous mathematical or statistical techniques and social engagement. On the contrary, we are strong proponents of a rigorous analytical approach to important social questions. We would even go so far as to say that formal modelling tools are one of the strengths of economics relative to other approaches. This does not, however, imply that relevance can be neglected.

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