

Admission to Econ PhD Programs: *Comments, Advice, and Speculation from a Recent Applicant*

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Background

I've noticed that advice for potential applicants to econ PhD programs varies substantially based on who's giving the advice. Most notably, I am always shocked when I see comments such as this on message boards or the econphd.net decision tables:

Background: Ivy, little formal math

Admits: --- (fill in with a few of your favorite top schools)

Comments: Don't listen to people who say you need real analysis and other crazy math courses (or, "Let me be the counter-example to the crazy-ass math nerds", etc)

For the record, I did not go to an Ivy; I am finishing up a second undergrad degree at an average state university. (I went back to get the math background needed for graduate econ.) There's nothing wrong with going to an Ivy, but I think the negative effect of little formal math for good students at top schools is often more than offset by the recommendations/connections of professors who are supporting these students' applications. Therefore, I think such advice tends to be (unintentionally) misleading to many of us who look to places like econphd.net. (More on these ideas below.)

My advice to those of you who are at top institutions for undergrad...

Quit reading these guides online and go talk to professors. Their advice is usually going to be much more valid and useful than what you read here. We're trying to understand what goes through your professors' minds as they sit down on an admissions committee and review our applications (i.e. decide our fate); you can ask them directly. Go do so. And if you're feeling kind, please report back to the rest of us.

My advice to the rest of you... who, like me, did not go to the greatest undergrad school.

First and foremost, if at all possible, I suggest you look at transferring to a better school. It doesn't have to be Harvard or MIT (not that either of these options will hurt you), but I would recommend looking at a school that has Top 20 grad programs in math and economics (there's an amazing amount of overlap, so this isn't hard to do). Your math background and recommendation writers are both very important, and transferring to a good school will make both of these factors more credible in the eyes of an admissions committee. Some will claim that I'm just speculating here, and they're right. But I am absolutely convinced that I would have been accepted to better schools had I chosen to do my math work (second degree) at a better school. If you're convinced you have what it takes to succeed in a top econ program, it's pretty reasonable to think you can transfer to

UT-Austin, UMD, UMich, UW-Madison, or a similar type school, and finish your undergrad studies there.

What's important in the application (and in what order)?

I. Your recommendations

Doesn't it suck that the most important part of your application is the one part that is completely out of your hands? Yeah, it does; but there are definitely things you can do to increase the probability of having great letters. First, I definitely believe now that people on admissions committees look for reasons to trust (or not to trust) the recommendation letters, and this is where the letter writer becomes important. If the letter writer is known by members of the ad com, then the letter is more credible (in most cases). Remember, the ad com is trying to get an (imperfect) estimate on an unobservable characteristic (your ability to succeed in the program and, more importantly, to do quality research). This is the primary reason that I suggest you transfer to a better school, since you are likely to find letter writers who will be trusted by the ad coms.

Otherwise, my advice is very similar to what you'll read elsewhere. Get to know your professors well. Not only will they be your letter writers, but they're going to give you a great deal of useful advice on all aspects of your journey to become a winner of the John Bates Clark Medal, including helping you identify fields that really interest you, suggesting schools you should apply to, and maybe even making you a research assistant (and you should jump at the opportunity).

Like I said before, I really think that the recommendations – and who writes them – are the most important aspect of your application, and it's the part that you have the least control over in many ways. (If for no other reason, the ad coms will trust the evaluation of someone who has completed a PhD program in economics before they will trust your own assumptions about your abilities... and, let's be honest, they're right.)

II. Your math background

For the most part, nobody cares about the 4.0 GPA you have in undergrad economics classes. Why? By now, you've hopefully realized that economic research and graduate economics programs are incredibly math-intensive; you should have also noticed that your undergrad econ classes use little to no math. Again, my advice here is similar to what you'll read elsewhere, but here goes.

To be competitive for admissions, you need: multivariable calculus, linear algebra, and real analysis. Yes, you really do need to take real analysis. At your school, it may be called Intro to Analysis or Advanced Calculus. The standard text is *Principles of Mathematical Analysis* by Rudin, which is what you should be looking for if you're uncertain about which class you need to take (i.e. if your school offers courses called 'Analysis' and 'Advanced Calculus', look to see which one uses Rudin; that's the one you want to take).

While you're at it, take probability, math stats (this should require multivariable calculus)... if you're up for it, look to take measure theory, maybe topology, and some more advanced stats courses.

As for economics courses, they're mostly useless predictors of your potential for success in grad school. The ad com is likely to put the most weight on intermediate micro (but not macro), econometrics, maybe game theory, and any grad courses you've taken. (I've heard these comments regarding undergrad econ courses from grad directors at Stanford, Yale, and Michigan... so you're not just getting my speculation on this point.) If possible, take some – or all – of the first year core courses. I think the field courses (grad and undergrad) are less useful for the ad com, and therefore less useful for you to take now.

III. GRE Scores

Much is made of GRE scores in advice guides and online message boards. Instead of my own speculation here, I'll (again) share the comments that were made by grad directors from Stanford, Yale, and Michigan during a panel discussion at 2005 AEA meetings in Philadelphia (same comment applies to the SOP below).

The GRE in no way is an accurate predictor of your potential to do the math required for econ PhD programs. However, below a 750Q is a very bad signal and will likely get your application thrown in the auto-reject pile. Otherwise, the 800Q isn't really much (if any) better than a 770Q. Aim high, but 760Q or above (just to be safe, since UC-Berkeley's site says to re-take if below 760) is fine. If you keep seeing 800Q on other people's profiles and thinking it's related to the admissions decision, just remember that you can't see the rest of the profile (like top undergrad student at U. Penn with A's in grad micro and grad measure theory) which matters more than the GRE.

GRE Verbal is a waste of time, unless you're an international applicant; in that case, you have to take the TOEFL, which will count more in the admissions decision. AWA is also largely ignored, but rumor has it that the UC-system requires a minimum score (5.0+ maybe?). I don't know if this is true, but there certainly seem to be some counter-examples out there; if in doubt, I suggest you email the department of the graduate office of the university.

IV. Statement of Purpose (SOP)

For top schools, the SOP is totally irrelevant because it will not be read prior to admissions decisions; if someone ever reads it (won't happen at Stanford), they will only do so after admitting you, and they will only read it to identify your research interests and match you with a professor (may happen at Yale). Outside of the very top schools, the SOP begins to play a role. The main reason is that these schools (say Top 5-25 schools) realize that they are not MIT or Harvard, and they need to target their admissions decision to people who are likely to come to their school... which means people with research interests that match the department's strengths (i.e. don't tell Caltech that you'll do great research in macro).

Be honest about your interests, and don't lie. Also, realize that everybody else is also going to tell their story about how "the visible hand of Alfred Marshall descended from the sky and tapped me on the shoulder... and that's when I realized that I wanted to become an economist". Really, nobody cares why you want to be an economist. They only care that you understand what you're getting yourself into and that you want to be a

researcher. Also, the comment was made that there's no real guarantee that you wrote the SOP anyway, so why should ad coms put much weight on them.

Final Comments

After applying this year, I really think that – for those of you still reading – you need to have some graduate coursework in order to be competitive at top schools. This can be grad courses taken as an undergrad, or it can be a master's degree. In either case, you need some graduate courses in math or econ (if econ, go for the first-year PhD core courses). If you go for a master's, let me make the following general advice:

- (i) Don't do a master's in economics in the US (or preferably, at all). If you want a master's in econ, look at LSE, UBC, or UPF. All of these have great placement records into top econ programs. UBC also funds some of their master's students, if I remember correctly; UPF may also, but I don't know. LSE, well... it's LSE, and you're going to pay for it.
- (ii) Look at doing a master's degree in statistics, especially mathematical/theoretical stats (i.e. not applied stats). The coursework is relevant to what you'll be doing in an econ PhD program, and you can obtain funding for your degree, unlike most econ and math master's programs. You'll learn all you want to about econometrics (which will make the metrics sequence easier when you go to an econ PhD program), but you'll also learn measure theory and probably become better acquainted with analysis, which will help with first year macro and micro.
- (iii) Finally, think about doing a master's in math. It'll count for more than an applied econ master's (which is what you'll get in the US), but you're not likely to get any funding. It'll help at admissions time, probably a great deal, but I think the stats degree may be the better overall choice, since you won't have to pay out of pocket (or, more likely, through massive amounts of student loans).

Finally, best of luck. Hopefully, you've gained something useful and have a better idea of what you're getting yourself into (and will make yourself a better applicant as a result).

APPENDIX I: AFTER YOU APPLY

First off, the most difficult thing you will do in the entire process is clicking the 'Submit' button on the online application. This is especially true when it comes to those dream schools. After you submit the application, there's no going back... everything is now final, and you can't change anything in your application.

You'll probably go through a short period of time when you feel like you have nothing to do. Take advantage of this time to relax because it won't last long. Also, very few people ever talk about what happens after your applications are done, and I wish someone would have warned me about what comes next, which is the waiting.

No matter how cool, calm, and relaxed you think you are, the waiting will get to you eventually. Starting in mid-February, you (and every other applicant) will expect to begin hearing from schools. (You'll very quickly realize that 'March 15' means very little to most people, and it's just a nice target date that schools like to mention but don't really adhere to all that well.) At some point, you'll look at the decision tables on econphd.net and try to guess when you should start hearing back, then you'll check out thegradcafe.com (if it's still up) to see when this year's decisions were sent out. There's also a good chance you'll get sucked into reading the TestMagic boards several times a day, just waiting to hear that a school is beginning to notify admitted students. (Credit goes to Yale here – this year, they sent out an email to rejected students telling them to check the online status around 11am, but they sent admissions packets to their admits via overnight mail the day before... so everyone got the news, good and bad, on the same day.)

As of mid-February, you shouldn't expect to be able to focus on school too much while you wait to hear the news. Also, some schools don't notify students on decisions by March 15... I heard good news from Cornell over a week into April and bad news from Penn and Northwestern a few days later.

If possible, I recommend either trying to take an easier courseload during your final semester or finding an interesting project to work on. For one thing, your grades in the final spring semester will have no impact on your admissions decision, since decisions are made prior to the end of the semester. The only good thing is that you can tell schools in your application what courses you plan to complete before enrolling in program next fall, but I suspect schools put little weight on this aspect since they won't be able to see any grades (and they're not likely to be impressed that you will enroll in – and possibly fail – some advanced courses that don't appear on your transcripts at application time). If you're in your senior year and you still have some university-wide requirements to take, put them off until the spring and make your life easier. Consider this your break before summer math camp with Simon & Blume or De la Fuente.

Bottom line: the waiting sucks, and you will become very indifferent towards your classes at some point. Just realize in advance that this is going to happen, and plan accordingly. Maybe you can finish up early and take the semester off, or you can try to do a research project with a professor (and possibly take it for course credit). Also, visiting schools that you've been admitted to is going to interfere with your courses... expect to miss a few days of school. March and April will be very hectic months.

APPENDIX II: FUNDING

Despite what many of us may think, there's a good chance that you will not receive funding during your first year in school. Perhaps I'm a bit biased here from hearing the experiences of many people this year (and my own experience), but it seems like first-year funding was especially bad this year. Many state schools are facing serious budget cuts (Berkeley may be the exception), and this makes it harder for schools like Michigan, UCSD, UCLA, Maryland, Texas, and Wisconsin to come through with assistantships or even tuition waivers (and you can forget about a first-year fellowship at some schools... I think UCSD offered few, if any, fellowships this year). Top schools still seem to come through with great funding, at least for the top admits, so this makes those schools even more appealing.

A word of warning – do not expect to be admitted to NYU. They seem to admit the fewest number of students, even less than MIT or Harvard, for one reason – NYU guarantees funding to all admitted students. This sounds great, but in order to decrease the risk of having too many funding offers accepted, they supposedly called some of their top prospects to ask if they still wanted an admissions offer.

Be aware in advance that you may have to self-fund the first year, or that your financial aid offer may consist of a first-year assistantship. It may make things a bit rough, but it helps you decide what you really want (and if you're willing to pay for it).

Having made the above comments, let me also recommend that you begin looking for outside funding very early. If you're a US citizen, look at applying to some of the competitive – and prestigious – scholarship/fellowship programs. NSF and Javits are the two most common, and you should apply to both. By the way, schools will ask you on the application if you've applied for these awards – you really want to be able to say that you've applied, even though neither you nor they know if you'll win the award since NSF and Javits results are announced after schools make their admissions decisions. (As a side note, the easiest way to get onto the waitlist at MIT is to apply for an NSF, since it seems like no NSF applicant is rejected by MIT until after NSF awards are announced... then again, it seems like the fastest way to get off the waitlist at MIT is by not winning an NSF.) Keep an eye out for other fellowships that have large stipends, and apply for them; you may be able to use one of these awards to gain admission to a school, since the school often won't have to take a risk on you since you're not taking their funds.

For other nationalities, there are similar programs... SSHRC for Canadians, IMF Scholarships for those from developing countries (though you may have to focus on macro for your dissertation), etc. Apply and hope for the best.

In the end, don't be surprised if your admissions offer doesn't include some amazing first-year fellowship. You should be surprised and very happy if you do receive a fellowship. Instead, be prepared to have an assistantship or even possibly to self-fund for the first year. After that, you should definitely get an assistantship with tuition waiver starting in the second year, regardless of where you go to school.