Navigating through the Ph.D. Program

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These tips are based on my own experience (not necessarily official SSE rules). However, my hunch is that most faculty would broadly agree with those suggestions.

Paper-writing process

- *Topic inspiration:* Read the Financial Times ideally <u>every day</u> (not so much very firmspecific news like Apple EPS went up from \$20.30 to \$21.00, but more about general trends or regulations). I get at least one research idea per day (not necessarily publishable)
- Topic choice is the most important choice. Ideally, the topic should
 - $\circ~$ Have broad relevance (so almost every economist understands at least your question)
 - Not much existing research (of course, this criterion may be in conflict with the previous one since more relevant questions generate more existing work, but there are exceptions:
 - A topic becomes (suddenly) more relevant: Crypto-currency, Socially responsible investment, etc.
 - Data becomes newly available (say because only few people have access, say Swedish data, or you know someone at the Central Bank, etc.)
 - Fits within your research agenda. It's not enough that the ideas are publishable, but they need to be connected. It took me a while to understand this.
 - Example 1: During the third year of my PhD I met with Bengt Holmström while he was visiting Chicago. He asked me what I was working on. I said I have one paper on general equilibrium theory, one paper on tariff wars, one paper on dynamic contracting paper in settings with expropriation risk and one empirical paper on mergers and acquisitions. I still remember when he warned me of this agenda and said: "One student, one paper, one research agenda." Which I interpreted as "It will be tough to publish these papers" and my goal was to prove that I could publish all of them, which I did (2 Journal of International Economics, 2 Journal of Financial Economics). BUT, I completely missed his point. The profession is so segmented that virtually no finance academic cares about international papers and vice versa. So, in short, 4 papers spread out across 4 fields probably count like 2 papers at most.
 - Focus your attention on your best paper. It is MUCH better to have one dissertation with one good paper (say 90) than one dissertation with 3 papers at 80 where the scale goes from 0 to 100. Job market success almost exclusively depends on the quality of job market paper.

- *Getting started:* Say you have an idea and it fits in your research agenda, you still need to get started. Sometimes the first steps/ words are the most difficult. Try to impose a structure on the process so you have at least something concrete
 - Try something simple first, i.e., a toy model for theory or a simple OLS regression using easily accessible public data (before hand-collecting data on your own)
 - Once you have a key hypothesis, prediction, etc. do some literature review (so that you don't run the risk of reinventing the wheel). I typically don't do literature search as the very first step because I am afraid it will bias the way I think about something and hinder my creativity.
 - This is the point where you should contact faculty. You have established that you like the idea, you have a clear hypothesis, prediction, and you checked that the literature has not (fully) addressed this. Now, get feedback from as many relevant people as possible.
 - Is this idea exciting to others?
 - What are their implementation concerns? Can these be addressed?
 - Once you decided that the project can go on, I typically enjoy putting references in a bibliography. The act of compiling the references in LaTeX generates a first concrete outcome. You almost have a paper.
 - Then look at <u>my guidelines to write up the paper</u> or the ones by <u>Cochrane</u>.

Interaction with faculty

- At Stockholm you have the opportunity to talk to world-class researchers.
- Don't be afraid to contact faculty to schedule meetings (but giving faculty flexibility on timing). My general impression is that (almost) all faculty talk to you if you are well prepared. (It is your responsibility to identify relevant faculty and contact them on your own. In case you have particular trouble connecting to someone, please let me know.)
 - Example 2: At Chicago, I contacted tough faculty members like Steven Kaplan or Bob Lucas. In particular, Robert Lucas gave me extremely detailed feedback on my paper on "tariff wars" which I all implemented before I submitted the paper to a journal in year 3.
 - Example 3: Farzad scheduled a meeting with Stew Myers (MIT) in his third year as a PhD student (while he was visiting MIT) to discuss our merger paper. We got useful feedback. (That's the type of good initiative: you have a decent paper and then make sure that you get feedback from relevant people.)
- Respond to any email from faculty within 24 hours or less, in particular when it's simple admin stuff like "can you meet tomorrow at 11am?". World-class researchers like Darrell Duffie or Andrei Shleifer ALWAYS respond to emails within a few hours (NOT days or weeks). I have never received an email by Darrell saying: "Sorry, I was on a holiday."
 - Example 4: I recently contacted Darrell about a mathematical problem that was slightly above my paygrade. He responded within 60 minutes saying he will look at it later during the day. 8 hours later he had crafted a 2 page discussion on the technical issues (far beyond what I had hoped for). So, take Darrell as an

inspiration. Either answer right away (if it's purely admin) or say: "thank you, I will get back to you within the next x hours / days."

- Be well prepared when you talk to faculty. I find it useful to have some basic results as graphs or slides so I can show them on my iPad or laptop. This type of preparation also helps structure the discussion (in particular, if you are nervous). Also, it signals to faculty that you have thought about an issue before talking to them.
- While the vast majority of students err on meeting the faculty too little (and too late!), sometimes it can be too much. Strike the right meeting frequency. (The appropriate meeting frequency is difficult to specify in calendar time since it is dependent on progress (and your effort)). However, make sure you understand that faculty time is a scarce resource and try to have answers to any question that you predict to receive. In fact, learning how to predict faculty feedback is extremely useful.
 - Example 2 (continued): I scheduled a follow-up after receiving a revision request from the Journal of International Economics. I had not even read the reports carefully. I simply wanted to meet to say "Wow, I got an R&R". After 2 minutes, Bob Lucas (rightly!) ended the meeting because he saw I had really nothing else to say (2). Don't use faculty resources if there is no point.
 - Example 3 (continued): Farzad scheduled another meeting a week after the presentation just to "follow up" (without us having any new results). That's an overkill.

Work attitude

- *Sports analogy:* Academic research works similar to sports competition, except that your resource is your brain.
 - **Passion:** You should enjoy research. While parts of tennis practice are annoying (say sprints), Roger Federer and Serena Williams likely enjoy a lot competing with the best of the world. That's why they stay in the game. If you are not passionate about research, how can you get others to be passionate about your research?
 - **Quantity time:** Finance is a competitive field, very much like sports. A good benchmark is that you should work at least 40 hours per week throughout the entire year.¹
 - Example 1: Farzad Saidi used to work 100 hours per week, 52 weeks a year. When we worked on our first project, I would send him emails at 2 am my time (Pacific time), i.e., 5 am his time (New York) and he would work on things, so I had them ready by the time I woke up at 9.00 am.
 - Example 2: If you want be as good as Ronaldo, you need to practice. If you don't learn it as junior, it will be even more difficult to learn it later on. <u>https://www.footchampion.com/carlos-tevezs-unique-story-aboutronaldos-training-style/</u>

¹ At Chicago, we were told that we were expected to work 60 hours per week (52 weeks a year). Now, you may say "this doesn't apply to me in Stockholm," which is technically true, but you are still competing with Chicago students for the same jobs. The competition is international, not local.

- **Quality time:** It's not as simple as putting hours in. You need to spend your time intelligently. Sometimes a break is useful. I typically have the best ideas when I go running or cycling after doing research.
 - **Example 1** (continued). Farzad is more productive now when he only works 50 hours a week, does some exercise, etc.. Thus, there is not necessarily a trade-off between productivity and a healthy lifestyle. I would even argue, being healthy, in particular, sufficient sleep, promotes good research.
 - **Example 2** (continued): It makes no sense to practice football 80 hours a week since the body would be exhausted when you have to perform.
- Work routine: A general rule is: work when YOU are most productive.
 - \circ $\,$ Some people like a routine schedule, say 9-5, where they stop research after 5 $\,$
 - My general rule is: I only do research when I feel awake and productive. If I am productive at 7pm, I continue working until midnight or longer. (Having fixed appointments in the evening, say a dinner, completely disrupt my day. That is, on a research day, I have nothing scheduled. No phone calls, no meetings, no lunch chit chat, no talking (makes me tired), just research.

Other things

- Get a homepage, ideally way before the job market, so you don't need to do it when time is most scarce.
- Try to co-author with other students: The co-author choice is absolutely instrumental for success in the profession. You get to know your Ph.D. cohort much better than you get to know the typical external co-author. Use that knowledge wisely. Many great co-author relations date back to student days, say Garleanu/Pedersen or Malmendier/Tate or Shue/Townsend.
- You MUST come to external seminars.