Or, what I'd tell my first-year self if I had a time machine

Reflections on Grad School in Economics

**Nick Hagerty** 

April 2020

#### **Disclaimers**

- All advice suffers from survivorship bias
- This is not meant to be a comprehensive guide
  - Just some things that have been helpful to me
  - If others find it relevant, great!
- Most of the insights are not original
- I have certainly not mastered all of it myself
  - Some definitely falls under "do as I say, not as I do"

# Don't forget why an economics PhD is amazing

- You get to do analytical work on current real-world problems that you can explain to your friends and family
- Media and policymakers actually pay attention to the results sometimes
- You get a very high degree of autonomy in your work
- You are extremely employable (in stable jobs that pay well and provide benefits)
- You graduate without enormous amounts of debt (hopefully)

# Your job in 1st and 2nd year

- Learn what you can, but make it through
  - If you don't enjoy core classes, hang tight, it will get much better
  - Keep in mind why you're here: to do research
- Make friends and be generous with your cohort-mates
  - You might learn more from them than your professors
  - Bonds forged now are harder to recreate after grad school
- Don't stress about your grades
  - They don't matter. Really.
- Work for a professor to learn the *process* of doing good research
  - Summer RA'ing might be more valuable than classes

#### Go to seminars and lunches

- You'll be tempted to skip. Resist.
  - Even when you think you aren't interested in the topic
- Pay attention to the back-and-forth
  - What's received well, what's not
  - This is how you pick up the norms of the discipline
- Don't worry if you don't follow all the content yet
  - Faculty are not THAT much smarter than you
  - They've just seen similar equations a thousand times before
  - They know what parts to zero in on and what parts they can skip

## Transitioning into research

- It's hard! Be kind to yourself
- Meet frequently with your advisors
  - "But I don't have anything new to show them"
  - Go talk to them anyway. They can help you get unstuck.
  - You can't actually hide. They notice you're not emailing them.
- Write a bad paper
  - Do not expect your first attempt to be good. Just get one done.
  - Procrastination often comes from a fear of failure

# Embrace a growth mindset

- Your "type" is not fixed!!
  - Intelligence is malleable, not a parameter waiting to be uncovered
  - Immutable talent is inconsistent with research on human development
- All skills get better with practice. Research is no exception.
  - Your standards develop faster than your ability (look up Ira Glass & the "taste gap")
- Find ways to worry less about what other people think of you
  - Your ideas will improve; their initial impressions will update
  - They aren't paying as much attention to you as you think
- Find ways to accept your performance in the present
  - It's a journey: Where you are today is not where you will be tomorrow
  - All you can do is try your best in each moment

#### Balance your time

- Do not try to work all the time
  - Sleep and breaks can improve motivation & focus
  - Total productivity has an interior solution (to say nothing of total utility)
  - Do outside activities. Have a social life. Make friends who aren't economists.
- "Work is just what I do when I have nothing else scheduled"
  - There is no end to the work you could do
  - Carve out times to not work. Give yourself permission to clear your mind.
- The risk: Your work becomes your identity
  - Then when your research doesn't go well, you feel like a failure
  - Your research will not always go well
  - But you will never be a failure.

## **Choosing advisors**

- Consider younger senior faculty
  - Far enough in their career that they have influence and stability
  - Early enough that they're working at the methodological frontier
- Get at least one you feel you can connect with on a personal level
- Extricate yourself early from any toxic relationships
  - Unconstructive criticism? Lack of boundaries? Pressure to work all the time?
  - Not worth it in the long run

# Where to get research ideas? My view so far

- Reading widely about problems that people care about in the real world
  - News media, especially outlets that focus on investigative journalism
    - For my US interests: High Country News, Bitterroot, ProPublica, Grist
    - For my India interests: Down to Earth, The Scroll, The Wire
  - Reports by think tanks, policy organizations, advocacy groups
- Making connections between fields
  - Lots of arbitrage opportunities out there
    - An insight from health insurance markets becomes relevant to flood risk
    - A new tool from IO helps solve a longstanding problem in ag econ
    - Sociologists identify an important factor but the direction of causality is unclear
    - Advances in environmental monitoring inspire a new identification strategy
  - This is why it's useful to attend talks outside your specific interests

# How much to strategize what you work on and how

- Maybe a little bit
- Not too much
  - You'll do a much better job on projects you're excited about
  - The strategy might turn out to be wrong
- When your gut instinct is strong, don't let your advisors overrule it
- I try to find projects at the intersection of:
  - I think it's important and exciting
  - Plenty of other economists will find it interesting
  - It can be answered convincingly with the tools I have

#### The research frontier moves fast

	2012	2014	2016	2018	2020
	Started grad school		Finished Now grad school		
Environment & development:	"Wow, this field is wide open!"		Tons of great papers, no more low-hanging fruit		
Structural models:	"Assumptions are ridiculous. I want no part of this"			Models are reasonably plausible. "I should invest more"	
Machine learning:	Huh?			First papers use it	Everybody's doing it

Nobody knows for sure what will be rewarded a few years from now

- Not even your advisers

## Go to conferences, if possible

- Networking is just making friends
  - With appropriate professional boundaries
  - Get to know your peers at other schools
    - They'll be your colleagues for decades and will hold power in the future
  - You're probably not going to impress senior academics at this stage anyway
- Practice presenting externally, in fairly low-stakes settings
  - Audiences are friendly at most conferences
  - Especially in environment and resources
- Exposure to a wider variety of perspectives and values
  - Your own department has an idiosyncratic culture (all departments do)

## Choosing a job market paper

- Mostly just your most promising project by 4th year
- Ideally represents the kind of research you want to keep doing
  - In terms of both topics and methods
  - Potential employers will categorize you based on it
- Good to push yourself & demonstrate lots of skills
  - But don't work too far beyond the edge of your knowledge
  - To anticipate and answer questions well, you have to understand what you're doing at 1-2 levels deeper than what you actually put in the paper

# Surviving the job market

- Awesome:
  - Meet lots of people who are interested in you and your work
  - Everybody gets a job! (usually)
- Less awesome:
  - Emotional rollercoaster. Low control, high uncertainty
  - Rejections. >95% of applications do not result in a flyout, even for "stars"
- Do not seek external validation from the job market
  - Get your validation beforehand (ideally from yourself)
- Always have a backup plan
  - What's your second choice sector?
  - Do the work to realistically picture yourself there

# Go to therapy (when available/affordable)

- Everybody can benefit
- In one survey, 18% of economics grad students had moderate to severe symptoms of depression and anxiety (Barreira et al. 2018)
- You probably have some unhelpful aspects of your worldview, self-image, thought processes, and behavior patterns
- Therapy can help you pinpoint their roots and learn more adaptive ways of handling things
- Books and apps can also be helpful if talk therapy is infeasible

## The achievement/status game

- You've probably been playing it for a long time. When does it end?
  - Never.
  - Jobs, publications, tenure, promotion, keynote addresses, prizes...
  - It can be hard to ever feel like you "made it" because by the time you get there, you've already raised the bar for yourself and are now comparing yourself against an even more elite group of people
  - Many people in academia are deeply unhappy
- You get to choose when you cash in!
  - Other careers will pay you more to work on things you're not excited about
  - If you want to stay, keep playing the game at least a little bit
  - But make sure you enjoy things along the way