Strategies (and Encouragement) for Ph.D. Health Economists on the Job Market

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August 21, 2020
Your Objective

- In academic job search, success is defined as a good match of applicant with the position/institution
  - Everyone’s best match is different

- For you to find a good match:
  - You must know where you fit
    - Fields you will work in; ideally, even the subfields
    - Type of research you will pursue (e.g. methodological approach)
    - Your comparative advantages as researcher and teacher
  - These might be hard for you to decide while still in graduate school, but knowing this will help you immensely on market
  - Be honest with advisors and potential employers about interests, skills, and what you seek in a match
Preferred Sectors *Before* Going on the Market, Job Candidates 2007-10

<table>
<thead>
<tr>
<th>Preferred Job Type</th>
<th>Mean</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant professor at four-year college</td>
<td>0.081</td>
<td>0.008</td>
</tr>
<tr>
<td>Assistant professor at university</td>
<td>0.719</td>
<td>0.013</td>
</tr>
<tr>
<td>Researcher at NGQO</td>
<td>0.111</td>
<td>0.009</td>
</tr>
<tr>
<td>Researcher in business or industry</td>
<td>0.068</td>
<td>0.008</td>
</tr>
<tr>
<td>Postdoctoral fellow</td>
<td>0.020</td>
<td>0.004</td>
</tr>
<tr>
<td>Observations</td>
<td>1,333</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Table pools observations from premarket surveys from the 2007–10 job markets and uses premarket weights. “NGQO” stands for “nonprofit, government, or quasi-governmental organization.”

Source: Helppie-McFall et al. (2015)
Supply and Demand

- **Supply** of new Ph.D. Economists (NSF Survey of Earned Doctorates, 2019) in U.S.:
  - 1,247 in 2018

- **Demand** for new Ph.D. Economists: # new jobs in economics advertised during 2018 (*AER P&P*, 2019):
  - New jobs: 4,028
    - New academic jobs: 3,041
    - New nonacademic jobs: 987
  - More than 3x the flow of new econ PhDs from American universities, but:
    - Also includes senior openings
    - Some PhDs trained abroad are applying for these too
But What will the Demand for Economists be This Coming Year?

• Unknown at this point, but…
  – YTD (as of end of July 2020), # jobs listed in JOE are down 24.6% compared to 2017-19
  – The financial crisis of 2008-09 resulted in:
    • One bad year: 2009 (# jobs listed in JOE down 20.7%)
    • Two slightly down years: 2010 (down 2.7%) and 2011 (down 3.0%)

See reports on the webpage of the AEA ad hoc committee job the job market:
https://www.aeaweb.org/joe/communications
Should You Go on the Market This Year?

• Talk this over with your advisor, committee! Their opinions are most important

• My take:
  – If you a 4\textsuperscript{th} year or earlier, sit this out and do more research, improve your JMP, publish
  – If you are a 5\textsuperscript{th} year, discuss carefully with your advisor. If JMP not strong, consider staying another year.
  – If you are a 6+ year, you \textbf{should} go on the mkt. Why?
    • Even if # jobs falls 50%, that’s still ~2k new jobs, higher than the ~1,200 new Ph.Ds
    • Your 1\textsuperscript{st} job isn’t for life – there’s an active market for asst profs, advanced PhD economists
    • Worst case, no one will judge you for not getting job this year
What Type of Job is the Best Match?

• If academic: what type of academic institution and department?
  – Liberal arts college – more teaching, undergrad but not PhD students.
  – Research universities – more research, less teaching. Best department fit depends in part on your subfield of health economics:
    • Economics department: any subfield potentially relevant but those who are more structural/theoretical/methodological may be more attractive to econ depts
    • Business School: esp. IO, pharma, health care
    • Public policy: empirical, policy-relevant topics; must play well with other disciplines
    • Public health: may be hard money or soft money; must be play well with other disciplines
    • Medicine: likely soft money so grant-writing important; little teaching; must play well with other disciplines
Implications of your First Departmental Home for your Publishing

- Economics: value econ journals almost exclusively, “top 5” especially

- Business: value econ journals plus business journals (e.g. J. of Marketing, J. of Management, Strategic Management J)

- Policy: broad set count - econ, health policy, medical journals

- Public Health, Medicine: more medical journals (e.g. JAMA, NEJM), less economics journals, need more publications for tenure so shorter papers with more authors, more interdisciplinary work
Consider All Your Options

• Post-doctoral fellowships
  – SIEPR at Stanford
  – Harvard Society of Fellows
  – NBER postdocs in Aging & Health
  – NIH-funded ones at Population Centers – you’ll compete against sociologists/demographers for these
  – If ad hoc individual postdoc, find out how much time you get for your own research (if any)

• Non-academic jobs: huge variety!
  – Government (e.g. Federal Reserve, BLS, FTC, Census, CBO, AHRQ)
  – NGOs (e.g. IMF, World Bank, OECD)
  – Contract research organizations (e.g. RAND, Mathematica Policy Research, Urban Institute, Abt Associates)
  – Consulting (e.g. Analysis Group, Charles River Associates, Cornerstone Research)
  – Industry (Google, Amazon, Ebay, Twitter)

• *There are good people everywhere*
Statement of AEA Executive Committee & AEA ad hoc Committee on the Job Market (Aug 2020)

- Concern about Econ job market unraveling now that there’s no in-person AEA meeting
  - Want market to be “thick,” with many participants on each side, at each stage
  - AEA goals of fairness, inclusivity & diversity fostered by having single timeline known to all
- Suggest employers wait until Monday December 7, 2020 to issue interview invitations
  - Why: signals will be delivered Dec 2. Want employers to review & consider them
- Suggest conducting initial interviews starting Monday Jan 6, 2021
  - Why: so all can participate in AEA meetings (Jan 3-5). Not earlier because of COVID disruptions to job candidates’ teaching and research.
- Use EconTrack to indicate when issue invitations for interviews and flyouts, and close search
Rough Timeline

• Sept – Nov, 2020: apply for jobs.
• Mid-late Nov: Register signals with AEA
• Dec 2, 2020: job candidates’ AEA signals sent to employers
• Dec: employers schedule interviews with you
• Dec: initial interviews - European job market (since 2018). Candidates can register Sept 15.
• Jan 6, 2021 onwards: initial interviews – U.S. job market
• Jan - May: second round (“flyouts” – job talks, 1:1 meetings), offers, negotiations, accept offer
• March: AEA scramble

But be prepared for greater variation than usual (sooner or later)
Things You Can Do Now

• Revisit your job candidate website, and other online presence
  – Keep it professional!
  – *Please* do not use Google Docs or any other gated website for your CV, JMP

• If you don’t already have them, get:
  – At least two professional, conservative outfits for interviewing
  – *Reliable* laptop for working on your job market paper and presentation while traveling
  – *Reliable* mobile phone
  – Carry-on luggage
  – Credit cards with high credit lines
  – *Fast, reliable internet connection* – will be doing interviews and seminars – new!
  – *Private, quiet room in which to conduct interviews and seminars* – new!
## Percent of JOE Listings by Month, 2017-19

<table>
<thead>
<tr>
<th>Month</th>
<th>% Listings 2017-19</th>
<th>% Jobs 2017-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>0.84%</td>
<td>0.56%</td>
</tr>
<tr>
<td>February</td>
<td>6.99%</td>
<td>5.09%</td>
</tr>
<tr>
<td>March</td>
<td>5.05%</td>
<td>3.63%</td>
</tr>
<tr>
<td>April</td>
<td>2.86%</td>
<td>2.01%</td>
</tr>
<tr>
<td>May</td>
<td>2.61%</td>
<td>2.09%</td>
</tr>
<tr>
<td>June</td>
<td>2.12%</td>
<td>1.61%</td>
</tr>
<tr>
<td>July</td>
<td>0.68%</td>
<td>0.49%</td>
</tr>
<tr>
<td>August</td>
<td>9.87%</td>
<td>9.77%</td>
</tr>
<tr>
<td>September</td>
<td>19.47%</td>
<td>21.35%</td>
</tr>
<tr>
<td>October</td>
<td>28.24%</td>
<td>31.11%</td>
</tr>
<tr>
<td>November</td>
<td>13.99%</td>
<td>15.02%</td>
</tr>
<tr>
<td>December</td>
<td>7.30%</td>
<td>7.27%</td>
</tr>
</tbody>
</table>
Applications

• Starting in September, check JOE weekly, but don’t drive yourself crazy checking
• It is expected you will apply for some jobs you are unsure about; both sides of market learn during job search
• Don’t apply for jobs you are certain you won’t accept
• Not unusual to apply for 100+ jobs
  – Average of 107 applications for Econ PhD job seekers during 2007-2010 (Helppie-McFall et al., 2015)
• Keep your advisors informed on your list of interviews – ask them to contact the employers you see as particularly good fit
  – Also show them entire list; they may know people at some places, may be willing to contact them
Applying

- Job market materials:
  - Cover letter: can explain why you’re a good match for the position (cannot / should not do for every application, just the closest matches)
  - Job market paper
  - Recommendation letters
  - Optional: other papers than your JMP – only if they’re strong
  - If requested: teaching statement, research statement, diversity statement

- AEA has an electronic clearinghouse for the job market – JOE Network – that facilitates applications, exchange of information
  - Other clearinghouse: EconJobMarket.org (used by European job mkt)
  - Some individual employers also have own portals you must use

- Employers may contact you to request that you apply – send again to specific individual who asked
How Do Employers Decide Who to Interview?

- Sebastian Tello-Trillo conducted a 2020 survey via Twitter of faculty re letters of recommendation (N=42).

- “Rank the following items in terms of importance for selecting candidates to interview at the AEA meetings (1 being most important)” followed by radio buttons for 1 through 6:

<table>
<thead>
<tr>
<th>Item</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Market Paper</td>
<td>2.02</td>
</tr>
<tr>
<td>Letters of recommendation</td>
<td>2.62</td>
</tr>
<tr>
<td>Non-JMP Research</td>
<td>3.03</td>
</tr>
<tr>
<td>Informal recommendations</td>
<td>3.57</td>
</tr>
<tr>
<td>Fit with teaching needs</td>
<td>3.97</td>
</tr>
<tr>
<td>Statements (research, teaching)</td>
<td>4.17</td>
</tr>
</tbody>
</table>
Data: 2020 survey by Tello-Trillo. N=42. Vertical line indicates mean
Signals

- Register with AEA to send two “signals of special interest” to employers in December
  - Can send to a JOE ad or enter any email address (if employer didn’t have listing in JOE)

- In December 2019, 1,766 job candidates sent 3,434 signals to 648 unique employers
  - More evidence that everyone is looking for their own best match

- Does sending a signal help you get an interview?
  - Coles et al. *JEP* 2011 finds signaling increases probability of interview by 6.8 ppts (hypothetical 3rd signal or 2 signals if had participated)
  - Analysis of more recent data suggests signaling increases probability by 8-9 ppts (Siegfried, *AEA P&P*, 2020)
Where Should You Send Your Signals?

• Where they do you the most good – move you from off the interview list to on it, for a job you value highly

• That’s hard for you to know, so here are some things you can consider:
  – Jobs you see as a great match
    • Explain why in the space for brief comments – explain why it’s a great match
  – Places you can’t otherwise credibly signal interest
    • Your advisor doesn’t know anyone there they can contact
  – Places that might want you but be skeptical of your interest: non-US, small town, liberal arts college vs research university, nonacademic, etc.
How Do You Know if You’re NOT Getting an Interview (or Flyout)?

• You will **not** be notified directly by the employer if you are not going forward in the search
  – You will be ghosted

• However, AEA sponsors information page called Econ Track:
  – [https://www.aeaweb.org/econtrack](https://www.aeaweb.org/econtrack)

• Employers are asked to list:
  – Date made interview invitations
  – Date made “flyout” invitations
  – Whether search is closed / position filled
Initial Interviews

- Historically, took place in person at ASSA Annual Meeting in early January
  - No in-person ASSA meeting in 2021; entirely online
- This year, expect virtually all interviews to be by Skype, Zoom, or phone
- Timing of initial interviews may be more variable
  - AEA is considering recommending a timeline for these – want market to be thick, reduce uncertainty for everyone, give more marginalized groups a fair chance
- Your placement committee should organize practice (mock) interviews to prepare you
  - If they don’t, ask them (or your advisors) to do it
  - Take these seriously, practice by yourself (and with other job candidates) in advance
Interviewing Tips

• When contacted for interview, ask which individuals will be interviewing you
• Research the employer and the individual interviewers
• Practice answering the likely questions listed in my job market guide [https://www.aeaweb.org/content/file?id=869](https://www.aeaweb.org/content/file?id=869)
  – Practice many times your opening “spiel” on your JMP: what’s your research Q, why should everybody care, how did you test it, what did you find, and what are the implications of your findings?
  – Understand where you fit in the discipline and literature, what are your comparative advantages
  – What is your research agenda for the next 5 years? What’s your next paper unrelated to your dissertation?
  – What are you willing to teach, and how would you teach it?
  – Be able to explain why you’re a good match for the search (if you are)
Interviewing Tips

• Have list of questions to ask *them*, to help you determine whether it’s a good match
  – Do NOT ask about salary or chances of tenure
  – Try not to ask anything easily found online, e.g. number of faculty in the department – you should do your homework in advance
  – DO ask about the research environment, interests and placements of students, future of department

• Don’t just be reactive; have mental list of information you absolutely want to convey to this employer, and make sure you do
What if You’re Asked Something Inappropriate?

• Inappropriate includes: whether married, age, whether have or plan to have kids, etc.
  – Not illegal but HR departments advise against asking, and exposes employer to risk of later lawsuit if there is allegation of discrimination on that dimension (EEOC)

• Possible response: “I assume you’re asking because you’re wondering whether I can take the job and give it my full commitment. I assure you that I can.”

• If experience discrimination or harassment, contact AEA ombudsperson:
  – https://www.aeaweb.org/about-aea/aea-ombudsperson
  – aeaombuds@whiteandstradley.com
What Are Employers Looking For?

• Someone who will be a very successful researcher
  – Intelligent, knows the literature, strong research agenda, ambitious, energetic, ideally already has papers published or forthcoming

• Someone who will teach and advise students well
  – Organized, experienced, dedicated, kind, good communicator (fluent English), no possibility they would discriminate or harass

• Someone who would be a nice colleague
  – Friendly, reasonable
  – Openness to collaboration
  – Team player, willing to produce public goods (committee work, administration)
“Flyouts” (Second Round)

• Traditionally: after interviews, employers invited 3-5 candidates for campus visits
  – Big variation in timing; some departments take 2-3 weeks to determine list, or may ask you at end of interview!

• Traditionally, visit consists of:
  – Meetings 1:1 or in small groups with faculty
  – Research seminar (job talk) – 90 minute
  – Dinner(s) with faculty

• This year:
  – Assume no travel; “flyouts” likely to all be online
  – Schedule different: no group dinner, may be more or fewer 1:1 meetings – can spread out over several days. Definitely still a seminar.
  – Timing likely to be more variable
  – Number of finalists likely to be more variable – lower money cost and probably lower time cost (no dinner, flexible timing for 1:1 chats)

• You should refuse invitation if know there’s no way you’d ever take the job (they’ll be grateful you didn’t waste their time)
  – Only decline if you have offer in hand that dominates that job
Job Talk

• Most valuable asset on job market is high-quality, polished job talk
  – Practice it many, many times!
  – Always record the feedback you get and use it to make the paper and talk better

• Design like hourglass:
  – Beginning has wide, broad appeal - anyone can understand why it’s an interesting question
  – Middle is narrowly focused on your methods
  – Conclusion again has wide, broad appeal – anyone can understand why what you found is important

• Expect to be interrupted with questions – it’s a dialogue
  – Do not interrupt your own sentences to call on questioners – wait until you finish your thought
  – Do not dodge questions – answer as best you can
  – Do not let someone derail your talk – you can tell a persistent questioner that you have to move on and will follow up with them later
Secondary Market “Scramble”

- AEA sponsors a “scramble” in late March
- Unmatched applicants and employers register, then each can see who is available on the other side
  - Only registrants can see who is available—no stigma
- AEA plays no further role; applicants and employees contact each other
- Interviews, visits, job matches result
- In March 2020, 691 job candidates and 76 employers (with 86 jobs) participated (AER P&P, 2019)
TABLE 4
Mean Number and Success Rates by Job Market Stage

<table>
<thead>
<tr>
<th></th>
<th>Applications</th>
<th>Interviews</th>
<th>Fly-Outs</th>
<th>Job offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>107.0 (2.3)</td>
<td>16.8 (0.4)</td>
<td>5.7 (0.2)</td>
<td>2.9 (0.1)</td>
</tr>
<tr>
<td>Observations (N)</td>
<td>905</td>
<td>905</td>
<td>905</td>
<td>905</td>
</tr>
<tr>
<td>Proportion resulting in interview</td>
<td>0.194 (0.006)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion resulting in fly-out</td>
<td>0.076 (0.004)</td>
<td>0.366 (0.009)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion resulting in job offer</td>
<td>0.040 (0.002)</td>
<td>0.200 (0.006)</td>
<td>0.573 (0.011)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>904</td>
<td>898</td>
<td>863</td>
<td></td>
</tr>
</tbody>
</table>

Note: Standard errors in parentheses. Mean number applications, interviews, fly-outs, and job offers are estimated for respondents who provided information about outcomes at all four stages. Mean success rates are estimated for respondents who provided information about outcomes at all four stages and had at least one choice at the stage for which the success rate is calculated. Estimates use post-market survey weights. Sample size is larger than survey sample column of table 1 because no additional covariates are included here.

Source: Helppie-McFall et al. (2015).
Offers and Negotiating

• If a department makes you an offer, you’ll likely be notified by phone by the search chair or department chair
  – Always get the offer in writing

• Offer will include:
  – Salary
    • 9-month, 10-month, or 12-month
    • Hard money or soft money
  – Summer support (if on 9-mo or 10-mo contract)
  – Course reductions for first year or two
  – Research funds / travel budget / office budget
  – Computer budget
  – Moving expenses
Negotiating

• Typically given 7-10 days to consider the offer
  – Could be as little as a weekend to decide
  – *Often but not always* possible to get extension

• Tell other employers that you have an offer

• Offers usually only improved if you have richer offer from institution in same market of similar or higher quality/ranking

• Be pleasant during negotiation — people have long memories, and *everybody talks*

• When deciding, remember that the quality of colleagues and grad students are important
  – Don’t over-weight a few thousand bucks relative to your happiness and future career trajectory
# Starting Salaries of New Assistant Professors, 2019-2020

<table>
<thead>
<tr>
<th></th>
<th>Salary</th>
<th>Additional compensation$^b$</th>
<th>Teaching load (courses per year)$^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PhD institutions</strong></td>
<td>$135,583 (47)</td>
<td>$52,922 (33)</td>
<td>3.1 (47)</td>
</tr>
<tr>
<td></td>
<td>[$22,782]</td>
<td>[$37,655]</td>
<td>[0.90]</td>
</tr>
<tr>
<td><strong>MA institutions</strong></td>
<td>$90,056 (9)</td>
<td>$32,432 (7)</td>
<td>3.7 (7)</td>
</tr>
<tr>
<td></td>
<td>[$11,092]</td>
<td>[$24,536]</td>
<td>[1.25]</td>
</tr>
<tr>
<td><strong>BA institutions</strong></td>
<td>$96,311 (21)</td>
<td>$18,132 (8)</td>
<td>4.96 (25)</td>
</tr>
<tr>
<td></td>
<td>[$37,671]</td>
<td>[$12,752]</td>
<td>[1.11]</td>
</tr>
</tbody>
</table>

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**Notes:**

$^a$ Some institutions hired more than one new assistant professor; thus means cover more people than institutions but are not weighted by number of new hires. Standard deviations are in brackets.

$^b$ Includes guaranteed summer compensation (over all years) and other compensation of cash value to employees, such as a signing bonus. Does not include fringe benefits, moving expenses, computer that remains the property of the institution. Mean computed over only institutions reporting additional compensation.

$^c$ Mean computed over only institutions reporting teaching load.

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Job Market Outcomes: 2007-2010

<table>
<thead>
<tr>
<th>Panel A: Accepted job type</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant professor at four-year college</td>
<td>0.08</td>
</tr>
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<td>Assistant professor at university</td>
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</tr>
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<td>Researcher at NGQO</td>
<td>0.19</td>
</tr>
<tr>
<td>Researcher in business or industry</td>
<td>0.07</td>
</tr>
<tr>
<td>Postdoctoral fellow</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Source: Helppie-McFall et al. (2015)
NGQO=nonprofit, govt, or quasi-govt organization
Good News

• Vast majority land a job they like
  – Only 2.1% of econ PhDs unemployed after job search season (Siegfried and Stock, 2004)
  – 64% get their first-choice job type (academic, govt, etc.); McFall et al. (2015)
    • 20% get their second-place job type
  – 69.1% said they were “very” or “extremely” satisfied with their job placements (McFall et al., 2015)
    • Another 24.4% were “somewhat” satisfied
  – 94% of PhD economists reported they liked their new jobs “very much” or “fairly well” (Siegfried and Stock, 2004)

• Throughout career, Ph.D. Economics have lowest unemployment rate of any doctoral field (NSF, 2010): 0.9%
  – At that time, national UE rate was 9.6%
Summary: Four Most Important Pieces of Advice

1. Know where you fit in the profession
   a. What fields you will specialize in
   b. How your job market paper relates to the literature
   c. Your comparative advantages as a researcher and teacher

2. Success on the job market is finding a good match – a job in which you are appreciated and in which you can grow and improve

3. Honesty with your advisors and potential employers about your interests, comparative advantages, and constraints on your search will improve your chances of finding a good match
Summary: Four Most Important Pieces of Advice (cont.)

4. The job market is first period in a repeat game. You will continue to interact with people you meet on the job market as journal referees, discussants, grant reviewers, tenure letter writers, and colleagues. Conducting yourself with maturity and integrity will pay dividends far into the future.
For More Information

AEA’s Job Openings for Economists (JOE) Website
https://www.aeaweb.org/content/file?id=869

Communications from the AEA’s ad hoc Committee on the Job Market: https://www.aeaweb.org/joe/communications
