# A GUIDE AND ADVICE FOR ECONOMISTS ON THE U.S. JUNIOR ACADEMIC JOB MARKET 2014-2015 Edition

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#### **Abstract**

This guide, updated for the 2014-15 job market season, describes the U. S. academic market for new Ph.D. economists and offers advice on conducting an academic job search. It reports findings from published papers, describes practical details, and provides links to internet resources. Topics addressed include: preparing to go on the market, applying for academic jobs, the AEA's new electronic clearinghouse for the job market, signaling, interviewing at the ASSA meetings, campus visits, the secondary market scramble, offers and negotiating, diversity, and dual job searches.

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#### Introduction

This document serves two purposes. First, it describes the U. S. academic job market for new Ph.D. economists; specifically: deadlines, what salaries and benefits have recently been offered, and what a job candidate should expect at different stages of the hiring process. Second, it offers advice on conducting an academic job search.

In offering advice, this document takes as given many of the most important factors that drive hiring decisions: the quality of your research, your graduate training, and the recommendations of your advisors. For this reason, following the advice in this guide cannot guarantee you a job. The advice herein focuses on presentation and etiquette, which at the margin may influence the hiring decision. I hope that you will find this guide helpful, but every job market search is different and the experiences reflected here may not match your own.

Most of this guide is outlined according to the chronology of a job search. The remainder, at the end, is devoted to issues of diversity, dual job searches, and a brief summary.

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The timing with which you will pass through stages of the job market depends on the market

segments in which you participate. Carson and Navarro (1988) define three segments of the academic job market for new economists:

- The pre-emptive market: conducted at an accelerated pace by departments seeking to
  interview prior to the Allied Social Science Association (ASSA) meetings the candidates
  they identify as a close match. Typically only a few candidates and highly-ranked
  departments participate in this market. Informal recommendation and scouting play a
  greater role in candidate selection in the pre-emptive market than in the two subsequent
  market segments.
- 2. The primary market: the largest of the three segments. Initial interviews take place at the ASSA meetings in early January.
- 3. The secondary market: used by employers if their top candidates in the primary market proved to be poor matches or if they advertised a job opening so late as to be unable to interview at the ASSA meetings. Campus visits in the secondary market begin after the primary market has begun to clear.

A rough schedule for each of the three market segments is listed in Table 1. Unless stated otherwise, the timing of events reported in this document is that for the primary market.

There are two major types of academic employers: research institutions and teaching institutions. Both types value proficiency in research and teaching, but in general, tenure decisions are more heavily based on research record and less heavily based on teaching proficiency at research universities than at teaching institutions. Much of the information in this guide applies to both markets, but the guide is primarily targeted to applicants to research universities.

Table 1: Schedule of Job Search By Job Market Segment

Segment of Market	Applying for Jobs	First Interview Conducted at ASSA Meetings?	<b>Campus Visits</b>	Offers and Negotiations
Pre-Emptive	October- November	No	December	December
Primary	October- December	Yes	January-March	February-March
Secondary	October- February	Maybe	March-April	March-May

Note:

Segments are defined according to Carson and Navarro (1988).

The goal of your search is <u>not</u> to get a job in the highest-ranked department; it is to find a job in which your work is understood and appreciated, you find the work enjoyable and gratifying, and in which you can be productive and continue to grow and improve. In a job search, success is defined as a good match of applicant and department. In order for you to find a good match, it is crucial that you understand where you fit in the field of economics: you need to know in what field(s) of economics you will work, the type of research you will pursue, and your comparative advantages as a researcher. It may be difficult for you, as a graduate student, to know where you fit in the discipline, but that information will help you immensely on the job market. An important way that you can increase the probability of finding a good match is to be honest with your advisors and potential employers about your interests, skills, and what you are looking for in a match.

You should not think of other job market candidates as direct competitors; each of you is seeking a match that depends on your individual characteristics, preferences and constraints. Be nice to others who are on the job market; share information and be supportive.

The most important determinant of your success on the job market is the quality of your job

market paper and how well you present it. You should focus your time and effort towards improving your paper, your interview skills, and your job talk (your 90-minute seminar based on the job market paper).

During your search, keep in mind two basic facts about the job market for new economics Ph.D.s. The first is trickle down. Each year, almost every economics Ph.D. program produces more Ph.D.s than it can hire. As a result, candidates from the top departments trickle down, filling openings at lower-ranked departments, crowding most of the graduates of those departments to jobs in departments further down the rankings. Stock, Alston, and Milkman (2000) find that the vast majority of new economics Ph.D.s in 1995-96 moved to jobs in departments at least 50 ranks below their graduate department; excluding moves to unranked departments, the average drop was 59 ranks.

On the bright side, the second basic fact is that almost everyone lands a job that they like. In a survey of new economics Ph.D.s in 2001-2002, Siegfried and Stock (2004) find that only 2.1% were unemployed shortly after the job search season. In fact, National Science Foundation data indicate that Ph.D. economists have the lowest unemployment rate (0.9%) of any doctoral field, as well as one of the highest median salaries of any doctoral field. Finally, the vast majority of people are happy with the outcome of their search. Of the new Ph.D. economists in 2001-02, 94% reported that they liked their jobs very much or fairly well (Siegfried and Stock, 2004).

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<sup>1</sup> The NSF's list of unemployment rates by doctoral field is here:

http://ncsesdata.nsf.gov/doctoratework/2010/html/SDR2010 DST4 1.html

<sup>2</sup> The NSF's list of median salaries by doctoral field is here:

# 1. Preparing to Go on the Job Market

Your dissertation advisors will help you determine whether you are ready to go on the job market. It is more important whether your primary advisor thinks you're ready to be on the market than whether you think you're ready to be on the market. You should certainly not go on the market without your advisors' approval, and you should have that approval by the Spring before you will apply for jobs. The most important indicator of your readiness is whether you will have a good job market paper completed early in the Fall. A second indicator is whether the progress on the rest of your dissertation is such that you are likely to defend the following spring. Sometimes graduate students who don't feel fully ready consider going on the market selectively, applying to only a few places, and then if necessary going on the market in earnest the next year. In my opinion, that is a bad strategy. There are high fixed costs (both money and time) to going on the market. Moreover, departments may notice that you have been on the market two years in a row and assume that you bombed on the market the first time and therefore you must be low quality. Make sure that you are ready and then conduct a full market search. Alternatively, apply for postdoctoral fellowships and then conduct a full market search in two years. (Sometimes circumstances change and people are forced to withdraw from the market. It is costless to do so before your department's placement webpage goes online. The later you withdraw, the greater the risk that some prospective employers may remember you as having been on the market and you may be viewed negatively the next time you go out.) This section is devoted to things you can do during the spring and summer to prepare for your job search.

Prospective employers will overwhelmingly judge you by your job market paper and how well you present it. Try to complete your job market paper by the end of summer. Keep in mind John Cochrane's Writing Tips for PhD Students:

http://faculty.chicagobooth.edu/john.cochrane/research/papers/phd\_paper\_writing.pdf

Another useful resource is Thomson (2001): A Guide for the Young Economist: Writing and Speaking Effectively About Economics. The job search will likely consume more time than you anticipate (October to March), leaving you with less time to revise your paper than you might

expect. Keep your advisors up-to-date with your research and think carefully about their critiques. You will likely have blind spots with respect to your research, so also ask faculty and fellow graduate students who have no previous exposure to your work to read and critique your paper.

Present your job market paper at seminars and conferences. You will quickly learn what other people think are the weak points; work to strengthen those areas. Practice will also enhance your presentation skills. Organize an informal workshop with the other graduate students who will be on the job market and practice presenting your job market paper. Submit your job market paper to be presented at the regional economics association conferences. The odds of acceptance are higher at these conferences than at the ASSA meetings. You are not restricted to the regional association that corresponds to the location of your graduate school; you can apply to present at the conference of any regional association. In general, attendance at the sessions of regional meetings is much lower than that at the ASSA meetings, but you will get practice, discussant comments, and some visibility for you and your work. The meetings of the Eastern Economic Association and Midwest Economics Association are in March, those of the Western Economic Association are in June-July, and those of the Southern Economic Association are in November.

Two summer workshops aim to help graduate students prepare for the job market.

• The Western Economic Association International (WEAI) sponsors a Graduate Student Dissertation Workshop. Each department can nominate up to two Ph.D. students who will be on the job market; a competitive selection process determines the final participants. Those selected receive: complementary membership in the WEAI, a grant to help cover airfare, and hotel accommodations during the workshop. During the workshop, participants practice their job talks and receive feedback from faculty mentors. The faculty mentors also conduct mock interviews of candidates. Nominations are due in November the year before you will be on the market, with selections announced in February and rough drafts of job market papers due in April. Information about the event is here: <a href="http://www.weai.org/gsw">http://www.weai.org/gsw</a>

In recent years, a handful of economics departments have sponsored EconCon, a
conference for Economics Ph.D. students to practice and receive feedback on their job
talks. Papers are selected, and the conference is organized, by Ph.D. students.
Information on the August 2014 event, which was held at Princeton, is here:
<a href="http://www.princeton.edu/~econcon/">http://www.princeton.edu/~econcon/</a>

Prepare your curriculum vitae (CV). It can take a surprisingly long time. To help you decide what information you should list, examine the CVs of last year's job candidates from top Ph.D. programs. The National Bureau of Economic Research (NBER) web site provides links to the job placement web pages (which contain job candidates' CVs) for major economics departments in the U.S.; the URL is <a href="http://www.nber.org/candidates/">http://www.nber.org/candidates/</a> Keep your CV current; the date your CV was revised should appear at the top of it. Keep detailed lists of every presentation, every award and grant you receive, and the journals for which you have refereed. Some of this may not appear on your current CV but you will modify your CV over time. List your mobile phone number on your CV. Your department should create a placement webpage from which prospective employers may download your CV and job market paper; Adobe Acrobat (PDF) is the best format for these documents.

Decide which faculty you will ask to write letters of recommendation and keep them informed of your research progress. All else equal, letters from senior faculty are more influential than those from junior faculty. All of your letter writers should know you and your work well.

Decide which types of jobs are the best match for you, in terms of field of specialization, type of department, and type of institution. Consider economics departments, business schools, and schools of public policy. Health economists will also want to consider schools of public health and medical schools. You may also want to consider searches in government (e.g. the Federal Reserve banks, the Bureau of Labor Statistics), international organizations (e.g. the World Bank, the IMF), think tanks (e.g. RAND, Research Triangle Institute, Mathematica), and the private sector.

Several AEA newsletters contain rich information about the diversity of jobs available to economists both within and outside academia, which will help you to better appreciate the richness of your job opportunities and better understand what types of employers may be the best match for you.

- The AEA's Fall 2012 Committee on the Status of Women in the Economics Profession (CSWEP) newsletter is devoted to "The International Job Market for Economists":
   <a href="https://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_Fall\_2012.pdf">https://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_Fall\_2012.pdf</a>
- The Fall 2011 CSWEP newsletter contains essays on working in think tanks and government:
   https://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_Fall\_2011.pdf
- The Winter 2006 CSWEP newsletter includes articles on teaching economics in different environments (e.g. liberal arts college, business school):
   http://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_Winter2006.pdf
- The Spring/Summer 2006 CSWEP newsletter includes articles on research careers for economists outside of academia (e.g. RAND, Upjohn, Federal Reserve, Bureau of Labor Statistics):
  - http://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_SprSum\_2006.pdf
- The AEA's Committee on the Status of Minority Groups in the Economics Profession
  has a newsletter with brief entries on "Economics Jobs Beyond Academia."
  <a href="https://www.aeaweb.org/committees/CSMGEP/resources/">https://www.aeaweb.org/committees/CSMGEP/resources/</a>
- The newsletters of the American Society of Health Economists have included symposia on the diversity of jobs available to health economists.
  - In the Fall 2010 newsletter, health economists working in schools of public health, public policy, medicine, and business describe their working environments and the advantages and disadvantages of each. http://ashecon.org/wp-content/uploads/2010/10/ASHEFall2010.pdf
  - o In the Spring 2010 newsletter, health economists in consulting, government, industry and think tanks likewise discuss the nature of their jobs and employers.

http://ashecon.org/wp-content/uploads/2010/11/ashecon-spring2010.pdf

Even if you're not a health economist, these symposia will help you to better understand

the differences across academic units and nonacademic employers.

You may wish to read the 2010 paper written by the AEA's Ad Hoc Committee on the Job Market, "The Job Market for New Economists: A Market Design Perspective," that was published in the *Journal of Economic Perspectives* (Coles et al., 2010). This paper provides a detailed overview of the AEA's signaling and scramble mechanisms that will be described later in this guide. <a href="http://www.aeaweb.org/articles.php?doi=10.1257/jep.24.4.187">http://www.aeaweb.org/articles.php?doi=10.1257/jep.24.4.187</a>

Buy at least two nice, conservative, professional outfits. You don't want to be frantically searching for appropriate outfits just before interviews.

Several items can make your job search easier.

- A smart phone with email access will be critical for staying in touch with potential
  employers while you travel. List your cell phone number on your CV. Make sure the
  calendar function on your smart phone is synchronized with your desktop and laptop, so
  you can edit your schedule from anywhere.
- A laptop is useful while traveling for continuing to work on your dissertation. See if
  your university can install VPN software that will allow you to remote connect to your
  computer at your home institution (e.g. to access all of your files and continue to estimate
  new models while traveling).
- Buy a briefcase in which to carry copies of your CV, papers, and the materials that will be handed to you during interviews. Carrying a backpack to your interviews isn't as professional.
- A carry-on bag that has a "suiter" (which prevents wrinkling). A carry-on is useful because the risk of your luggage being lost is higher if you check it. (The first time my luggage was lost by an airline was on my first campus visit as a job candidate.
   Moreover, in the first interview that I helped to conduct, the applicant's luggage had been lost.)

Join airline frequent flier programs and hotel frequent stayer programs. You might as well

collect the benefits for all the traveling you'll be doing!

Find out which faculty member will serve as your department's Job Placement Coordinator and determine what the Coordinator does to assist job market candidates. Find out if your department ranks job candidates by field. Determine whether your department offers financial support to its job candidates; some departments subsidize travel to conferences for interviewing.

Determine all of the deadlines for your department: e.g. for CVs (to be compiled into a departmental mailing) and for requesting letters of recommendation. Your politeness and punctuality will help your department to help you with your job search.

If you will be working as a teaching assistant or research assistant during your job search, be sure that your supervisor and employer know in advance that you will be on the market. Plan in advance how to manage your work responsibilities while juggling the demands of the job market.

Manage your online profile. If your department sets up a website for its job candidates, make sure that your photo is professional (you in a suit, looking straight at the camera; not you hiking). I recommend against posting your CV on Google Docs – prospective employers may be denied access if they aren't registered with and logged into Google. If you have silly or superficial webpages attached to your graduate student profile, take them down. Do not allow your practice job talk to be posted online.

# 2. Applying for Academic Jobs

In early fall, look for job openings that match your skills and interests. By far, the number one source of information about jobs for Ph.D. economists is Job Openings for Economists (JOE): <a href="http://www.aeaweb.org/joe/">http://www.aeaweb.org/joe/</a> Jobs are posted continuously.

You may find some relevant job openings through sources other than JOE. You might wish to try:

- Field-specific organizations; e.g. the International Health Economics Association: http://www.healtheconomics.org/jobs/
- The Association of Public Policy Analysis and Management (APPAM) encourages its institutional members to post their jobs in public policy to the website www.PublicServiceCareers.org
- Chronicle of Higher Education: <a href="http://chronicle.com/jobs/">http://chronicle.com/jobs/</a> New job listings are posted every business day, and remain online for 30 days. Most economics departments do not advertise their positions in the Chronicle, but you might find ads from interdisciplinary or unorthodox departments.

Only a decade ago, job candidates applied for positions by mailing packets that included their job market paper, CV, and cover letter. Recommendation letters would often be sent separately. That process involved high costs in time and postage for applicants, and high time costs for potential employers (even just for filing the hundreds of applications and matching them with the reference letters arriving separately). The good news is that, in order to increase the efficiency of the job market for new Ph.D. economists, the AEA has introduced an electronic clearinghouse called the JOE Network.<sup>3</sup> You should immediately create an account by going here: <a href="https://www.aeaweb.org/joe/cand.php">https://www.aeaweb.org/joe/cand.php</a>. You can later upload to your account your CV, job market paper, and other materials. This new clearinghouse is integrated with JOE, so you can

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<sup>3</sup> The AEA charged its Ad Hoc Committee on Job Market Systems Design and Implementation (Nancy Rose (chair), John Cawley, Peter Coles, Paul Milgrom, Jesse Shapiro, and Peter Rousseau) with developing the electronic job

simply click to apply to jobs advertised in JOE ads. Through this system you can request recommendation letters from your references (who will upload their letters to a separate secure portion of the JOE Network, making it quick and easy for the letters to be sent to each prospective employer). You will not be able to read the letters that your advisors write about you, but you will be able to see that the letter has been submitted. Just as you can search for ads through JOE, employers will be able to search through the registered users to find you, so be clear and specific about your fields of research and other characteristics. The JOE Network is the official electronic clearinghouse of the AEA for new Ph.D. economists, and I expect that eventually the vast majority of applications will be submitted through this system. However, 2014-15 is its first year of operation, and during this transitional period many employers may continue to request applications through their earlier mode, which might be the institution's unique portal (some universities require that all of their departments receive applications through an institution-specific website), EconJobMarket.org (another electronic clearinghouse for the economics job market; you can register here: <a href="https://econjobmarket.org/">https://econjobmarket.org/</a>), email, or good old-fashioned snail mail.

It may be helpful to provide an overview of the market for new Ph.D. economists. Table 2 describes the supply of new American Ph.D. economists using data from The Survey of Earned Doctorates, a census of all individuals receiving a research doctorate from a U.S. institution in an academic year. The table provides the last few years' worth of data because the numbers fluctuate over time. In the year 2012, U. S. universities granted 1,243 Ph.D.s in economics; of the recipients, 67.6% were male, and 41.6% were U.S. citizens.

Table 2: Recipients of an Economics Doctorate at U.S. Universities, 2010-12

	2010	2011	2012
Economics Ph.D.s Granted by U.S. Universities	1,072	1,124	1,243
Gender			
Men	65.5%	65.6%	67.6%
Women	34.4%	34.4%	32.3%
Citizenship			
U.S. Citizen or permanent resident	42.6%	38.2%	41.6%
Non-U.S. Citizens with Temporary Visa	51.8%	55.5%	52.8%

Notes: Totals include doctorates in economics and econometrics.

Sources: Tables 60 in NSF (2011, 2012, 2013).

Percents do not always sum to 100% because of non-response and rounding.

To complement Table 2, which describes the supply of new economics Ph.D.s from American universities, Tables 3 and 4 describe the demand for new economics Ph.D.s. They list the number of new academic jobs listed in JOE by month in recent years. (An important difference is that the annual data in Table 2 correspond to July 1 to June 30, whereas the annual data in Tables 3 and 4 correspond to January 1 through December 31.) Each unique job is only counted once, under the month the ad first ran. Table 3 shows that, in 2013, a total of 1,924 new academic jobs were advertised. Table 4 shows that, in 2013, a total of 866 new non-academic jobs were advertised. A comparison of the supply side (Table 2) and the demand side (Tables 3 and 4) shows that the odds are in your favor; the number of new jobs advertised in JOE is typically far higher than the number of new Economics Ph.D.s granted by American universities. For 2013, there were 1,243 new economics Ph.Ds and 2,799 new jobs for economics Ph.D.s. However, this does not necessarily mean that many jobs go unfilled. The count of academic jobs advertised in JOE includes not just openings for assistant professors but also ones at the senior level. Furthermore, the set of people competing for the junior academic jobs posted in JOE includes not just those about to receive their economics Ph.D. from a U.S. university but also those who are earning their economics doctorate in other countries, as well as some current junior faculty and postdoctoral fellows seeking new jobs, and to some extent those who earned a

Ph.D. in business, public policy, or another related field.

Tables 3 and 4 indicate that the most new advertisements are posted in October and November.

Table 3: Number of New *Academic* Jobs Posted in JOE By Month, 2011-2013

Month	2011	2012	2013
February	115	121	111
March	66	85	65
April	64	57	73
May	32	71	31
June	55	35	24
August	66	60	68
September	120	198	130
October	620	618	663
November	548	544	554
December	262	270	205
Total	1,948	2,059	1,924

Notes:

Includes both junior and senior openings.

Sources: Siegfried (2014, 2013, 2012), Tables 1.

Table 4: Number of New *Nonacademic* Jobs Posted in JOE By Month, 2011-2013

Month	2011	2012	2013
February	61	48	52
March	51	28	23
April	65	33	32
May	28	11	26
June	28	23	22
August	28	55	39
September	83	81	66
October	201	222	271
November	211	216	182
December	132	139	153
Total	888	856	866

Notes:

Sources: Siegfried (2014, 2013, 2012), Tables 1.

Table 5 lists the number of academic employers that advertised on JOE in recent years. The modal employer advertising on JOE is a university with a graduate program in economics (1,216 out of 2,208 advertising employers in 2013). Other employers with many advertisements on JOE are four year colleges (297 in 2014) and consulting or research firms (249 in 2014).

Table 5: Number of Employers Advertising on JOE 2012-2013

Type of Employer	2012	2013
Universities with graduate programs	1,241	1,216
Four-year colleges	271	297
Federal government	94	83
State / local government	27	21
Banking or finance	88	92
Business or industry	63	70
Consulting or research	279	249
Other	147	180
Total	2,210	2,208

Notes:

Includes both junior and senior openings. Sources: Siegfried (2014, 2013), Tables 2. Table 6 lists the number of times in recent years that JOE listings have specified certain fields of economics as the focus of the search. (Advertisements may list more than one field of specialization in their ads, so each ad may be counted multiple times in Table 6.) Consistently, the fields most often sought by employers are: Mathematical and Quantitative Methods, Microeconomics, Macroeconomics and Monetary Economics, and Financial Economics. Any Field is also commonly listed, especially by major research universities.

Assess how well each JOE job listing satisfies your preferences and constraints. It is expected that you will apply for some jobs you are unsure about; the job market is a learning process for both applicants and employers with interviews and campus visits used to gather information about the quality of match. However, do not apply for jobs that you are certain you would not accept; it is a waste of resources for you and the employer. Moreover, there is no point applying if your field is not close to any of those listed. Search committees roll their eyes and disregard the applications from people whose work is unrelated to the advertised fields. Trust employers to accurately describe the scope of their search in the JOE ad.

For how many jobs should you apply? That depends on how many job listings appear to be a good match with your preferences and constraints. In the Stock et al. (2000) sample of economics job candidates during 1995-96, the average applicant sent 76 applications; 25% sent 100 or more. List (2000) finds for a sample of job seekers at the 1997 ASSA meetings that the mean number of applications mailed for academic jobs was 41, with a standard deviation of 32.

Table 6: Fields of Specialization Sought In Job Openings for Economists 2011-2013

JEL	Field of Specialization Sought	2011	2012	2013
Code				
A	General Economics and Teaching	365	397	393
В	Methodology and History of	54	69	55
	Economic Thought			
C	Mathematical and Quantitative	890	876	793
	Methods			
D	Microeconomics	525	570	514
E	Macroeconomics and Monetary	479	505	513
	Economics			
F	International Economics	454	516	442
G	Financial Economics	487	504	496
Н	Public Economics	364	377	371
I	Health, Education and Welfare	373	416	362
J	Labor and Demographic Economics	303	351	319
K	Law and Economics	87	107	102
L	Industrial Organization	360	423	424
M	<b>Business Administration; Business</b>	157	164	164
	Economics; Marketing, Accounting			
N	Economic History	115	135	109
O	Economic Development,	319	333	302
	Technological Change			
P	Economic Systems	28	31	40
Q	Agricultural and Natural Resource	402	429	392
	Economics			
R	Urban, Rural, and Regional	146	166	149
	Economics			
Y	Miscellaneous categories	29	37	51
Z	Other Special Topics	32	37	37
AF	Any Field	487	n.a.	615
	Total	6,456	6,953	6,643

### Notes:

Includes both junior and senior openings, and nonacademic as well as academic jobs. Advertisements may list more than one field of specialization.

n.a.: not available

Sources: Siegfried (2014, 2013, 2012), Tables 3.

You might find the following information about departments to be useful for focusing your search.

- IDEAS/RePEc is an online service that allows economists to register and "claim" their working papers and publications. Thereafter, the service tracks citations to those papers. This information is used to generate rankings of individual economists as well as departments on a wide variety of metrics, including number of distinct works, number of citations, number of online abstract views, and number of downloaded papers. The methodology for these rankings is described here: <a href="http://ideas.repec.org/t/ranking.html">http://ideas.repec.org/t/ranking.html</a> You can examine the rankings of departments overall, as well as by subfield of economics, here: <a href="http://ideas.repec.org/t/ranking.html">http://ideas.repec.org/t/ranking.html</a> You should review the rankings in your areas of research; sometimes departments with unremarkable overall rankings are very strong in a certain field. You can even use the IDEAS/RePEc data to construct your own rankings: <a href="http://ideas.repec.org/cgi-bin/newrank.cgi">http://ideas.repec.org/cgi-bin/newrank.cgi</a> A strength of this service is that new information is continually added (although citations may be entered with a lag of 6 months or more). A limitation is that it includes only the economists who have registered.
- The rankings of the National Research Council (NRC) were intended to be the gold standard; they reflect faculty publications, grants, and awards; student GRE scores, financial support, and employment outcomes; and program size, time to degree, and faculty composition. The NRC's latest rankings (based on data from 2005-06 and released in 2010 after a delay of three years) were eagerly anticipated, as there had been no NRC rankings since 1995 (NRC, 2010). However, the result was disappointing, as the NRC offered two rankings with different methodologies, and moreover within each ranking programs did not receive a single score but instead a range, making it difficult to make comparisons or draw strong conclusions. (You can read about the methodology of the rankings here: <a href="http://www.nap.edu/catalog.php?record\_id=12676">http://www.nap.edu/catalog.php?record\_id=12676</a>). In response to the complexity of the NRC rankings, many institutions seem to have shrugged them off. You can examine the rankings of economics departments by downloading the excel spreadsheet here: <a href="http://www.nap.edu/rdp/">http://www.nap.edu/rdp/</a>. The website PhDs.org, which is not

affiliated with the NRC, has taken the data and created a web-friendly interface that allows you to prioritize criteria and produce your own rankings; here is the link to the webpage for economics programs: <a href="http://graduate-school.phds.org/rankings/economics">http://graduate-school.phds.org/rankings/economics</a>

Show your letter-writers the list of jobs for which you plan to apply and ask their advice. Make sure they are aware of the types of jobs you think are the best match and of any restrictions on your search. You might ask if they would be able to write a better letter if you limited your search to certain departments. Give them copies of your CV and cover letter so they can see how you are marketing yourself. Ask your advisors to call any contacts they may have in departments you have identified as a particularly good match and vouch for you. (While such informal contacts can help you get an initial interview, after that you are on your own. Nobody can get the job for you -- you have to perform well in the interviews and in your job talk.) If your committee refuses to make any calls or send any emails on your behalf, don't worry -- you will still get interviews.

You may want to have more letter-writers than is required. That way, even if one is late, the consideration of your application is not delayed.

If you are particularly interested in public policy, you may wish to interview at the conference of the Association of Public Policy Analysis and Management (APPAM), which is usually scheduled in late October or early November: <a href="http://www.appam.org/fallresearchconference/">http://www.appam.org/fallresearchconference/</a>
APPAM, in cooperation with the national associations for schools of public affairs and public administration, created the website <a href="www.PublicServiceCareers.org">www.PublicServiceCareers.org</a>, where you can search for positions (academic, government, nonprofit, NGO, consulting, or research) and post your CV. Public policy departments are more likely than economics departments to interview at the APPAM meetings.

In mid-September the ASSA sends to AEA members an email and/or a brochure that includes information on conference registration and reserving hotel rooms for the conference.

Information will also be online at: <a href="https://www.aeaweb.org/Annual\_Meeting/index.php">https://www.aeaweb.org/Annual\_Meeting/index.php</a> You

will not be able to make hotel reservations until you register for the ASSA conference. Make your hotel reservations as early as possible; hotel choices diminish as the conference nears, so if you wait too long you may be forced to stay in a non-conference hotel far from your interviews. When making hotel reservations, you may want to ask for a room close to ground level; that way, if elevators are slowed by the huge traffic of job candidates you can take the stairs. Most years, the ASSA reserves one or more all-suite hotels for interviews; you might want to reserve a room near (but not in) an all-suite interview hotel. Do <u>not</u> reserve a room in the all-suite hotels because they are intended for employers. While candidates might gain personally from staying in the interview hub, a lot of social welfare will be lost from all the other candidates having to travel to additional hotels for interviews, and from candidates and interviewers having to meet in tiny stuffy single rooms.

Plan to arrive a day before your interviews begin so that you can scout hotel locations and register for the conference. This will also help avoid disaster if your flight is delayed. Expect that you may have your first interviews on the arrival date; i.e. the day before the conference sessions begin.

Try to transmit all of your application materials by mid-November, Thanksgiving at the latest. Submit your materials as soon as possible for any new positions posted on JOE in early December. The materials you transmit must include a cover letter, your CV, and your job market paper. Rarely, a job listing will also request your graduate school transcript. You have the option to send other papers in addition to your job market paper, but only do this if it strengthens your application. Papers published in a high-quality journal should be sent; partially completed working papers should probably not. For jobs that are a particularly good match, you should tailor your cover letter to explain why; liberal arts colleges in particular may be looking for signals of applicant interest and match; see Holmes and Colander (2007). You do not have to tailor every cover letter; most can simply state that you are applying for the job they advertised, explain your research fields and job market paper topic, and state that you would welcome an opportunity to meet with their search committee at the ASSA/AEA meetings.

If you are targeting teaching institutions in your search then you should also submit a teaching portfolio, which should include a statement of teaching philosophy and the evaluations associated with your teaching (as a lecturer and/or teaching assistant). If you will participate in this market, ask for advice on assembling a teaching portfolio from professors in your department, and for more detailed assistance contact your graduate school placement officers or any teaching centers on campus. Shively, Woodward, and Stanley (1999) write that the best signal of teaching ability is to have received favorable teaching evaluations for an independently taught course. Holmes and Colander (2007) describe the methods they used, in their search for an assistant professor of economics for Middlebury College, to screen applicants for interest and aptitude in teaching. Owens (2008) offers advice tailored to those seeking academic jobs with a teaching focus.

You may receive unsolicited email requests for your job market paper. Even if you have already transmitted your job market materials to that department through the JOE Network, email an electronic copy to any individual requesting it.

The IllinoisJobLink (IJL) is a free job placement service at the ASSA meetings. IJL offers online job listings, and applicants are encouraged to contact employers prior to the ASSA meetings in order to schedule interviews. IJL is open to all employers but tends to accommodate primarily government, the private sector, and non-U.S. universities. In contrast to most academic interviews, which take place in hotel suites, interviews arranged through the IJL take place in a large hotel ballroom in which each employer is assigned a table. Many academic economists are unaware of the IJL, but it is a large market. In recent years, 150 tables of interviewers have participated (Coles et al., 2010). Information about how to participate in the IJL service can be found in the registration materials for the ASSA meetings.

You should be very nice to, and appreciative of, the faculty and staff in your department who are facilitating your job search. Your advisors will be writing letters. Your department may have a placement committee that disseminates information about you and your fellow candidates to other institutions. Administrative staff may set up a placement webpage, and administrative

assistants may have to organize and submit many letters of recommendation. It's natural to be focused on your own experiences during the job market, but it's nice if you take a moment to thank the individuals facilitating your search.

You will likely spend a lot of time waiting for prospective employers to call. For the primary market, expect to get your first requests for interviews shortly after Thanksgiving and most of them in the first through third weeks of December. Your interview schedule will probably be virtually complete shortly before Christmas, although the occasional request can arrive just a few days before the meetings.

When you receive a call requesting an interview, make sure that in the course of the conversation you record the following information:

- The name of the person calling and their contact information (email address, phone number)
- Their department and institution
- For which position you are being interviewed (the department may be conducting multiple searches)
- The date, time, and length of the interview
- The hotel in which the interview will take place
- Their AEA Disclosure Code, so you can later determine the hotel room of the interview
- Which faculty members will be conducting the interview (this information may not yet be available)
- Who is on the search committee (in particular, who is the chair)

As you begin to receive requests for interviews, be respectful of other candidates on the job market. Share information with other candidates but don't flaunt your successes.

Two studies, Stock et al. (2000) and List (2000), yield clues as to how many interviews you should expect (unfortunately, more recent data are not available). Stock et al. (2000) found that 95% of applicants during 1995-96 had at least one interview; on average, these people had nine

interviews. List (2000) found in his sample of job seekers at the 1997 ASSA meetings that, of those who had applied for any academic jobs, 20% had no interviews for academic jobs at the ASSA meetings. The mean number of academic interviews for the entire sample was 5.99, with a standard deviation of 6.62. List also finds that a job candidate from a top-19 institution received between 1 and 1.6 more academic interviews than candidates from lesser-ranked departments.

In December, give your primary advisor weekly email updates on your list of interviews. If you aren't getting any calls by the second week of December then ask your advisors if there is anyone they can email or call on your behalf.

Should you ever decline an interview? Yes, if you know you would not accept the job; in that case, don't waste your time and theirs. Do not accept interviews solely because you think "it will be good practice." It won't be good practice if it's obviously a bad match.

Interviews at the AEA meetings generally last 30 or 45 minutes. When scheduling interviews, leave a minimum of 15 minutes between them so you can move from room to room and hotel to hotel. You might want to study a map of hotel locations in the convention city and try to schedule interviews in the same hotel in adjacent time slots and leave extra time between interviews that are distant.

There is learning by doing in interviews. For this reason you might want to schedule your most important interviews for the middle of the conference (and the middle of the day), and schedule your lower-priority interviews for the beginning of the conference (and the beginning of the day).

Ask your placement officers if they will conduct mock interviews so you can practice.

Before you depart for the ASSA meetings, have your job talk ready; you may be invited for campus visits immediately after the ASSA meetings.

#### 3. Signaling

Roughly ten years ago, the AEA's Ad Hoc Committee on the Job Market<sup>4</sup> was formed to consider inefficiencies in the job market for new economics Ph.D.s and offer possible solutions. One inefficiency that the committee identified is imperfect information among employers about the interest of job applicants. Employers receive applications from far more candidates than they can interview at the ASSA meetings, and a lack of information about the interest of otherwise-similar applicants can lead to suboptimal interviewing schedules. Although applicants attempt to signal their interest through cover letters and other communication, such signals may not be credible because applicants can send an unlimited number of them (i.e. they could carefully tailor a hundred cover letters without regard to quality of match in an attempt to maximize their number of interviews). To address this problem of imperfect information the AEA implemented in 2006 a mechanism through which applicants can credibly signal their interest in interviewing with a specific employer. This section describes that signaling process.

From mid-November until early December, each applicant on the economics job market can send through the JOE Network a signal of interest to up to two JOE advertisements. What makes these signals credible and interesting to employers is the fact that each applicant can send no more than two. (The AEA enforces that each applicant sends no more than two signals.)

Up to midnight Eastern Time on the deadline in early December (see the JOE Network page for the exact date), applicants can decide which two employers should receive their signals of particular interest. Through the dashboard of the JOE Network, applicants will indicate the two JOE ads they wish to signal. (If the job was not advertised in JOE, applicants can provide the information such as employer name and email address so the AEA can transmit the signal.)

Applicants have the option of sending with their signal a brief message, which could be used, for example, to indicate for which of the multiple jobs in a particular JOE ad the signal is intended or to explain the reasons it is a particularly good match. All signals sent to the same job listing will be aggregated and sent simultaneously shortly after the deadline. Do not contact the

<sup>4</sup> The members of the Ad Hoc Committee on the Job Market were: Alvin Roth (chair), John Cawley, Peter Coles, Phillip Levine, Muriel Niederle and John Siegfried.

employer to ask if they received your signal.

Deciding which jobs to signal is a healthy process, because it forces you to think hard about the type of job you want, the qualities of an employer that you value, and where you want to live.

Use your signals carefully in order to maximize the probability of a good match on the job market. Consider sending your signals to departments that: a) are a good match for you; and b) will add you to their interview schedule as a result of your signal. Obviously you do not know with certainty which departments fit that description, but here are some general guidelines. There is little benefit in sending a signal to a department that already knows of your interest (for whom the signal provides no new information), one that is likely to interview you even in the absence of your signal, or one that would be unlikely to interview you even if they knew of your interest. Nor is there much benefit in sending a signal to a department that you are sure is a bad match for you, even if it greatly increases the chances of an interview.

Read the JOE ads carefully before you signal! Make sure your job market paper fits the focus of their search. As a search committee chair and member, I've received signals from candidates whose research fields did not match our ad. Do not make this mistake.

Do not worry that you will be hurt by being limited to two signals. The AEA reminds employers that, because applicants can send only two signals, there is essentially no information to be gleaned from *not* receiving a signal from an applicant.

Over 1,200 job applicants (including the vast majority of new Ph.D.s in economics) use the signaling mechanism each year (see Table 7). Virtually every participating candidate sends two signals. Roughly 700 employers receive at least one signal.

Table 7: Job Market Signaling 2011-2013

	2011	2012	2013
Number of candidates sending signals	1,284	1,285	1,260
Number of employers receiving signals	673	697	715
Number of signals sent	2,520	2,513	2,474

Sources: Siegfried (2014, 2013, 2012)

Consistently, many of the top signal recipients are concentrated in large cities such as Boston, New York, and Washington D.C., perhaps because dual job searches necessitate searching in large cities, or applicants simply want to live in big cities for other reasons.

A survey conducted by the AEA Ad Hoc Committee on the Job Market during the 2008-09 job market season found that 53% of employers reported gaining useful information from the signals they received, and that 41% of employers offered an interview to a candidate in part because of receiving a signal.

The AEA Ad Hoc Committee on the Job Market wrote a paper that summarizes the signaling data for 2006-2009; see Coles et al. (2010). In particular, the Committee estimated the effect of sending a signal on the probability of interview. First, survey data were collected; candidates who participated in the process were asked, "If you could have sent a third signal, where would you have sent it?", and candidates who did not participate in the process were asked, "If you had used the signaling mechanism, where would you have sent your signals?" Coles et al. (2010) analyze the sample of employers that were signaled, and those that would have been signaled according to the earlier questions, under the assumption that in all cases the applicant and the job are roughly equally good matches and the only meaningful characteristic that differentiates them is the presence or absence of a signal. Regression analysis indicates that employers who were signaled were 6.8 percentage points more likely to interview the applicant. When analyzed by types of employers, the effectiveness of signals appears particularly high for liberal arts colleges, schools in small towns, and departments ranked lower than 480. However, the Committee

cautions: "[T]hese results should be interpreted with care...these results should be interpreted as showing that signaling was associated with a higher probability of receiving an interview *for the particular candidates who signaled these particular employers*. Candidates deciding where to signal should choose employers appropriate for themselves." (Coles et al., 2010, p. 200).

If you receive an email from the AEA asking you to complete a survey about the job market in general, or signaling in particular, please do complete the survey. The ability of the AEA to monitor and improve the signaling mechanism, as well as the functioning of the overall job market, depends on your cooperation.

#### 4. Interviewing at the ASSA Meetings

The vast majority of interviews for economists on the academic job market take place at the Allied Social Science Associations (ASSA) meetings. Prospective employers rent a hotel room or suite into which applicants stream for tightly scheduled 30-60 minute appointments throughout the meetings. Occasionally departments will interview at a table in a ballroom or in a restaurant over a meal. Interviews held in small hotel rooms may feel quite crowded, with interviewers perched on beds or leaning against walls. In the course of the ASSA meetings, departments may interview several dozen applicants for each job; the search chair (or entire committee) may sit in on every interview and as a result your interviewers may be more fatigued than you.

Before the meetings, review your interviewers' publication records and research interests. Take careful note of any papers in your area; understand how your work relates to theirs. Also, learn about other members of the department, the department itself, and the University. The internet makes this easy. Know what degrees the department offers and the relevant units on campus. Be prepared for the fact that interviewers may refer to university-specific programs or administrative units using acronyms.

Arrive a day before your interviews begin so that you can scout hotel locations. One former job candidate who ended up being ten minutes late to an interview because a cab driver couldn't make change for a \$20 bill recommends that, if you anticipate having to take taxis between hotels, make sure you have lots of small-denomination bills to pay for them.

Another reason to arrive early is so you can register for the conference well before any interviews. Keep your conference name badge with you at all times; you need to wear it to access areas of the conference, including the Job Placement Center (the location of the IllinoisJobLink). In past years, candidates have missed interviews when security would not allow them into the Job Placement Center because they lacked a conference badge.

The ASSA maintains a website which lists Disclosure Codes (which should have been given to you by prospective employers when they scheduled your interview) and the hotel names and room numbers associated with them.

# https://www.aeaweb.org/Annual\_Meeting/disclosure\_codes.php

Unfortunately, it is not always possible to learn the locations of all of your interviews before the conference starts. The reason is that your interviewers must check into their hotels and then submit the room number before they can be included on the list. Don't be surprised if one or two of your prospective employers are tardy in submitting this information.

Interviewing at the ASSA meetings will be physically, mentally, and emotionally demanding. Try to minimize the strain by keeping to your regular schedule as much as possible. If you exercise, keep to your usual regimen. If you tend to eat a light breakfast, do the same at the meetings. If you drink the same tea every morning, you may find it reassuring to bring some with you. Don't overindulge in caffeine; you may not find convenient bathrooms. You will be running between hotels so before each interview glance in a hallway or lobby mirror to make sure that your appearance is neat. If you have a lot of interviews, you may have little time to eat or drink. Moreover, restaurants and coffeeshops in conference hotels will have long waits. Bring granola bars or other portable snacks with you in your briefcase and eat between interviews. One professor advises that you carry a bottle of water in your bag, in particular because sometimes you will have to take many flights of stairs because of longs lines for the elevators. You must make sure to eat and stay hydrated in order to remain responsive, cheerful, and relaxed.

Even though you may not attend any sessions, you are required by the AEA to register for the conference. Wear your name tag during interviews; interviewers will be talking with a few dozen candidates and your badge can help them remember to whom they are talking.

Occasionally interviewers will be running late and may ask you to stand waiting in the hotel corridor.

Begin the interview by introducing yourself and shaking hands with your interviewers.

Interviewers are looking for a pleasant colleague. Make eye contact, smile, and be friendly.

Interviews generally begin with a request that you describe your dissertation. Explain your paper in broad terms. The interviewers may know nothing about your field, so be sure to explain the economic intuition and logic of what you are doing and explain how it is of interest to a wide audience. Rehearse one-minute and five-minute summaries of your job talk paper until they are polished. (However, don't give the impression of reciting from a memorized script -- talk naturally.) The interview is not a seminar -- don't have an introduction, methods section, etc. Don't be afraid to admit the limitations of your work; you don't want to put yourself in the position of trying to defend something that's not defensible.

During each interview, keep in mind the parameters of the search (i.e. the field desired). Be prepared to explain why you are qualified in that field. You might think this is unnecessary; after all, they contacted you for the interview. However, getting the interview merely means that a few people in the department think you are worth talking to; there could still be serious disagreement over whether you are qualified in the field so come prepared to explain and defend your field-specific credentials.

Know where your research fits in the economics literature. Be able to explain how your current work fits into a larger plan for establishing your place in that literature. Have an intellectual discussion in the interview. Be relaxed enough to go with the flow of the conversation; avoid sounding defensive or scripted. Ideally you will show that you are interested in finding the right answer, not just in getting a job or publishing a paper.

Have a mental list of the most important things you want to communicate during the interview. Work these in when conversation lags. If there are reasons that you especially want the job, be sure to mention them. All else equal, recruitment committees want to make offers to people who really want the job and are likely to accept.

After a dozen or so interviews you may forget what you've already said in that particular interview. Pay attention to what you've already said and try not to repeat yourself.

Candidates with empirical job market papers should expect a careful examination and detailed discussion of their identification strategy and empirical methods. Be sure you can clearly explain your identifying assumptions and the evidence and logic for and against them. A substantial fraction of the interview could be devoted to this discussion.

Also be prepared for "big picture" questions, which can take several forms; e.g.

- Why is this economics?
- Why is this an interesting question?
- Why should we care about your results?
- You will almost certainly be asked about the policy relevance of your work. Make sure that your answer actually does logically flow from your empirical results.

Have good answers prepared for these big-picture questions; it can be hard to think on your feet of a good and complete answer from scratch. Senator Edward Kennedy's 1980 Presidential campaign collapsed after he couldn't answer the question "Why do you want to be President?" in a televised interview. Be prepared to justify what you are doing.

Interviewers want to make sure that the job candidate is responsible for the idea behind the job market paper and the decisions made in it. They want to hire a smart independent thinker and good economist, not just a drone who takes orders from their advisor. Interviewers might ask:

- How did you get the idea for this paper? (Interviewers may be curious if your advisor simply handed you the idea.)
- Why didn't you estimate (an alternative regression model) instead?
- Why didn't you use (an alternative dataset) instead?

Employers want to hire people who will be productive. They want someone who will have defended their dissertation before starting the new appointment, and they want someone who

will transition quickly to their next projects. So they might ask:

- What is your research agenda for the next five years?
- What are the next three papers you will write? (Be prepared to discuss the research question, conceptual framework, data, and methods on each.)
- When will you finish your dissertation?
- Do you plan to continue collaborating with your coauthors/advisors? (An ongoing working relationship could be good, if it leads to good publications and is a relationship of relative equals, or troubling if a candidate continues as a de facto research assistant on the advisor's projects because the candidate lacks original ideas.)

Interviewers may want to see how well you know your chosen field, so they might ask:

- To what journal will you send your job market paper and why? Who would be the ideal referees for it, and why?
- If you were to teach a Ph.D. course in your field, what would be the key papers on the syllabus?
- Which senior economists do you wish to emulate? Why?
- Tell us the best paper you've seen presented in a seminar recently, and explain what made it the best.
- Based on your reading of the literature and participation in seminars and conferences, where do you see (your field) going?

Interviewers may want to see if you know where you fit in the discipline:

- Will your research use structural models or a more reduced form approach?
- In general, what journals do you consider to be the appropriate outlets for your work?
- What will be your major conferences?
- Do you think you'd be happy in a department like ours? (Especially likely to be asked by interdisciplinary departments.)

In general, interviewers like to see if candidates are smart, can think on their feet, and are good communicators. They might ask:

- (Pointing to one of your paper's tables): Please interpret and explain this parameter estimate so that anyone could understand it.
- Be prepared for interviewers to ask about your papers other than your job market paper. I've heard interviewers say that they know the candidate can have a polished discussion on the job market paper, so they want to spend the entire interview talking about the other papers on the CV.
- In general, interviewers might want to spend some time talking about an issue unrelated to the job market paper but important in that field of economics, just to see how the candidate thinks and speaks extemporaneously.

Naturally, teaching institutions will devote more of the interview to talking about research than will research institutions. Here are some questions you might hear about teaching:

- What is your teaching experience?
- What would you like to teach? What textbooks or journal articles would you use to teach those courses?
- How would you teach? What is your teaching philosophy?
- How would you teach our students (undergraduate / masters / nontraditional / Ph.D. students) in particular?

Employers may also want to determine how good a match you think it is, and whether you'd be likely to accept an offer:

- Why are you interested in our school? What in particular led you to apply for a job with us?
- Is the location of our school (rural, regional) a problem?
- Where else are you interviewing?
- Is there anything you would like us to know that isn't on your CV or in your application? (This is an opportunity to explain why you think it's a good match.)

It's OK to ask for the motivation behind an interviewer's question, or to ask for clarification. You may be interrupted during your responses; this is normal and you should not panic or get angry. Do not try to dodge questions; to attempt to do so would insult the intelligence of your questioners. Consider all questions seriously and answer them as best you can.

Some graduate students have asked me for the "right" answers to these questions. There is no single right answer to these questions; you need to be introspective and really think about who you are as an economist, what your comparative advantages are, and what you are looking for in a job. Although there are no answers that are always right, there are of course answers that are always wrong: these are answers that reveal that the candidate is, e.g., unprepared, unintelligent, uninterested, or arrogant.

The U.S. Equal Employment Opportunity Commission (EEOC) enforces laws against employment discrimination on the basis of (e.g.) age, race, disability, and pregnancy. On the EEOC website <a href="http://www.eeoc.gov">http://www.eeoc.gov</a> you can click on various links to see the Federal statutes and regulations applying to each type of discrimination. There are also state laws and regulations regarding employment discrimination, and these may be more stringent than the Federal ones. The Cornell Law School has a useful webpage that explains what to do if, during a job interview, you are asked a question that you think may be illegal:

## http://www.lawschool.cornell.edu/careers/students/interview/ill\_questions.cfm

A friend who is a labor lawyer offers this advice that you should keep in mind in future years when you are conducting job interviews for your department: From an employer's perspective, any question pertaining to the applicant's membership in a protected class (race, color, religion, national origin, ancestry, sex, sexual orientation, marital status, pregnancy, children, age, or handicap) should not be asked. Even though in some cases it may not be per se illegal to ask the question, if there is an adverse employment action down the road, the employee/plaintiff may use the question to show evidence of bias. Further, an employer should understand (but usually doesn't) that even if the candidate has "opened the door" to a topic that really shouldn't be discussed, the employer should not walk through that door and keep talking about it.

Generally, towards the end of the interview time is reserved for you to ask the interviewers questions. You should asked informed questions, based on what you've already learned about

the department and institution online; in other words, you should not ask questions that could easily have been answered with a simple Google search. Here are some questions you might want to ask:

- Tell me about your department's research environment. Is there much mentoring of junior faculty by senior faculty? What resources are available to help new faculty develop their research?
- How do you see me fitting in your department?
- What is the teaching load? What is the typical course reduction for new faculty? Would I have an opportunity to teach graduate students? Will I be able to teach courses in my field?
- What is the quality of the graduate students? To which fields are they most attracted? Are they involved with the research of the faculty? Are there resources to support graduate students as research assistants? What is your goal in educating graduate students: to produce academics and researchers?
- I saw on your web page that you have *N* faculty; is that the number of lines in the department? (If the number of faculty is well below the number of lines then that implies that the department might be hiring a lot of faculty in the coming years.)
- What are your expectations about grant writing by junior faculty? Are faculty allowed to use grant money to buy teaching reductions for the purposes of research?

Don't be afraid to refer to a list of questions that you want to ask. Doing so will help you remember to ask the important questions, allow you to keep track of the answers, and it signals to the interviewers that you've done your homework and are taking the interview seriously. (Do not refer to notes when responding to their questions!)

At the end of the interview, be sure to ask whom you should contact if you have any questions and when they plan to make their decisions about campus visits. Some may not make decisions for weeks while others may be calling candidates the next day.

After you exit each interview, try to jot a few notes about your impressions. It will be tempting

to skip this if you are pressed for time but this can help you to later to keep each interview distinct.

Bizarre things can occur during interviews. I have heard stories of interviewers becoming ill, saying shocking things, watching TV, and not taking the interview seriously. If something like this happens, try not to panic but rather stay relaxed and be yourself.

You may have an interview that goes badly, leaving you feeling shaken. You must divorce it from your mind and go to the next interview as relaxed, cheerful, and natural as you were before the bad experience.

## 5. Campus Visits

Departments vary greatly in how soon they meet after the ASSA meetings to decide which interviewees to invite for a campus visit. Some departments arrange campus visits at the ASSA meetings, others call just days after, while others wait until the end of January or even the beginning of February. Candidates in whom the department is particularly interested may be invited for a campus visit prior to the ASSA meetings as part of the pre-emptive market. Most departments invite 3-5 people per job opening for campus visits, so a campus visit indicates that you are a finalist. You will not be informed if you are *not* going to be invited for a campus visit. If you are getting few or no campus visits by early February, meet with your advisors to discuss the problem and continue to apply for newly posted job openings.

You should decline an invitation for a campus visit if you know that you would refuse the job offer. Do not accept flyouts solely to increase your exposure. Campus visits can be extremely fatiguing; you don't want to be exhausted by the time you need to make a good impression for the department that is your top choice. Declining campus visits to departments you would never join is also a decent thing to do because departments have limited resources. If you receive many calls for campus visits, schedule your top six immediately and ask the others if you can call them in a few weeks to schedule the visit. Later, you can decline the invitation if things are going well.

Try to combine multiple campus visits with a single flight (especially if the flight is cross-country); you can divide cost of flight between the schools so that everyone benefits from combining the trips. You may be invited to visit a campus that is close to another school that interviewed you but has not yet invited you to visit. It is acceptable to call the recruitment chair to explain that you are still interested in the department and that you'll be in the area for another campus visit so if they're still interested it is an opportunity to share the costs of the trip with the other department. However, do not be pushy.

On your campus visit you will present your job paper in a formal workshop and will meet with faculty and administrators individually or in small groups; you may have little in common with some of them. You will also have at least one dinner with a small group of faculty, which, though informal, is an important part of the vetting process. Teaching institutions may also require candidates to give a sample class lecture in order to evaluate their teaching skills.

Your interaction with potential employers is the first stage in a repeat game. The people with whom you are interviewing will be in the same profession as you for decades. Be courteous and friendly and even if they never make you a job offer they will remember you well. If you are arrogant or abrasive you will make things harder for yourself in the future -- some of your interviewers (yes, even those in poorly-ranked departments) will be refereeing your papers, evaluating your grant applications, and perhaps writing your tenure letters.

During your campus visit, don't be too intimate:

- Don't tease
- Don't flirt, even if you think someone is flirting with you—you're more likely to be hyperaware of little things and to misinterpret.
- Don't touch people in a familiar way (e.g. punching someone's shoulder in a jocular way, touching the person with whom you are talking)
- Don't address people in an overly informal way. Be aware of how people prefer to be addressed; for example, in some instances you should address people as Doctor or Professor, and even when going by first names be sure you use the right form of the first name; if someone prefers to be called Catherine you don't want to call her Cathy.
- Don't joke around too much -- you're likely to be a little hyperactive because of
  adrenaline and you may sound shrill or your humor may fall flat. You may be
  misinterpreted. Politically incorrect jokes are a particularly bad idea; be sensitive to
  issues of diversity.
- Don't tell personal stories. This is especially true of drinking and dating stories.

While you don't want to be too intimate you also don't want to be aloof, uptight, stiff or

unfriendly. It's a delicate balance. You want to come across as a relaxed and friendly future colleague.

Don't be too quiet. Initiate conversations. Go out of your way to say hi to people who are in your field or who have worked on a similar topic, even if they're not on your schedule; they will expect it.

At the end of your campus visit, ask whom you should contact if you have any questions and when they plan to make their decision. Again, departments differ in their ability to make a quick decision.

Departmental policies for reimbursement vary widely; some departments may have you book your ticket through a university travel office and have the hotel bill them directly so that you don't need to charge anything to your credit card; however, most departments will ask you to pay out of pocket for travel and hotel and submit the receipts for reimbursement. If you have lots of campus visits scheduled this can quickly exhaust your credit card's limit. Call the credit card company and ask for additional credit before you begin traveling. If you do pay out of pocket, don't forget to get copies of all receipts. Submit receipts to departments for reimbursement immediately after each trip is completed; if you wait you could easily lose the receipts or forget. Photocopy your receipts before submitting them in case the originals are lost.

The rest of this section on campus visits is divided according to your three activities during the visit: the interviews with individual or small groups of faculty, your job market talk, and the dinner with faculty.

## a) Campus Visits -- Interviews

Before departing for your campus visit, request a detailed itinerary of your visit. Visit the department web page and familiarize yourself with each faculty member you are scheduled to meet. In particular, look through their CVs to see if they have ever published in your area. Make notes and list a few things to chat about with each person. Itineraries for job candidates are often fluid, so be flexible and prepared to meet with members of the department who are not on the original schedule.

It is your job to make sure there are no dead times in an interview. Come with enough questions to fill a forty-five minute interview. It is OK to repeat your questions in interviews with different people. People will think that you are not interested in the job if you have no questions. Some interviewers may have been assigned to interview you and will be annoyed if you make it more work for them than it has to be. Bring a list of questions and record the answers; you will signal your preparation and interest. In addition to the questions listed under Section 4, here are other questions you might ask:

- What is your main research project at the moment? (It is important to ask
  other people about their research and discuss it in a way that reveals your
  interest in economic questions outside of your area.)
- Are you happy with the research environment here?
- How does this department compare to the others you've been in?
- What kind of courses are you teaching, and how much control did you have over that?
- Which seminars do you regularly attend?
- Are there any units outside of the department I should know about, for example, any interdisciplinary centers that offer research grants?
- What is the budgetary future of the department? Will there be more junior faculty hired in the near future?
- Were you satisfied with the start-up package provided to you as a new faculty member?
- How much committee work have you been assigned?

- How do you envision the department changing in the future? Is there an
  intention to build in any particular area? What are your goals as (Dean /
  Chair)?
- How do you evaluate faculty for contract renewal and for tenure? What has happened in the last few tenure reviews?
- How strong are the links between the department and other units of the University?
- Is the administration supportive of the department (e.g. has there generally been agreement on tenure cases, is the Dean generous with resources)?
- How do you like living here? Where do faculty choose to live?

Do not ask about salary. In general, the only time to discuss it is after you have received an offer. A later section of this document provides summary statistics of recent salaries. Your more sensitive questions (e.g. about recent tenure cases in the department) should be reserved for private discussions with friendly junior faculty. In general you might want to ask junior faculty an open-ended question like "So, is there anything I should know about the department?"

Revisit the Cornell Law School webpage that explains what to do if, during a job interview, you are asked a question that you think may be illegal:

http://www.lawschool.cornell.edu/careers/students/interview/ill\_questions.cfm

Don't belittle your own work out of a sense of modesty (or anything else). You should be excited about your work, enjoy it, and take pride in it.

Interviewers are looking for good colleagues and neighbors. Concerns about personality can eliminate candidates from consideration, no matter what their other qualities.

Academia is gossipy. An interviewer may ask you confidentially, "What's it like working with Professor X?" or "I've heard Professor Y can be hard to deal with." Until you have a degree in hand and a job contract signed it's unwise to tell anecdotes about your advisors. Even then, you

should expect that your comments will be repeated.

## b) Campus Visits – The Job Talk

The most valuable asset on the job market is a high-quality, polished job talk. Practice it again and again for different audiences. Draft answers to anticipated questions. Know it well enough that you can make a lot of eye contact instead of reading from overheads. At some point you may become sick of your job talk but maintain your enthusiasm and keep it fresh.

Holmes and Colander (2007, p. 60) emphasize: "Know your audience. If there will be students or non-economists in the audience, tone down the pyrotechnics. Failure to do so signals either little interest in engaging the audience, or an inability to convey technical concepts to non-professionals."

When planning your talk, leave time for interruptions. It is important that you be able to explain your results and implications clearly, without having to skip slides or talk very fast because you're running out of time.

Jesse Shapiro offers good advice on "How to Give an Applied Micro Talk": <a href="http://faculty.chicagobooth.edu/jesse.shapiro/research/applied\_micro\_slides.pdf">http://faculty.chicagobooth.edu/jesse.shapiro/research/applied\_micro\_slides.pdf</a>
Thomson (2001) is a comprehensive guide to the oral presentation of economics research.

Make sure that your PowerPoint slides are legible. Do not cut and paste into your PowerPoint slides a full table from your dissertation – people will probably not be able to read it. A font size of 20 is the minimum.

When creating your graphs and figures, keep in mind the advice in Jonathan Schwabish's "An Economist's Guide to Visualizing Data":

https://www.aeaweb.org/articles.php?doi=10.1257/jep.28.1.209

More generally, Tufte (1983) is a classic reference on the effective presentation of quantitative information via graphs and charts, and Tufte (2003) is a pamphlet on how to design an effective PowerPoint presentation.

Have backup copies of your presentation available. Save it to your laptop and to a USB pen drive, and also email it to yourself. I met someone who, on the way to give a job seminar, accidentally dropped down an elevator shaft the USB drive that held the only copy of her job market presentation she had with her. (A janitor dug through the garbage at the bottom of the shaft while the seminar audience waited, and recovered it so she was able to give the seminar.) Don't leave anything to chance: email yourself the latest version in addition to having it saved to a USB drive.

The schedule for visiting job candidates typically includes 30 minutes for preparation just before the job talk seminar. However, don't count on getting that time – it frequently gets crowded out when you're running late or it is converted into one additional interview.

At the beginning of your talk, provide an outline of the talk and quickly summarize your findings. You might be tempted to wait until the end of the seminar to announce your findings, but a seminar isn't a murder mystery in which knowing the ending ruins the show. You want people to know your findings as soon as possible. Moreover, some people will have to leave your talk early, and you want to ensure that they too understand your results.

Emphasize why your paper is of interest to all economists, not just those in your field. Put your research in the context of the previous literature, but spend little time criticizing the previous literature. Instead of emphasizing the negative aspects of what others have done, emphasize the positive aspects of what you've done. Make sure that, when you are citing literature, you correctly pronounce authors' names.

While you talk, people will raise their hands with questions. Don't stop in midsentence to call on them; this is jarring and distracting. Instead, finish your complete thought and then ask their

question. (If you're worried that they'll think you haven't seen them you can acknowledge them with a nod and an index finger to indicate "one minute" while you finish talking).

Audience members may ask you major questions that anticipate your future slides. Sometimes job candidates, in a desire to answer all questions immediately, will start skipping around their presentation; this risks losing the narrative and creating confusion. If you have prepared slides coming up that answer the question, you can say: "That's a great question but I'm going to hold off on it for now because I will get to that in just a few slides." This allows you to better control the timing of your talk and the order in which topics are addressed.

During the seminar, if there is a major disagreement about facts that drags on, and you are concerned about losing too much seminar time, you can say something like: "We should probably talk about this after the workshop, because I had a different impression of the facts ... OK?" This will acknowledge their point without agreeing with it and allow you to proceed with your presentation. As a speaker, being able to control a seminar in a diplomatic way is a difficult and valuable skill. Domowitz (2001) goes so far as to say, regarding your job talk seminar, that "Loss of control = loss of job."

It is important to come across as a nice person. That said, a little fire in the belly is a good thing. If someone harasses you during your seminar or in an interview you don't need to keep a smile plastered to your face; you can and should stand up for yourself and your work. Uncontrolled outbursts of anger or frustration are always bad. This is a fine line to walk.

Do not try to dodge questions during your job talk; answer them as best you can. When people give you comments, write them down. This serves several purposes: 1) it will help you to remember the critiques of your paper, which will guide your future revisions; 2) it indicates that you are listening to what people are saying; and 3) it can be used to provide closure when there's a disagreement -- you can note the person's complaint, thank them, put down the pad and move on with your talk.

In the course of reading for your dissertation, you should have absorbed enough institutional knowledge about the subject of your job talk paper that you are the foremost expert in the seminar room. Fair or not, if you don't know much institutional knowledge about the area of your job talk paper, people may assume that your work is superficial. For example, if your paper is on food stamps, seminar participants will expect you to know details like eligibility levels, the extent to which food stamp programs vary across states, when the program was created, and how the food stamp program was affected by welfare reform. Institutional knowledge may be especially important in interdisciplinary departments; non-economists cannot evaluate the quality of your economics research, so they may use the depth of your institutional knowledge as a signal of your quality.

Don't be rattled if at times one audience member leans over and whispers to another for awhile. As you have probably realized from attending seminars, some senior faculty feel comfortable enough to do what other people would consider rude, which is chit-chat with their neighbors during an important seminar. They may even laugh, but don't be offended; for all you know it has nothing to do with you or your presentation. An occasional incident like this is to be expected. However, if the seminar devolves into multiple groups in the audience talking amongst themselves, you have lost control of the seminar.

In some job talks you will be confronted with a question that you don't handle well. When you return home from the visit, you can email the questioner, remind him or her of the question and provide the best answer that you can craft and conclude by asking if that strikes them as a reasonable answer. In other words, even if you fumble the ball during the job talk, it is still possible to make a good impression by remembering the question and trying to find the right answer.

## c) Campus Visits – Dinner with Faculty

Much of the advice under Campus Visits – Interviews also applies to the dinner with faculty. The few remaining comments here concern the mechanics of the meal itself.

Brush up on your dining etiquette. Your hosts will take you to a nice restaurant and you may be confronted with issues of etiquette that you rarely face. Know that your bread plate is the one to the left (above your fork), that your glasses are those to the right (above your knife), and that you start with the outside silverware and work in. Knowing the basic rules can spare you embarrassment. At one recruitment dinner I attended, a bottle of wine came to the table, the candidate picked it up first and filled his wine glass to the brim and then looked on, visibly embarrassed, as everyone else at the table filled their wine glasses partway. You don't want to feel embarrassed and out of place when you should be bonding with your dinner companions.

At dinner, drink what others are drinking (probably wine) but in moderation. Do not order a cocktail like a martini and do not have more than one or (at the most) two drinks. You may not do or say something stupid every time you're tipsy, but you are more likely to do or say something stupid when you're tipsy.

There may be times during dinner when your hosts will talk amongst themselves about departmental matters. While you might feel ignored, and perhaps anxious that you are a boring dinner companion, don't panic. This happens often and is no reflection on you; just politely listen and participate when it feels natural.

Be polite and courteous to waiters and waitresses. No matter how nice you are to the interviewers, if you are rude to support staff no one will think you're a nice person.

Even if you were invited for a campus visit, you may not be officially notified if another candidate has been offered, and accepted, the job.

## 6. The Secondary Market "Scramble"

Once the primary market clears, it is difficult for unmatched agents to determine who remains unmatched on the other side of the market. Labor demanders can post another advertisement in JOE, but it is harder for labor suppliers to signal their continuing availability. As a result, a lack of information may cause mutually beneficial matches to go unmade.

To help overcome this inefficiency, the Ad Hoc Committee on the Job Market recommended that the AEA formalize the secondary market through a job "scramble." This concept was borrowed from the market for physician residency matching. There, a computer conducts matches in the primary market based on preference rankings from both sides (medical students and residency programs), but some are left unmatched. To facilitate matching among agents that remain available after the primary market, continuing availability on each side of the market is advertised and unmatched medical school graduates "scramble" to meet and match with residency programs. The AEA has likewise established a forum through which unmatched agents can advertise their continuing availability. This section explains how the scramble works.

The entire scramble occurs during March. On a date in March to be announced, job candidates and prospective employers who remain unmatched may participate in the scramble through the JOE Network. For the purposes of the scramble, "unmatched" means a job candidate who has not yet accepted a job offer or an employer who has positions still unfilled. Job candidates holding a job offer they have not accepted may participate in the scramble if they wish. (However, candidates in such a position should discuss their situation with their advisors and placement director.) In contrast, job candidates who have <u>accepted</u> a job offer are ineligible to participate in the scramble. There is no charge to participate in the scramble.

On specific dates in March to be announced later, scramble registration will close and then the scramble website will go online. Only job candidates who have registered as unmatched are given access to the scramble website, and they will only be able to see which positions remain unfilled; they will not be able to see which other job market candidates remain unmatched.

From that point on, the AEA plays no further role in the scramble. The AEA does not play matchmaker or suggest likely matches. It falls entirely to the unmatched agents to research each other, contact each other, and if both sides agree, move forward with phone interviews, campus visits, or job offers. It is expected that both sides of the market will take the initiative, so do not wait for employers to contact you – you should contact the ones that seem like a good match. However, do not pester employers; the Committee has received complaints from employers about overly aggressive job candidates.

The scramble webpage will not be updated to include new job listings. The committee does not want the website to become a waste of time for job market candidates; if new listings could be posted, candidates would be tempted to log on to the site frequently in search of new jobs. To avoid this, the only jobs that will ever be listed on the webpage are those that are on it the first minute the webpage goes online.

The scramble webpage will not be updated to delete the listings of jobs that have been filled or job candidates who have accepted a job; it is not cost effective to assign someone the task of keeping the webpage current in real time. The scramble website is taken down in early April.

The number of participants in the scramble in recent years is listed in Table 8. Consistently, more candidates than employers participate. In 2013, there were 463 job candidates and 80 job openings active in the scramble. The types of employers run the gamut: universities with graduate programs, four-year colleges, consulting firms, research institutes, government agencies, and banks and financial firms.

Table 8: The Job Market Scramble 2011-2013

	2011	2012	2013
Number of candidates	388	479	463
Number of job listings	67	79	80

Sources: Siegfried (2014, 2013, 2012)

If you receive an email from the AEA asking you to complete a survey about the job market in general, or the scramble in particular, please do complete the survey. The ability of the AEA to monitor and improve the scramble, as well as the functioning of the overall job market, depends on your cooperation.

## 7. Offers and Negotiating

If a department makes you an offer, you will likely be notified by a phone call from the search committee chair. Get the offer in writing as soon as possible. You should have all aspects of the offer in writing. An oral promise from the chair isn't sufficient because the chair might step down or be replaced.

What might be included in an offer? Aside from salary, it might include summer support (each month of which is equal to a ninth of your nine-month salary), course reductions, research funds, office setup budget, office computer budget, and perhaps a travel budget. Each of these may be negotiable, but you will probably have to have other offers to convince a department to improve their initial offer.

The American Economic Association's Universal Academic Questionnaire provides information on recent salaries for new economics Ph.D.s. Each fall, the AEA surveys the chairs of economics departments on the number and salaries of their faculty, by rank. (Academic economists working outside of economics departments are not reflected in this survey.) Since 1999, the summary statistics of these questionnaires have been reported in the *American Economic Review: Papers and Proceedings*. Table 9 lists the average salary of new assistant professors over time; in 2013-14 it was \$115,240 in Ph.D.-granting departments. Average compensation for new economics professors is considerably higher, and average teaching load is considerably lower, in Ph.D.-granting departments than in those that do not grant Ph.D.s. For example, consider the 2013-14 data. In contrast to the average of \$115,240 that Ph.D.-granting departments paid new assistant professors for teaching an average load of 3.2 courses, departments in which a B.A. was the highest degree paid an average of \$76,825 for a teaching load that averaged 5.6 courses.

Table 9: Employment Conditions for New Assistant Professors in Economics 2011-2012 to 2013-2014

	Year	Salary	Additional Compensation	Teaching Load (Courses / Year)
Ph.D. Institutions	2011-2012	\$105,772 (N=46)	\$22,381 (N=29)	3.1 (N=46)
Ph.D. Institutions	2012-2013	\$113,263 (N=47)	\$46,894 (N=29)	3.1 (N=41)
Ph.D. Institutions	2013-2014	\$115,240 (N=56)	\$36,923 (N=30)	3.2 (N=49)
M. A. Institutions	2011-2012	\$84,909 (N=14)	\$10,000 (N=3)	4.2 (N=13)
M. A. Institutions	2012-2013	\$86,982 (N=16)	\$26,167 (N=9)	4.2 (N=14)
M. A. Institutions	2013-2014	\$86,829 (N=12)	\$15,132 (N=8)	4.2 (N=11)
B.A. Institutions	2011-2012	\$75,186 (N=26)	\$10,575 (N=8)	5.2 (N=29)
B.A. Institutions	2012-2013	\$80,516 (N=31)	\$15,978 (N=6)	5.6 (N=34)
B.A. Institutions	2013-2014	\$76,825 (N=45)	\$13,741 (N=17)	5.6 (N=55)

Notes:

Sample sizes in parentheses. These are means of institutional reports, which in turn are means of the offers they made to new assistant professors in economics.

Additional Compensation includes guaranteed summer compensation over all years and other compensation of cash value to employees, such as a signing bonus. It does not include fringe benefits, moving expenses, or computers that remain the property of the institution.

Sources: Results of American Economic Association Universal Academic Questionnaire as reported in: Scott and Siegfried (2014, 2013, 2012), Tables 3.

The Bureau of Labor Statistics' CPI inflation calculator indicates that total inflation between 2012 and 2014 was 3.77%%. Over the same period, starting salaries for new assistant professors rose 2.18% in departments in which the B.A. was the highest degree granted, 2.26% in departments in which the M.A. was the highest degree granted, and 8.95% in departments in which the Ph.D. was the highest degree granted. Thus, in recent years the starting salaries for assistant professors easily outpaced inflation in Ph.D.-granting departments but rose slower than the rate of inflation in non-Ph.D. granting departments.

Your salary will apply to either the nine-month academic year or the twelve-month calendar year. If you are offered a nine-month contract, you can write grants to pay your summer salary.

Departments with nine-month contracts differ in how many months of summer support they allow you to take; common policies are 2, 2.5, or 3 months. If you plan to write grants, having the option of getting a third summer month can be quite valuable. Your job offer may include guaranteed summer support for the first year or two. In recent years, 91.9% of Ph.D.-granting departments offered new hires some summer salary, for an average of 2.4 summers. In contrast, only 35.1% of non-Ph.D.-granting departments offered their new hires summer salary, and the offers they do make are for a smaller percentage of the nine-month salary and for fewer summers (Deck et al., 2010).

In recent years, 91.9% of Ph.D.-granting economics departments offered a teaching reduction to new hires; of those offering a teaching reduction, the average reduction was 1.2 courses for an average of 2.1 years. In contrast, only 48.6% of non-Ph.D.-granting departments offered a teaching reduction; but for those offering a teaching reduction, the average reduction was 1.3 courses for an average of 2.6 years (Deck et al., 2011).

Departments differ in what counts towards your teaching load. Some departments count helping to coordinate a seminar series as a course while in others such work is considered part of your departmental service and will not decrease how many courses you must teach. In some departments, teaching a large undergraduate course will count double towards your teaching load while in others it counts just once. In some institutions advising a certain number of undergraduates or serving on a certain number of dissertation committees will count as a course toward your teaching load. These policies are not well advertised but could have a significant impact on how much time you spend teaching and how much you have left for research.

Moving expenses were paid by 90.8%, and the purchase of a new office computer was paid by 88.2%, of economics departments. Housing allowances are far less common: only 7.8% of responding departments offer them (Deck et al., 2011).

Salaries of economists in business schools are generally higher than those of economists in other academic units. Siegfried and Stock (2004) found in a survey of new economics Ph.D.s from

2001-2002 that the salaries of new hires in business schools were 26% higher than those in other academic units.

Comprehensive data on the salaries of health economists can be found in Cawley and Morrisey (2007) and Cawley, Morrisey, and Simon (2015).

Faculty salaries at private universities tend to be higher than those at public universities. Ehrenberg (2004) finds that the average salary of assistant professor economists in public universities was 5% lower than that in private universities.

All else equal, departmental budgets and hiring are more variable in public than in private institutions. In private institutions, expenditures are usually based on a moving average of endowment income in order to smooth expenditures. Public institutions, on the other hand, can be at the mercy of year-to-year variations in state legislature appropriations -- hiring and raises may be strongly correlated with the business cycle. One economist described departmental resources in his public university economics department as "Years of famine and then the sugar dump truck pulls up." Public universities may also be required to publish faculty salaries; knowing the salaries of recent hires may give you a sense of a prospective employer's willingness to pay.

Talk to other people on the job market to find out what other schools are paying, but don't be surprised when they won't tell you.

Salary is important in ways you may not recognize. Contributions to defined contribution retirement accounts are a fixed percentage of it. Subsequent annual raises may be a percentage of it. Each month of summer money is equal to a ninth of it. Some schools provide life insurance equal to a multiple of your salary.

There are useful relocation calculators that will help you evaluate the relative attractiveness of

different communities. A calculator that allows you to compare the cost of living in different communities of the United States is located at:

http://www.homefair.com/calc/salcalc.html

http://money.cnn.com/best/bplive/

Money's Best Places to Live provides information about weather, crime, housing, education, health, and other quality of life characteristics in over 300 U. S. cities:

Departments generally allow a candidate to consider the offer for 10-14 days. (An offer with a short, inflexible deadline is an "exploding offer.") The amount of time a candidate is given to consider the offer is typically shorter the lower-ranked the offering department, and the later in the job market season. Feel free to wait until the deadline, especially if you expect to receive offers from other departments. It is also acceptable to ask for a brief extension to the deadline so you can finish your campus visits. You have the most leverage after the department has made an offer but before you have accepted.

Once you have an offer, call the other departments you visited that could dominate the offer you received and tell them that you're hoping to hear from them soon because you already have an offer. Many departments move slowly and they may need a stimulus like this just to get the recruitment committee to meet. Do not solicit offers from departments that are dominated by the one that made you an offer. If you have not yet completed your campus visits by the time you receive an offer, cancel visits to any departments that are dominated by the offer. Inform the others of your new deadline and, if necessary, reschedule to sometime before your deadline the visits to departments that could dominate your current offer.

Departments are most likely to improve their offer when you have a richer offer from a better department of the same type. A richer offer from a far worse department may not be interpreted as a serious alternative. Economics and public policy departments often do not try to match the higher salaries of business schools. Academic departments are unlikely to match offers from the private sector.

A good book on the subject of negotiating is Fisher, Ury, and Patton (1991). One point of the book is that you must appeal to an objective standard (here, the fair market salary and benefit package) and not give in to pressure from the other side.

Do not be so aggressive in negotiations that you create hard feelings. I have heard faculty darkly muttering about job candidates from years ago who led them on for a month before turning them down, or who asked for so much that the department was outraged. Don't string along departments for your own vanity. Once an offer is dominated, turn it down.

It's possible to be firm and yet still friendly in negotiating. For example, you can say that you're having a hard time making up your mind and you're really hoping that they can do something to make the decision easier.

Talk to junior faculty already in the department to find out what is easiest for the department to provide. Some departments find it easier to increase research funds, others find it easier to increase salary. At some universities, parking is so scarce that departments are angered if you ask for it. At big sports universities, it may be hopeless to ask for basketball or football tickets. The generosity of the retirement program and life insurance benefits are generally set at the college or university level and cannot be enriched.

You may ask that your offer letter specify the number of new course preparations (preps) you will have as an assistant professor (e.g. no more than four). Departments differ in their willingness to commit to this.

Consider the short-term and long-term benefits of each package. Many offers are front-loaded in that teaching reductions are only for the first semester or that research funds disappear after a year.

Two important inputs to your research will be your faculty colleagues and your graduate students. Some say that the first academic job involves as much human capital acquisition as

graduate school, so be sure to choose a job in which you can learn from your colleagues.

Domowitz (2001) makes the important point that the distribution of quality faculty across departments is less skewed than you think but the distribution of quality graduate students across departments is more skewed than you think.

The verbal acceptance of a job offer is considered just as much a commitment as a written acceptance. To renege on either an oral or written acceptance of a job offer is a serious breach of ethics and etiquette; the consequence is a substantial and long-lasting drop in your reputation within the discipline.

Outcomes for recipients of new Ph.D.s in economics in 2012 are listed in Table 10. At the time they completed the Survey of Earned Doctorates, 70.5% of new recipients of an economics Ph.D. had definite employment and 9.2% had postdocs, and 18.3% had not yet accepted an offer or were still searching. For those with definite employment, the table lists in italics the conditional percentage with employment in academe, government, industry/business, and the nonprofit sector. In 2012, 59.4% of those with definite employment had jobs in academe, 16.3% had jobs in industry, 13.5% had jobs in government, and 5.9% took jobs in the nonprofit sector. Of those with definite employment, 69.5% were to be employed in the U.S. Non-U.S. citizens are much more likely to take jobs outside the U.S.; among recipients of economics Ph.D.s from U.S. institutions in 2012 who had definite employment plans, the percent with jobs in the U.S. was 93.9% for U.S. citizens and 48.6% for non-U.S. citizens.

Table 10: Postgraduation Plans of New Economics Ph.D.s, 2012

Postgraduation Plans	2012 N=1,243
Definite employment	70.5%
Employment in Academe	59.4%
Employment in Government	13.5%
Employment in Industry/Business	16.3%
Employment in Nonprofit	5.9%
Employment in Other	5.0%
Definite postgraduate study	9.2%
Seeking employment or study	18.3%

Sources: NSF (2013), table 61. Percentages employed in specific sectors are conditional on having definite employment.

After you have successfully resolved your job search, you may be interested in reading guides for economics junior faculty and about academic economics in general. Daniel Hamermesh has written insightful guides to professional etiquette for junior and senior faculty: Hamermesh (1992, 1993). *A Guide for the Young Economist* (Thomson, 2001) offers advice on writing papers, presenting a research seminar, and refereeing articles. Rouse (2008) offers ten steps for navigating papers through the publication process:

http://www.aeaweb.org/committees/CSMGEP/resources/newsletter/08/the\_other\_pipeline.html McAfee (2010) is helpful for understanding the internal workings of journals. *Publishing Economics: Analyses of the Academic Journal Market in Economics* (Gans, 2000) collects papers that address issues such as the returns to coauthorship, the behavior of economics journal editors, and the relative impacts of economic journals. If you ever feel depressed after receiving a rejection notice, you might feel better after reading *Rejected: Leading Economists Ponder the Publication Process* (Shepherd, 1995), which describes how some classic articles in economics were rejected when initially submitted for publication (an abridged version was published in the JEP: Gans and Shepherd, 1994). The newsletters of the Committee on the Status of Women in the Economics Profession (CSWEP) and the Committee on the Status of Minority Groups in the Economics Profession (CSMGEP) include insightful essays on a variety of practical topics related to being a junior faculty member and to teaching, research, and tenure. For example, the

Spring 2011 CSWEP newsletter focuses on "how to get published in an economics journal": <a href="http://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_SprSum\_2011.pdf">http://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_SprSum\_2011.pdf</a> and the Winter 2013 CSWEP newsletter is devoted to "Navigating the Tenure Process": <a href="https://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_Winter2013.pdf">https://www.aeaweb.org/committees/cswep/newsletters/CSWEP\_nsltr\_Winter2013.pdf</a>
Some newsletter entries are tailored to women or members of minority groups but most are interesting and useful for everyone. The CSWEP newsletters are available online here: <a href="http://www.aeaweb.org/committees/cswep/newsletters.php">http://www.aeaweb.org/committees/cswep/newsletters.php</a> and those of the CSMGEP are available here: <a href="http://www.aeaweb.org/committees/csmep/resources/">http://www.aeaweb.org/committees/csmep/resources/</a>

# 8a. Special Topics -- Diversity

The AEA Committee on the Status of Minority Groups in the Economics Profession (CSMGEP) notes that the number of economics Ph.D. recipients who are both U.S. citizens and members of historically underrepresented minority groups (i.e. African Americans, Hispanics, and Native Americans) is very small (see, e.g. Rouse, 2008). In 2012 only 3.4% of doctoral degrees in economics were awarded to such individuals; of the 1,1195 individuals who received a Ph.D. in economics from a U.S. university that year, 15 were African-American, 26 were Hispanic, and none were Native American (NSF, 2012, table 22).

If you are a member of a historically underrepresented minority group (African-American, Hispanic, or Native American) it is to your advantage to indicate that on your CV; many U.S. departments take affirmative action to interview and hire U.S. citizens who are members of such groups. You could indicate this information explicitly or implicitly by (e.g.) listing any minority scholarships you have received or your membership in any minority student associations. The AEA now sponsors a website for minority job candidates; you can sign up here to be included on it: <a href="http://www.aeaweb.org/committees/CSMGEP/job\_market/index.php">http://www.aeaweb.org/committees/CSMGEP/job\_market/index.php</a>
Typically Asian-Americans and anyone who is not a U.S. citizen or permanent resident is not

Typically Asian-Americans and anyone who is not a U.S. citizen or permanent resident is not counted as a historically underrepresented minority (although they may be valued for contributing to diversity more generally).

Ngina Chiteji, Chair of the CSMGEP, provides the following advice: If you are a candidate from a minority group who does research on under-represented groups, you probably want to think about whether you would be interested in a joint appointment with a special studies department, such as African-American Studies, Latino Studies, Asian Studies or Native American Studies. Many colleges and universities have separate departments or programs for these interdisciplinary fields. If you have an interest in being affiliated with such a division, you should consider signaling that when you are on the market. For example, you could check the websites for these departments to see if they are hiring too, and then submit applications to both

departments while mentioning your interest in a possible joint appointment in your cover letter. Alternatively, you could inquire about opportunities for teaching across disciplines during your job interviews at the ASSA meetings. (If your work is on the economic conditions in Africa, for example, you might offer to teach a course with this title that is cross-listed with the African Studies Department.) Joint appointments often allow the Economics Department to engage in cost-sharing with another university division. At some institutions, particularly liberal arts colleges, this is often considered advantageous. Moreover, there is a growing trend of celebrating interdisciplinary research and teaching, and valuing scholars who have affiliations with departments outside their primary discipline is part of this trend. Accordingly, you may be able to increase your value--on the margin--if you market yourself as being interested in (and qualified for) appointments outside of Economics. If you are a foreign student, a similar logic would apply for International Affairs Programs. And, if your research covers gender issues, you may want to check online to see if the institution to which you are applying has a Women's Studies Department or a Gender Studies Department.

The CSMGEP organizes a Mentoring Program that matches graduate students and new economics Ph.D.s with mentors in the field and facilitates other professional networking. Participants must be U.S. citizens or permanent residents; see Rouse (2009). The CSMGEP also publishes an annual newsletter called *The Minority Report* that contains useful articles on the job market and publishing; it can be read online at:

http://www.aeaweb.org/committees/CSMGEP/resources/

If English is your second language, prospective employers will evaluate whether your English skills are sufficiently advanced for you to teach successfully at their institution. It is important for you to speak clearly during your interviews and seminar, particularly for departments that heavily emphasize undergraduate teaching. Loveridge (1996) points out that non-native speakers of English may use technically correct but odd phrases in their writing and encourages such applicants to ask a friend who is a native speaker of English to proofread cover letters. Non-native speakers of English should not despair for their job market prospects; the market for new Ph.D.s in economics is quite international.

The paragraph below appeared earlier in this guide under the heading of "Interviewing at the ASSA Meetings." I reproduce it here because of its relevance to the topic of diversity. The U.S. Equal Employment Opportunity Commission (EEOC) enforces laws against employment discrimination on the basis of (e.g.) age, race, disability, and pregnancy. On the EEOC website <a href="http://www.eeoc.gov/federal/adr/statutes.cfm">http://www.eeoc.gov/federal/adr/statutes.cfm</a> you can click on various links to see the Federal statutes and regulations applying to each type of discrimination. There are also state laws and regulations regarding employment discrimination, and these may be more stringent than the Federal ones. The Cornell Law School has a useful webpage that explains what to do if, during a job interview, you are asked a question that you think may be illegal: <a href="http://www.lawschool.cornell.edu/careers/students/interview/ill\_questions.cfm">http://www.lawschool.cornell.edu/careers/students/interview/ill\_questions.cfm</a>

A friend who is a labor lawyer offers this advice that you should keep in mind in future years when you are conducting job interviews for your department: From an employer's perspective, any question pertaining to the applicant's membership in a protected class (race, color, religion, national origin, ancestry, sex, sexual orientation, marital status, pregnancy, children, age, or handicap) should not be asked. Even though in some cases it may not be per se illegal to ask the question, if there is an adverse employment action down the road, the employee/plaintiff may use the question to show evidence of bias. Further, an employer should understand (but usually doesn't) that even if the candidate has "opened the door" to a topic that really shouldn't be discussed, the employer should not walk through that door and keep talking about it.

Siegfried and Stock (2004) find, using data on new economics Ph.D.s in 2001-2002, that there is no significant difference in starting salary by race, age, sex, marital status, citizenship, or native language. Cawley and Morrisey (2007) and Cawley, Morrisey and Simon (2015) find no significant differences by race or sex in the academic earnings of health economists.

The percentage of new economics Ph.D.s, job candidates, and new hires that were female is listed in Table 11. Currently, roughly a third of new economics Ph.D. recipients are women. The third and fourth rows of Table 11 indicate that women were slightly underrepresented (relative to their share of all job market candidates) among new hires by U.S. departments that

grant Ph.D.s and slightly over-represented among new hires by U.S. departments that do not grant Ph.D.s.

Table 11:
Percent of New Economics Ph.D.s
And New Hires That Are Female
2007-2010

	2012	2013
All New Ph.D. Recipients	32.5	35.0
Initial Job: U.S. Academic Job, Ph.DGranting Department	31.4	32.7
Initial Job: U.S. Academic Job, Non-Ph.DGranting Department	36.6	37.0
Number of Departments Reporting	122	124

#### Notes:

Cell values indicate percent female.

All Ph.D.-granting economics departments in the U.S. were surveyed; the number of departments reporting is listed in the last row.

Sources: McElroy (2013, 2014) Tables 1,5.

The Committee on the Status of Women in the Economics Profession (CSWEP) publishes a newsletter that includes articles regarding the experiences of female economists in the job market. The CSWEP newsletter is online at:

https://www.aeaweb.org/committees/cswep/newsletters.php

CSWEP organizes a mentoring program (the CSWEP Mentoring Program or CeMENT) at which female junior academic economists receive feedback on their research papers or grant proposals and attend panel discussions on research and publishing, getting grants, teaching, the tenure process, and work-life balance. Recently, CSWEP conducted a randomized experiment and concluded that the CeMENT mentoring program increased top-tier publications and total number of publications after three and five years, and total number of successful federal grants after five years (Blau et al., 2010). More information about the program can be found here:

https://www.aeaweb.org/committees/cswep/mentoring/

Employers may ask candidates to indicate their race and ethnicity (e.g. through a web survey). Compliance is voluntary. This information will not be linked to your application or even given to the department, but is recorded by the institution's affirmative action office.

## 8b. Special Topics -- The Dual Job Search (Spouses)

At the beginning of your job search, sit down with your spouse or partner and discuss your preferences for locations and jobs, and how you as a couple would handle the range of possible job market outcomes. In particular, determine whether you are willing to live apart, and if so, under what circumstances. These discussions can be difficult, because the answers depend in part on how much each of you is willing to compromise your career for the relationship (and vice versa).

If your spouse is also an academic, it is in your best interest to reveal this to potential employers sooner rather than later. Many departments and universities have policies and procedures to accommodate academic couples. Moreover, if an employer does not accommodate academic spouses, this is information that you want to have as soon as possible. Nothing good can come from concealing information about your spouse's job search; your goal on the job market is to find a good match with an employer. If you wait until you have an offer in hand to ask for help with an academic spouse's job search then you have waited too long; even when systems are in place to help with this issue, the process takes weeks.

It is not necessary to describe your dual job search in your letters of application, but you could describe it briefly during your ASSA interview. You can provide the rest of the details on your campus visits. By the time you conclude a campus visit, the prospective employer should understand your preferences and constraints with respect to your "two-body problem."

Academic departments generally cannot find a job for a nonacademic spouse, but they may be able to refer the spouse to local labor market resources.

If your spouse is applying for another academic job at the same university, make sure that both search committees know this. Search committees are aware of the difficulty dual-career spouses have in finding dual job matches, and may jump at the chance to resolve two job searches

quickly.

Dual academic career couples enjoy maximum flexibility when they are both on the job market at the same time. If both partners are not at the same stage of graduate studies, the partner who is farther along could consider a postdoc while waiting for the other to finish.

Dual career academic couples should strongly consider sending their AEA signals to institutions that are already advertising suitable jobs for both spouses.

If your spouse has good job prospects in the vicinity of the university to which you are applying, it is in your interest to reveal this information to the search committee. People dislike uncertainty; if the committee knows that the job and area are a good fit for you and your spouse then they will assign a higher expected probability that you will accept the job if offered. Search committees want the offers they make to be accepted, so this may make you a more attractive candidate.

The Fall 2009 CSWEP newsletter contains stories and job market advice from dual-economist couples. <a href="http://www.cswep.org/newsletters/CSWEP">http://www.cswep.org/newsletters/CSWEP</a> nsltr Fall 2009.pdf

Revisit the Cornell Law School webpage that explains what to do if, during a job interview, you are asked questions about your marital status or plans to have children: http://www.lawschool.cornell.edu/careers/students/interview/ill\_questions.cfm

You may find it helpful to read columns in the Chronicle of Higher Education devoted to dual academic career couples. You can search for them in the Chronicle's Careers section: <a href="http://chronicle.com/jobs/">http://chronicle.com/jobs/</a>

# 9. Summary

Below are the four most important pieces of advice regarding the job market.

- 1) Know where you fit in the discipline of economics; in particular, know:
  - a. In what fields of economics you will specialize
  - b. How your job market paper relates to the literature
  - c. Your comparative advantages as a researcher and teacher
- 2) Success in the job market is finding a good match from your perspective, a job in which your work is appreciated, you enjoy the work, and in which you can grow and improve.
- 3) Honesty with your advisors and potential employers about your interests, comparative advantages, and any constraints on your search improves your chances of finding a good match.
- 4) The job market is the first period in a repeat game. You will continue to interact with the people you meet on the job market as journal referees, discussants, grant reviewers, and colleagues. Conducting yourself with maturity and integrity on the job market will pay dividends far into the future.

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