



Undergraduate Women in Economics

The Challenge

<http://scholar.harvard.edu/goldin/UWE>

The UWE Challenge is funded by the *Alfred P. Sloan Foundation* through the *National Bureau of Economic Research* and is endorsed by the *American Economic Association*.

Project Originator and Organizer:

Claudia Goldin, Henry Lee Professor of Economics, Harvard University

AEA President, 2013

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Participating Colleges & Universities

Brown University (Providence, RI)

Colorado State University (Fort Collins, CO)

Connecticut College (New London, CT)

Illinois State University (Normal, IL) [David L. Cleeton, Professor & Chair](#) - dlcleet@ilstu.edu

Princeton University (Princeton, NJ)

Southern Methodist University (Dallas, TX)

St. Olaf College (Northfield, MN)

University of California, Berkeley (Berkeley, CA)

University of California, Santa Barbara (Santa Barbara, CA)

University of Central Florida (Orlando, FL)

University of Colorado Boulder (Boulder, CO)

University of Connecticut (Mansfield, CT)

University of Hawaii at Manoa (Honolulu, HI)

*University of Illinois (Champaign, IL) [Elizabeth Powers, Associate Professor
and Director of Undergraduate Studies](#) - epowers@illinois.edu*

University of Richmond (Richmond, VA)

University of Virginia (Charlottesville, VA)

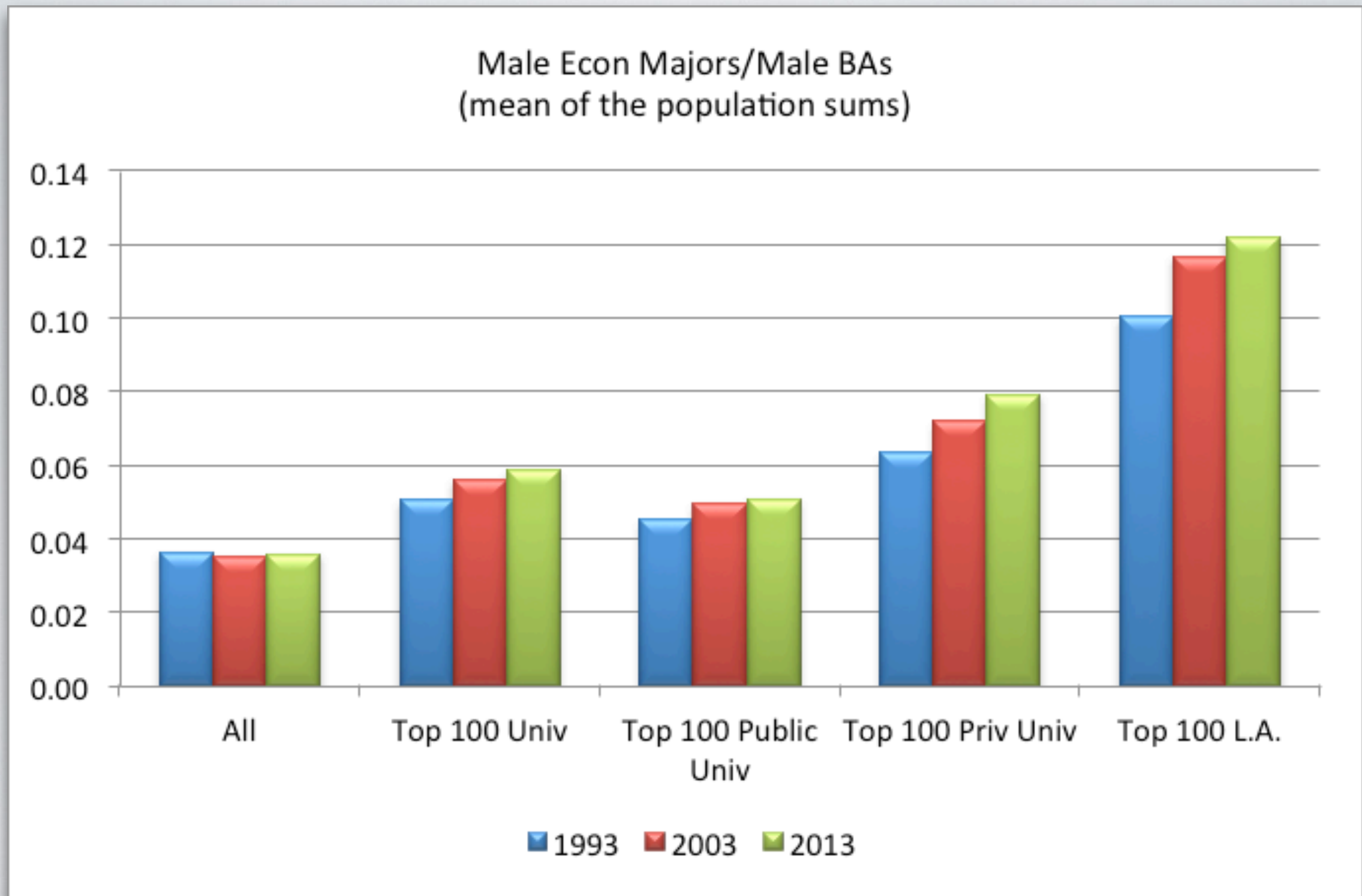
University of Wisconsin, Madison (Madison, WI)

Washington and Lee University (Lexington, VA)

Williams College (Williamstown, MA)

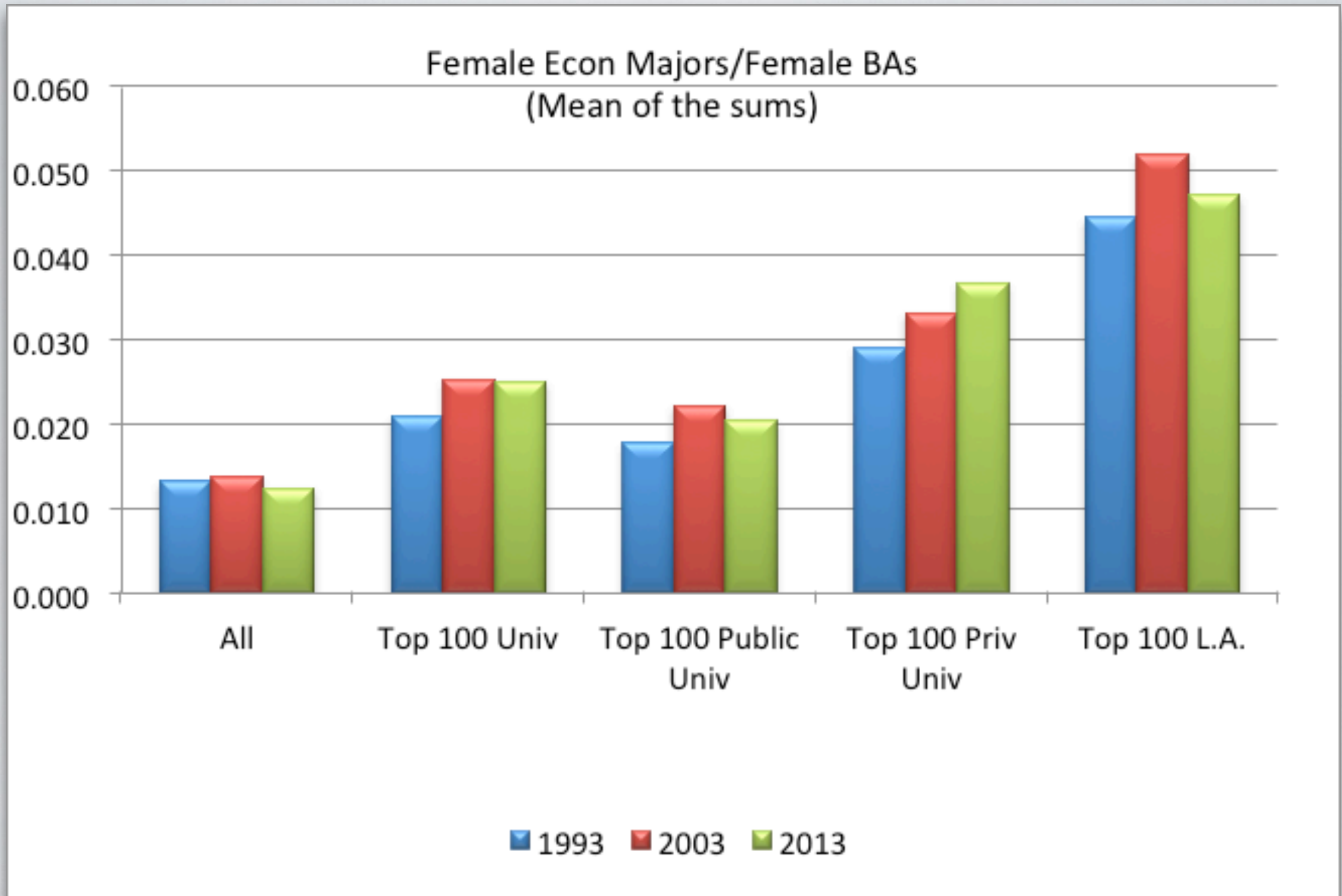
Yale University (New Haven, CT)

MALE ECON MAJORS



1993 to 2013. Economics is popular for males.

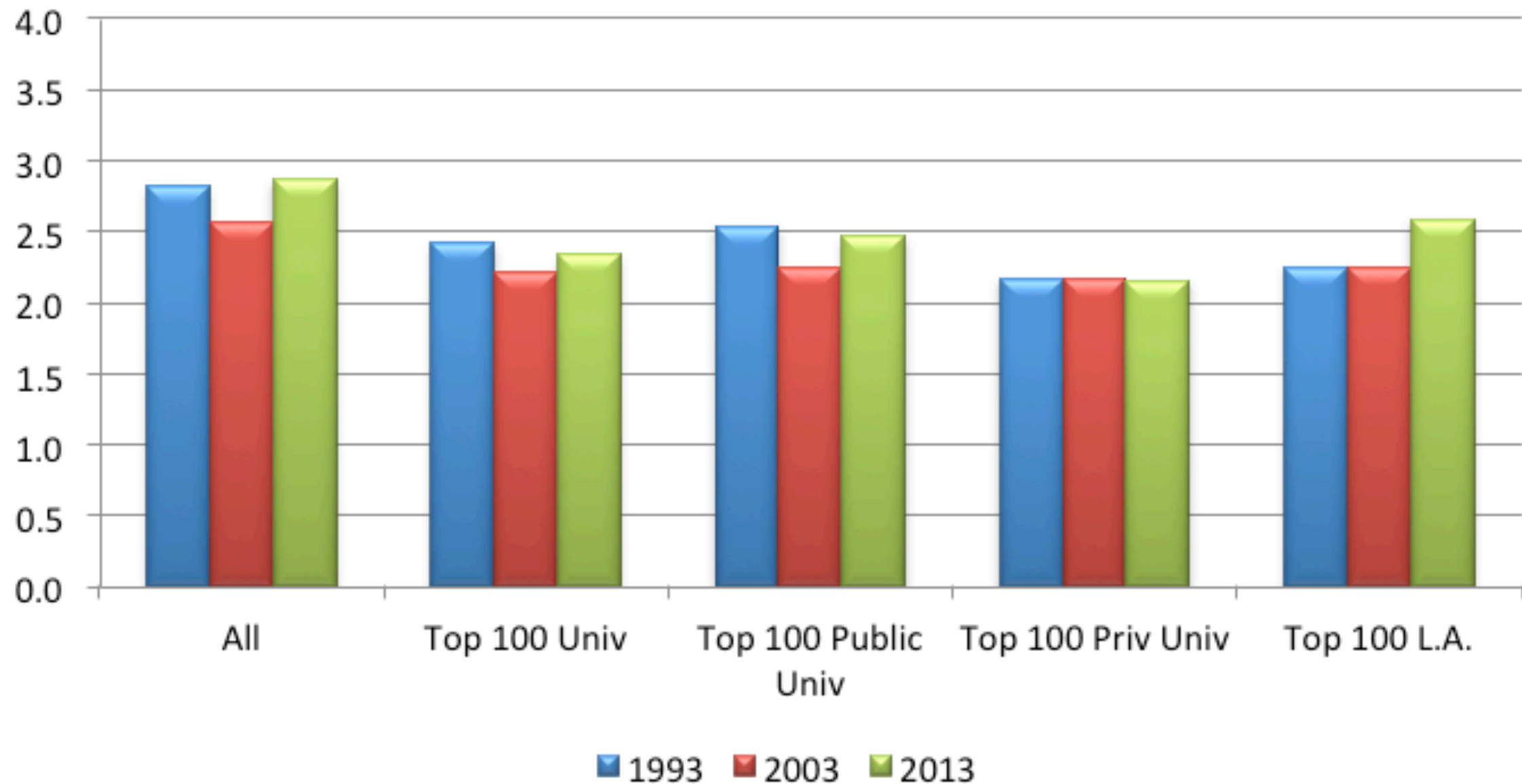
FEMALE ECON MAJORS



1993 to 2013. Economics is less popular for females.

MALE/FEMALE ECON MAJORS

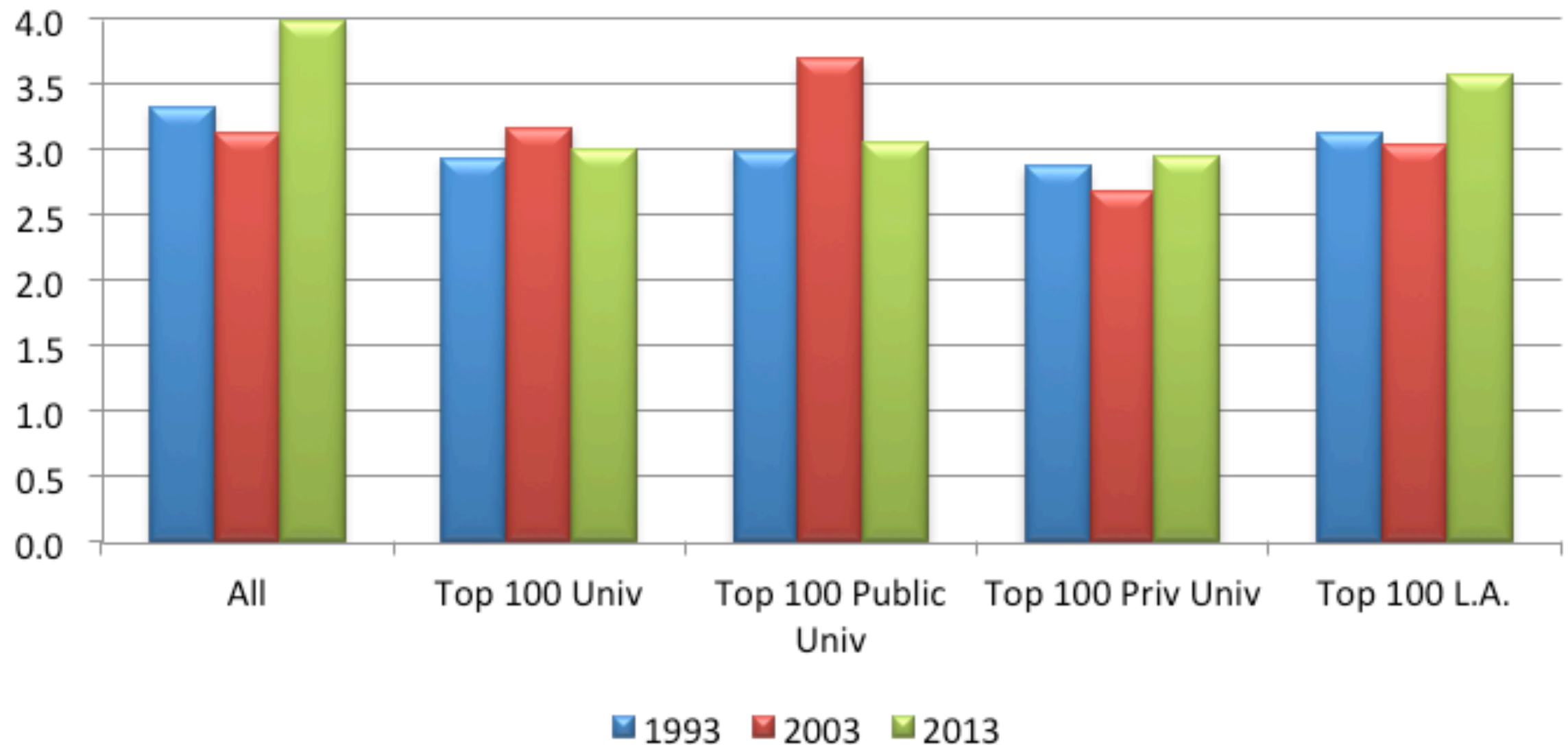
(mean of the population sums)



"Conversion" ratios, 1993 to 2013. No change across 20 years.

MALE/FEMALE ECON MAJORS

(mean of ratios)

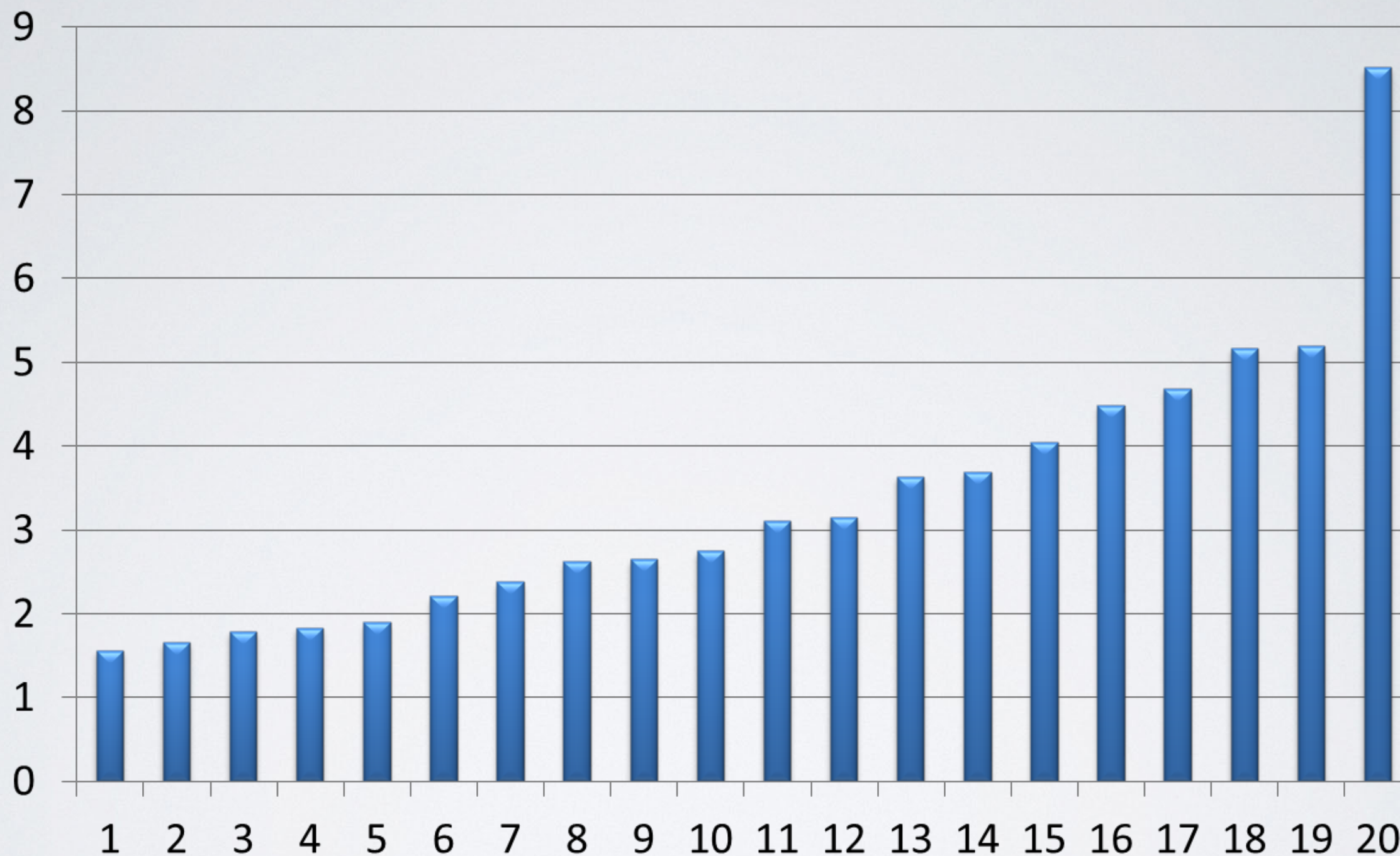


"Conversion" ratios, 1993 to 2013. No change across 20 years.

CHALLENGE TREATMENT AND CONTROLS

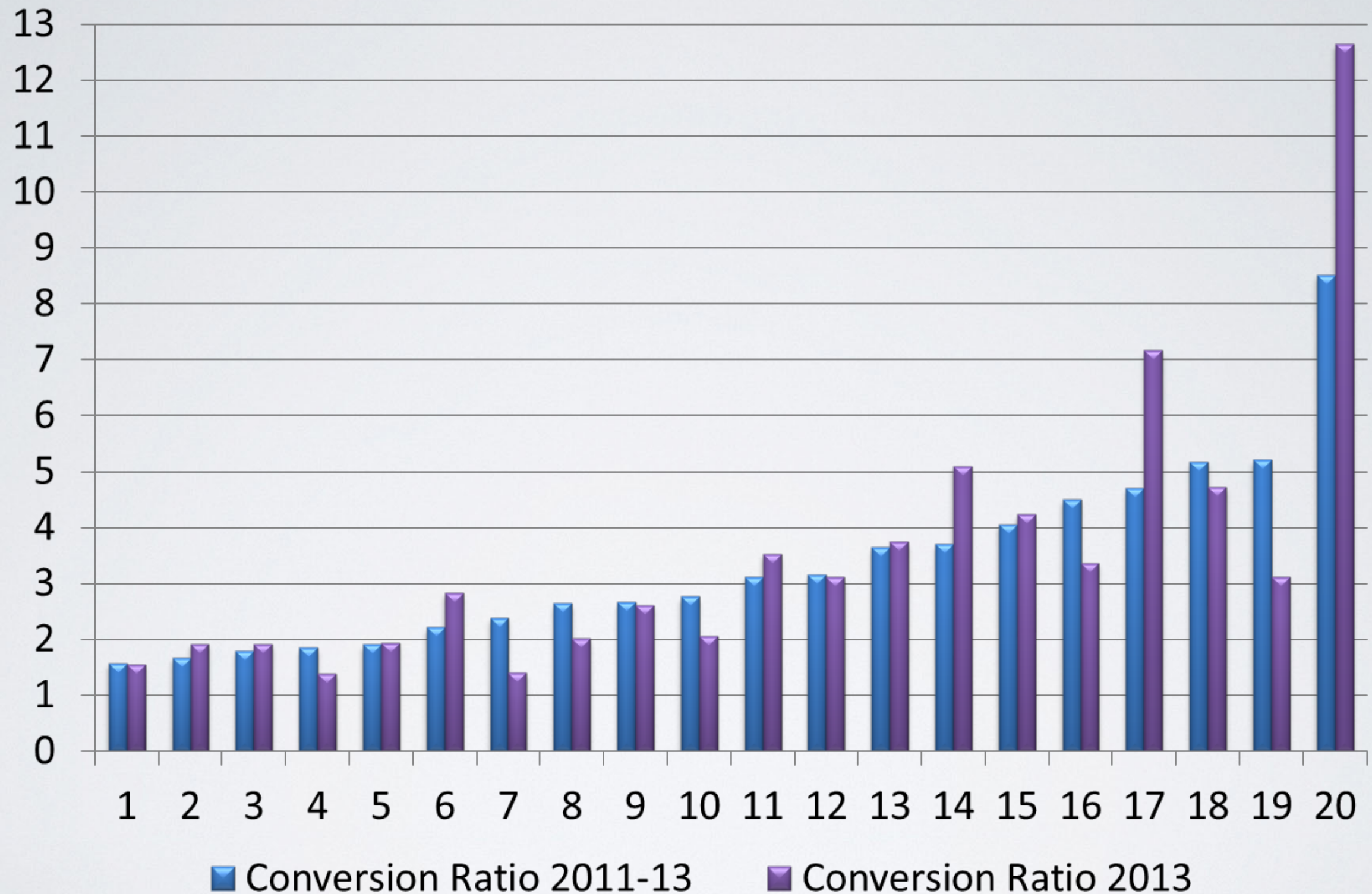
- **Invited** 325 schools with 15 or more economics graduates; 160 responded; 88 in “treatable” sample; 20 chosen at random; 38 of the others have agreed to be controls.
- **Treatments:** Brown; CO St.; CT Coll; Illinois State; Princeton; SMU; St. Olaf; UCSB; UC Berkeley; Univ. Central FL; UC Boulder; UConn; Univ. of Hawaii; Univ. of Illinois; Univ. of Richmond; UVa; Univ. of Wisc., Madison; Washington & Lee Univ.; Williams College; Yale.
- **Controls:** 38 comparable institutions
- **Others:** 30 “treatable” sample schools could be added controls.

20 “TREATMENT” SCHOOLS: CONVERSION RATIOS, 2011-2013



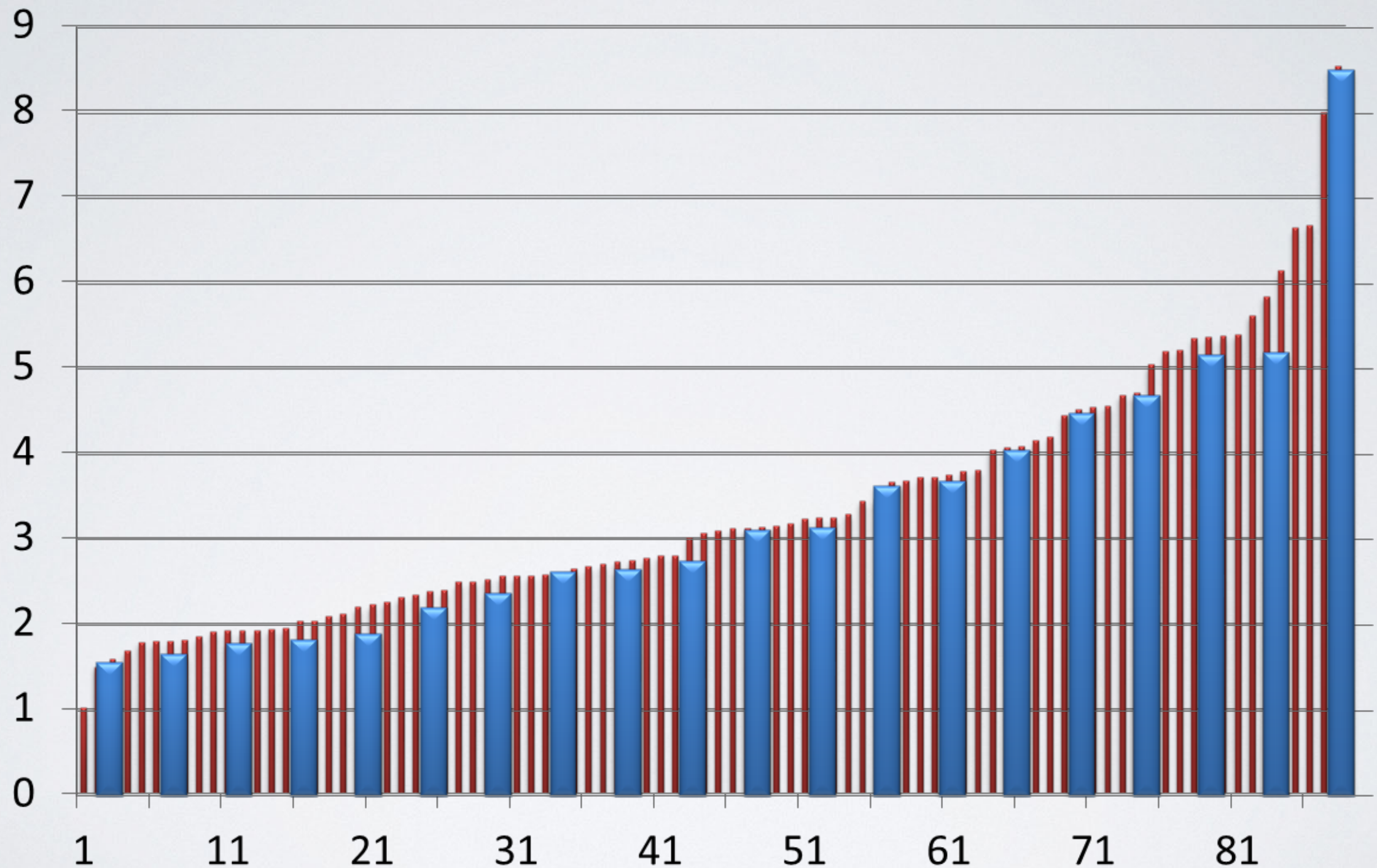
NOTE: Average of separate years, 2011-2013, from IPEDS data.

20 “TREATMENT” SCHOOLS: 2011-13 VS. 2013



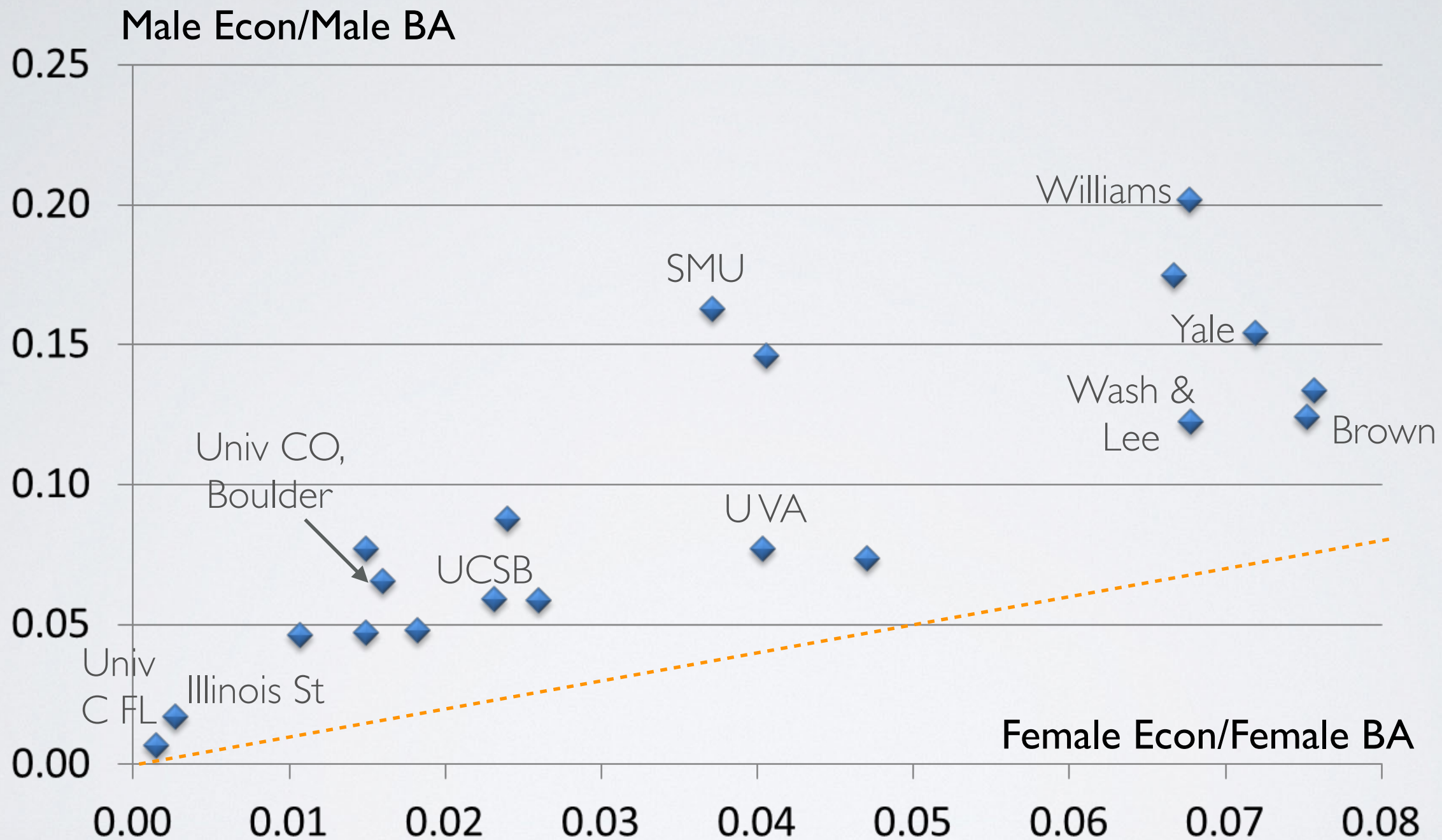
Year to year fluctuations even for schools with more than 25 economics BAs.

88 “TREATABLE” SCHOOLS (RED) & 20 TREATMENTS (BLUE)



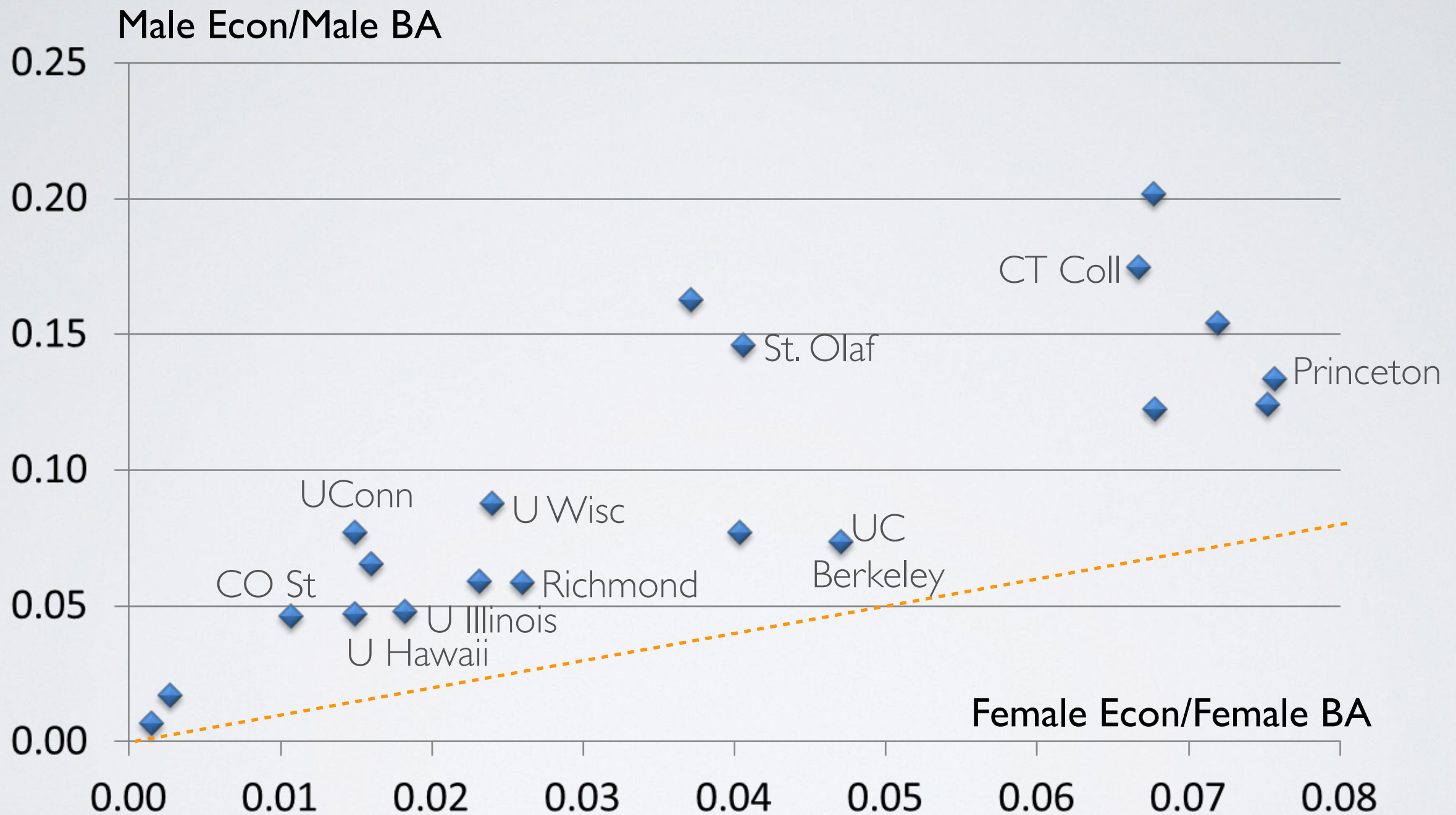
NOTE: Not surprisingly, the full “treatable” and the random 20 distributions are very similar.

20 “TREATMENT” SCHOOLS: FEMALE & MALE MAJOR RATIOS



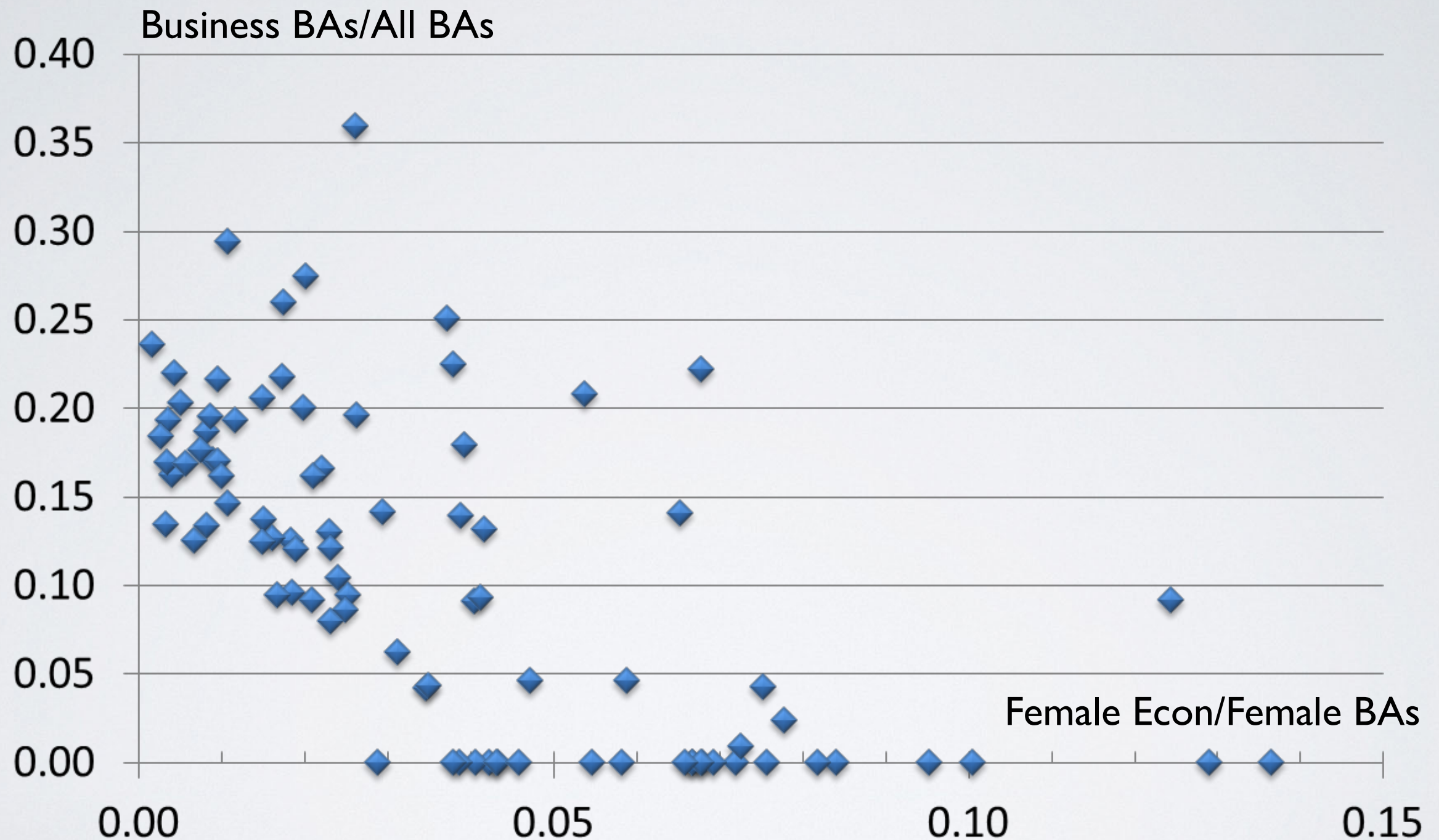
NOTE: Ratios given are the average of the three years 2011-2013.

20 “TREATMENT” SCHOOLS: FEMALE & MALE MAJOR RATIOS



NOTE: Ratios given are the average of the three years 2011-2013.

88 TREATABLE SCHOOLS: FEMALE MAJOR RATIO AND BUSINESS BA_s/ALL BA_s): 2011-2013 AVERAGE



More business majors “means” fewer female economics majors.

Female major ratio = (Female Econ/Female BA) is average of 2011-2013 totals, as is (Business BA_s/All BA_s).

Better Information	Mentoring and Role Models	Content and Presentation Style
<p>Without accurate information about the broader application of economics (e.g., beyond finance and consulting), women are more likely to major in less rigorous fields, often within the social sciences or humanities.</p>	<p>Women are more sensitive to their grades in introductory courses when choosing their major than are men. The creation of networks among students within the department and showing support for their decision to major in the field has been effective in recruiting underrepresented minorities.</p>	<p>On average, female undergraduates are less confident about their quantitative skills than are men even if they are equally able and prepared. Their lack of confidence may diminish their belief that economics fits their personal strengths and abilities.</p>
<p>Use the <i>UWE-AEA Video</i> (to be produced by the AEA before Fall 2015) during freshman orientation week to highlight key points about the major, including:</p> <ul style="list-style-type: none"> • The many applications of economics; • The diversity of its practitioners; and • The range of potential careers. <p>Also use the video at the start of the introductory course, post it on the course website, and include it on the department's website.</p> <p>Augment the material provided on your department's website or in printed pamphlets to highlight information such as:</p> <ul style="list-style-type: none"> • Subfields and upper-level courses; • Various career options and course requirements for the different career tracks; and • How economics relates to other fields and majors, and the high return to an economics degree. <p>Guest speakers in lecture and other times:</p> <ul style="list-style-type: none"> • Invite alumni working in diverse fields to talk about their jobs and interests. • Have talks during campus open days, e.g., freshman parents' weekend. • Guest speakers in lecture classes should include diverse faculty in terms of gender, race and field. • Recruit faculty, from non-business/non-finance fields, who are inspirational and approachable. 	<p>Mentoring:</p> <ul style="list-style-type: none"> • Increase the number of female TAs/grad students/older undergrad mentors for students in intro and intermediate courses. • Make a video of your alumni talking about their work involving economics, even though "economist" may not be in their job title. • Facilitate opportunities for research and collaboration with the faculty. • Help students find summer jobs that value economics, are dynamic, and include human contact. <p>Creating student learning communities:</p> <ul style="list-style-type: none"> • Encourage coffee/study breaks in the economics department lounge. • Organize student groups to work with the department to create talks and conferences on diverse topics. • Connect with students through social media. <p>Faculty lunches:</p> <ul style="list-style-type: none"> • Have informal lunches with professors and TAs. • Pick faculty who specialize in diverse areas of economic research (e.g., health, labor, education, environmental, econ history, behavioral, corporate finance). <p>Student counseling:</p> <ul style="list-style-type: none"> • Offer faculty counseling at midterms and other grade times (research papers, presentations, etc.). Convey that making mistakes is often part of learning economics. 	<p>Add modules and case studies to introductory and intermediate courses. Use more evidence-based material in teaching.</p> <ul style="list-style-type: none"> • Present information through real-world examples that cover diverse subfields in economics and related disciplines. • Include study results and also information on the researchers who did the work and how they became interested in the subject. Invite the researchers to give a lecture. • Help faculty communicate more clearly and encourage more evidence-based theory courses. <p>Support independent/group projects in various sub-fields (e.g., health, education, poverty, crime, inequality, sports).</p> <ul style="list-style-type: none"> • Have students interview community residents about issues in recent economics news (e.g., pay-day loans; Affordable Care Act; student debt) and how they have been affected. • Coordinate community service opportunities that apply economic concepts and tie into course material. <p>Make sections more conducive to learning for students with different skill levels, styles of learning, and interests.</p> <ul style="list-style-type: none"> • Separate sections based on students' quantitative experience, not by ability. • If sections are heavily skewed by gender, deliberately change the gender mix and collect data on grades and drop-off rates.

The Economics Department at Illinois State University will organize the following 'interventions' as a participating institution in the Undergraduate Women in Economics (UWE) Challenge.

Use the UWE-AEA Video to highlight key points about the major, including:

- The many applications of economics;
 - The diversity of its practitioners; and
 - The range of potential careers.
- The video will be incorporated into a class period at the start of the introductory course. We will also post a link to the video on the course website, and the department's website.

Augment the material provided on our department's website and in printed pamphlets to highlight information such as:

- Subfields and upper-level courses;
- Various career options and course requirements for alternative career tracks; and
- How economics relates to other fields and majors, and the high return to an economics major.

Mentoring:

- Increase the number of female grad-student mentors for students in intro and intermediate courses.
- Facilitate opportunities for research and collaboration with the faculty by recruiting more female Undergraduate Teaching Assistants (UTAs).

We will invite all of the women enrolled in one of our 225-student sections of Principles of Economics to participate in a bi-weekly Friday lunch gathering focused on "Women in Economics". The programs will incorporate major recruiting efforts as well as serving as venues for women faculty members, graduate students, and alumni to discuss their work and interests.

Outreach for UWE – presentation scheduled for the annual Professors Conference, 12-13 November 2015, at the St. Louis Federal Reserve Bank on the UWE Challenge.

ECONOMICS

Does merit aid for college help or hurt the college system in the U.S.?

Would a tax on sugary beverages reduce obesity?

What are the implications of China's decades of low fertility?

Does international trade lower the wages of unskilled U.S. workers?

Does growing up in a recession matter for your attitudes and beliefs as an adult?

Do parenting styles influence the outcomes of their offspring later in life?

Why have schools in the U.S. become more segregated? How has this affected black youths?

How can we attract high quality teachers to high poverty schools?

How did the legalization of the birth control pill affect women's decisions about education, work, and family?

What are the long-run effects of housing vouchers on child outcomes?

Does corruption grease or sand the wheels of economic development?

How can income redistribution improve economic efficiency?

What caused the rise of the top 1 percent?

How are wages determined? Why have wages remained stagnant for so long?

Do financial markets reflect rational behavior?

Will new technologies allow Google, Apple and Tesla to displace today's global Big Three (VW, GM and Toyota)?

Can mandated political representation increase the welfare of minorities?

Why would Native American tribes raise millions of dollars to buy back land far from their reservations?

Does economic growth worsen income inequality?

INTERESTED?

Register for
ECON 105 or
ECON 103
this Spring

SPRING TERM COURSES

ECON 138: Economic Reasoning Using Statistics
ECON 215: Money & Banking
ECON 220: Law & Economics
ECON 235: Telecommunication Economics & Policy
ECON 236: Economics of Energy & Policy
ECON 238: Using Regression and Econometric Methods
ECON 240: Intermediate Microeconomics
ECON 241: Intermediate Macroeconomics
ECON 245: International Economics
ECON 343: Competition & Managerial Strategies
ECON 345: International Trade
ECON 350: Public Finance
ECON 326: Economics of Human Resources