

**A Comparison of Salary Structures between Economics and Agricultural Economics  
Departments**

Christiana E. Hilmer

Michael J. Hilmer\*

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\* Christiana Hilmer, Assistant Professor, Department of Economics, San Diego State University, chilmer@mail.sdsu.edu; Michael Hilmer, Assistant Professor, Department of Economics, San Diego State University, mhilmer@mail.sdsu.edu.

Agricultural economics is an important subdiscipline of economics. Along with Microeconomics, Macroeconomics and Monetary Economics, Mathematical and Quantitative Methods, and others, Agricultural and Natural Resource Economics is one of 19 field headings within the discipline recognized by the *Journal of Economic Literature*. Nonetheless, while there are not separate Microeconomics, Macroeconomics and Monetary Economics, Mathematical and Quantitative Methods departments, nearly all U.S. Land-Grant institutions operate separate departments of agricultural economics which are in the vast majority of cases housed within an entirely different college from Economics departments. This gives rise to the possibility that despite sharing similar disciplinary training, conducting similar research, teaching many similar courses, and desiring to publish in many of the same journals, economists belonging to economics and agricultural economics departments might face significantly different salary structures, even within the same institution. Yet, little is known about the potential differences in the salary structures between economics and agricultural economics departments.

Potential differences between salary structures are important because rational agents respond to the incentives provided by the remuneration systems they face at their places of employment and are therefore more likely to participate in those activities for which they receive the highest relative return. For academics, an interesting focus of this line of research is the economic return to measurable aspects of the publication process. Previous studies have estimated salary structures separately for economics and agricultural economics programs, finding differences in the estimated return to publishing in different quality outlets and the return to sole- and co-authored articles (Hilmer and Hilmer, 2005; Moore, Turnbull, and Newman,

2001; Sauer 1988, etc.). While such studies have been informative, differences in time-frames, schools included in samples, etc. have precluded direct comparisons between economics and agricultural economics departments. This study is the first to empirically assess the difference between the prevailing salary structures in economics and agricultural economics departments at public institutions in the United States.

## **1. Data**

One of the primary reasons that such a study has never been conducted is likely the fact that individual salary information seems rather difficult to come by. This does not have to be the case, however, as the 1966 Freedom of Information Act (FOIA) gave citizens the power to request a substantial amount of information from federal government files. While the law did not apply to state governments, most states have since enacted their own FOIA policies that enable citizens to request state government records. As such, it should be possible to compile faculty salary data on the vast majority of public universities in the U.S. Hence, beyond the legwork involved, there is little to prevent a researcher from compiling a comprehensive data set that enables the comparison between the salary structures within economics and agricultural economics departments at the majority of public institutions in the U.S.

An important difference between economics and agricultural economics programs is that the latter serve an extension purpose in addition to the traditional teaching and research focus served by economics programs. As such, while we recognize the importance of the three-part mission of land-grant institutions, in order to make the most apt comparison between department types, we limit our focus to those agricultural economics faculty with teaching/research appointments. We note that this approach is standard in the literature and has been employed

before by Kinnucan and Traxler, Simpson and Steele, and others. We further limit our sample to top Ph.D.-granting agricultural economics programs and we define such programs as those being included among Perry's (2004) ranking of the top Ph.D.-granting agricultural economics programs.

Following this approach, in August 2007 we started making FOIA requests for current annual salaries for tenure track teaching/research faculty members in the departments of economics and agricultural economics at Perry's top 25 Ph.D.-granting agricultural economics programs. In response, we received usable data from 23 of the 25 institutions, with Cornell and Penn State refusing to provide data. An important concern in salary determination is the relative "quality" of the different programs represented in our sample. As mentioned above, our quality measure for agricultural economics programs comes from Perry's (2004) rankings and we define tier 1 programs as those having a reputation ranking above 4.0, tier 2 programs as those having a reputation ranking between 3.0 and 4.0, and tier 3 programs as those having a reputation ranking between 2.0 and 3.0. Our quality measure for economics programs is based on the 1993 National Research Council rankings of the top 106 Ph.D.-granting economics departments in the U.S. and we define tier 1 programs as those being ranked in the top 30, tier 2 programs as those being ranked between 31 and 60, and tier 3 as being those ranked 61 or below.

The remaining individual-specific data are collected from multiple other publicly-available sources. Gender and current academic rank are determined from departmental websites and/or individual homepages. Individual-specific peer-reviewed publication data through 2007 are collected from *Econlit*, which is the American Economic Association's bibliography of economics literature throughout the world. The database currently contains information on articles published in more than 700 journals, including all the major field and general interest

economics journals. To account for potential differences in the quality and/or likely importance of different publications, we distinguish between five different types of publications: (1) Top 36 economics journals according to Scott and Mitias (1996)<sup>1</sup>; (2) other economics journals; (3) core agricultural economics journals according to Perry (2004), which are the *American Journal of Agricultural Economics*, the *Journal of Environmental Economics and Management*, *Land Economics*, and the *Journal of Agricultural Economics*<sup>2</sup>; (4) regional agricultural economic journals, which according to Beilock and Polopolus (1988) are the *Journal of Agricultural and Resource Economics*, the *Journal of Agricultural and Applied Economics*, the *Agricultural and Resource Economics Review*, the *Northcentral Journal of Agricultural Economics*, and the *Canadian Journal of Agricultural Economics*<sup>3</sup>; and (5) other agricultural economics journals.

## **2. Summary Statistics**

Table 1 presents the 23 programs for which we have data according to whether they are ranked as tier 1, tier 2, or tier 3 programs within the economics and agricultural economics distributions. Overall, the entries suggest that institutions tend to have similarly ranked economics and agricultural economics programs. In particular, of the 5 institutions having tier 1 agricultural economics programs, 2 also have tier 1 economic programs while the remaining three have tier 2 economics programs. Likewise, of the 6 institutions with tier 1 economics programs, 2 have tier 1 agricultural economics programs while the remaining 4 have tier 2 agricultural economics programs. At the opposite end of the spectrum, among the 9 institutions with tier 3 agricultural economics programs, 8 also have tier 3 economics programs while 9 of the 10 institutions with tier 3 economics programs also have tier three agricultural economics programs.

Table 2 presents summary annual salary statistics across academic ranks and program tiers. Comparing the percentage of faculty in the different academic ranks across program tiers provides the following insights. Across all program tiers, agricultural economics departments have lower percentages of assistant professors and higher percentages of full professors than economics departments. At the same time, among both economics and agricultural economics departments tier 1 programs have lower percentages of associate professors than tier 2 and tier 3 programs. Combined, the higher percentage of assistant professors and the lower percentage of associate professors within tier 1 programs might suggest that elite programs view the decision to tenure faculty more in terms of the opportunity cost of not replacing the individual with a newly-minted Ph.D. who might prove to be a future star.

Turning to average salaries, across the board the average annual salaries of economics department members are higher than the average annual salaries of agricultural economics department members. For tier 1 and tier 2 programs, the difference in average annual salaries between economists and agricultural economists increases with academic rank, from roughly \$7,000 to \$9,000 for assistant professors to roughly \$22,000 to \$23,500 for full professors. Given that full professors have likely published much more in their careers than assistant professors, this suggests that highly ranked economics programs may well be more likely to financially reward publishing success than agricultural economics programs.

Table 3 presents average publication statistics across program tier and current academic rank. In general, looking across academic ranks, while tier 1 agricultural economics faculty average more total publications than tier 1 economics faculty, tier 1 economics faculty average significantly more top 36 economics articles while tier 1 agricultural economics faculty average significantly more core, regional, and other agricultural economics articles. This wide disparity

in publishing patterns suggests that faculty members may well be responding to differences in respective salary structures in terms of determining where to aim their publishing efforts.

### 3. Empirical Results

The goal of our empirical work is to explain the factors that affect the annual salaries of members of economics and agricultural economics departments in the U.S. The standard approach to addressing this question is to estimate log annual salary regressions that control for different factors that are likely related to an individual's current annual salary. As mentioned above, we expect an individual's current annual salary to be a function of his or her gender, international status, the quality of program to which the individual belongs, and the publishing success that the individual has had. As such, the econometric model to be estimated can be written as,

$$(1) \log W_i = \delta_0 + \delta_1 M_i + \delta_2 I_i + \delta_3 Y_i + \delta_4 Y_i^2 + \gamma T_i + \beta P_i + \varepsilon_i,$$

where  $W_i$  is the 2007 academic year salary,  $M_i$  is 1 if the person is Male and 0 if female,  $I_i$  is 1 if the person is international and 0 if domestic  $Y_i$  is years since Ph.D.,  $Y_i^2$  is years since Ph.D. squared, and  $\varepsilon_i$  is the error term. In order to be able to control for different tiers of schools,  $T_i$  is a vector that accounts for tier 1 and tier 2 programs in either agricultural economics or economics departments. The  $P_i$  is a vector that contains measures of journal quality including top 36 economics journals, other economics journals, core agricultural economics journals, regional agricultural economics journals, and other agricultural economics journals. Our *a priori* expectation is that faculty members in higher ranked departments will be paid more and articles

published in more prestigious journals should have a more significant positive effect on an individual's earnings.

Table 4 presents the results of estimating basic log annual salary regressions. The first two columns present the simplest possible specifications that control only for the individual characteristics of gender and international status. These results suggest that without controlling for anything else, males earn roughly 7 percent more than females in both disciplines while international faculty earn roughly 4 percent less in economics departments. The fact that the R-square for these regressions is roughly .04 suggest that these individual characteristics explain very little of the difference in annual salary for economists and agricultural economists.

The middle two columns add controls for the number of years since the individual received the Ph.D. Doing so eliminates the statistical significance of being male for agricultural economists and the statistical significance of being international for economists. Because our experience term is entered as a quadratic, the estimated effect of an additional year depends on the number of years already accumulated. Comparing across experience profiles suggest that the return to an additional year is initially almost identical, 1.0 percent for both economists and agricultural economists five years after Ph.D.-receipt, but that the return decreases at a quicker rate for economists, .05 percent for an economist 30 years after Ph.D.-receipt versus .42 percent for an agricultural economist at the same point. While we recognize that that the estimated R-square is far from the be all end all of statistical measures, it does provide some information as to the amount of variation in annual salaries that we are able to explain. In this case, adding this one relatively simple control for experience appears to substantially increase the explanatory power of our regressions. The fact that the degree of increase is quiet different for economists and agricultural economists suggests a structural difference in salary structures between the two



disciplines. In particular, the estimated R-square for the regression increases more than 6-fold for agricultural economists and less than 3-fold for economists and after included the years since Ph.D. measures we are able to explain roughly one-third of the variation in agricultural economics salaries but less than one-sixth of the variation in economics salaries. In other words, it appears that agricultural economics department reward experience at a much greater rate than economics departments.

The final two columns indicate that add controls for the quality tier to which the individual's program belongs. Doing so increases the estimated R-square for agricultural economics by roughly one-third while it increases the value for economics more than two and a half times. Given that an individual's observed program rank is likely related to his or her research productivity and prominence within the profession, this disparity suggests that economics salaries are likely more dependent on research productivity. Holding our individual characteristics constant, agricultural economists in tier 1 and tier 2 programs average annual salaries that are 11 and 3 percent higher, respectively, than those earned by agricultural economists on in tier 3 programs. For economists, the average annual salaries of tier 1 and tier 2 faculty average nearly 21 percent and nearly 8 percent more than those of tier 3 faculty. Again, the fact that the estimated returns to belonging to more highly ranked programs are twice as large for economics as for agricultural economics suggests that relative standing within the profession likely plays a much greater role in salary determination for economists than for agricultural economists.

Table 5 adds controls for publication statistics to our analysis. The results again suggest different reward structures for the two disciplines. In particular, for economics we estimate that each additional top 36 article is associated with a statistically significant .64 percent increase in

current salary while for agricultural economics there is not a statically significant relationship between such publications and current annual salaries. At the same time, for agricultural economics we estimate that each additional core agricultural economics article is associated with a statistically significant .41 percent increase in current salary while for economics there is not a statically significant relationship between such publications and current annual salaries. The one area of agreement appears to be other economics articles for which we estimate statistically significant associations of .15 to .2 percent between each additional article and current annual salary for both economics and agricultural economics. Comparing the estimated R-square for these regressions to those in the previous regression that did not control for publication statistics again highlights underlying differences between salary determination in the two disciplines. Specifically, adding the publication controls increases the estimated R-square for agricultural economics by 20 percent and increases the estimated R-square for economics by more than 34 percent. Moreover, the value of the number itself is now larger in magnitude for economics than for agricultural economics. In other words, it appears that differences in current annual salary are determined to a greater degree by differences in published research in economics than agricultural economics.

A potential concern with the above estimates is that current annual salaries likely have a large institutional component that might be common across different departments. One of the advantages of our data set is that we possess salaries for both economics and agricultural economics departments on the same campuses. Hence, we should be able to control for at least some of the potential institutional components by including university fixed-effects. Table 6 presents the results of adding university dummy variables to our previous regression. Doing so has little effect on the estimated coefficients for economics but does significantly change some of

our estimates for agricultural economics. Specifically, after adding the university dummies, the estimated effect of belonging to a tier 2 program instead of a tier 3 program goes from being a marginally significant 1.9 percent to a statistically significant -6.2 percent. At the same time, the estimated effect of each additional regional agricultural economics journal goes from being a statistically insignificant .06 percent to being a statistically significant .31 percent. A possible explanation for this change is that there are certain tier 3 agricultural economics programs that pay disproportionately high current annual salaries to individual who have published a disproportionate number of articles in regional agricultural economics journals. Finally, we note that after adding our controls for individual characteristics, program tiers, published research, and university fixed-effects we are able to explain nearly sixty percent of the variation in current annual salaries for both disciplines.

#### **4. Conclusions**

This goal of this research has been to examine if there are differences in the pay structures between agricultural economics and economics departments. We find that on average salaries in economics departments are higher than salaries in agricultural economics departments. Not surprisingly, across all tiers and ranks economics departments publish more top 36 articles and agricultural economics departments publish more core, regional, and other agricultural economics journals. Publication patterns for other economics journals are very similar across tiers for assistant and associate professors while full professors in economics departments publish more other economics articles. Regression results suggest that years since Ph.D. explains a greater proportion of salaries in agricultural economics departments while the tier of school explains a great proportion of salaries structure in economics departments. Regression

results also suggest that the returns to publications in top 36 and other economics journals is higher in economics departments while publications in core and regional agricultural economics journals is more highly rewarded in agricultural economics departments.

## References

- Beilock, R., and L. Polopolus. "Ranking of Agricultural Economics Departments: Influence of Regional Journals, Joint Authorship, and Self-Citations." *American Journal of Agricultural Economics* 70(1988):403-09.
- Hilmer, C.E. and M.J. Hilmer. "How Do Journal Quality, Co-authorship, and Author Order Affect Agricultural Economists' Salaries?" *American Journal of Agricultural Economics* 87(2005):509-23.
- Kinnucan, H.W., and G. Traxler. "Ranking Agricultural economics Departments by AJAE Page Counts: A Reappraisal." *Agricultural and Resource Economics Review* 23(1994):194-199.
- Moore, W.J., R.J. Newman, and G.K. Turnbull. "Do Academic Salaries Decline with Seniority?" *Journal of Labor Economics* 16(1998):352-66.
- . "Reputational Capital and Academic Pay." *Economic Inquiry* 39(2001):663-671.
- Perry, G.M. "Ranking M.S. and Ph.D. Graduate Programs in Agricultural Economics – Spring 2004." Unpublished, Oregon State University, 1999.
- Sauer, R.D. "Estimates of the Returns to Quality and Co-authorship in Economic Academia." *Journal of Political Economy* 96(1998):856-66.
- Scott, L.C. and Mitias, P.M. "Trends in Rankings of Economics Departments in the U.S.: An Update." *Economic Inquiry* 34(1996):378-400.
- Simpson, J.R. and J.T. Steele. "Institutional Affiliation of Contributors to the American Journal of Agricultural Economics, 1973-83." *American Journal of Agricultural Economics* 67(1985):325-27.

Table 1  
Agricultural Economics and Economics Programs for Which We Have Data

Agricultural Economics					
Tier 1	Perry Rank	Tier 2	Perry Rank	Tier 3	Perry Rank
UC Berkeley	1	Minnesota	7	Kansas State	16
UC Davis	2	Ohio State	8	Florida	18
Maryland	3	Purdue	9	Connecticut	19
Iowa State	4	Wisconsin	10	Colorado State	20
NC State	5	Illinois	11	Virginia Tech	21
		Texas A&M	12	Oklahoma State	22
		Michigan State	13	Georgia	23
		Oregon State	14	Rhode Island	24
		Washington State	15	Missouri	25

Economics					
Tier 1	NRC Rank	Tier 2	NRC Rank	Tier 3	NRC Rank
UC Berkeley	7	Texas A&M	33	Georgia	63
Minnesota	10	Ohio State	35	Washington State	83
Wisconsin	15	Iowa State	36	Connecticut	84
Maryland	20	UC Davis	38	Oklahoma State	86
Mich. State	27	Florida	41	Missouri	93
Illinois	28	NC State	42	Colorado State	100
		Purdue	50	Oregon State	---
				Kansas State	---
				Virginia Tech	---
				Rhode Island	---

Table 2  
Summary Annual Salary Statistics by Academic Rank and Program Tier

	Agricultural Economics			Economics		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
<u>Assistant Professors</u>						
Mean	89,693.13 (6,944.94)	77,689.48 (9,279.77)	71,701.44 (5,176.39)	96,543.89 (15,683.41)	86,913.38 (6,896.72)	77,320.92 (7,786.61)
Minimum	77,395.88	60,000.00	65,129.94	72,000.00	75,047.00	66,736.08
Median	90,100.00	76,517.50	71,157.05	93,400.08	84,973.50	75,500.00
Maximum	102,214.00	99,600.00	80,000.00	144,445.30	100,200.00	92,390.90
Observations	11	28	16	49	24	24
Percentage of Faculty	.1375	.1547	.1391	.2438	.1727	.2069
<u>Associate Professors</u>						
Mean	104,544.60 (26,471.82)	89,957.63 (14,447.79)	84,734.60 (15,776.66)	125,065.50 (48,708.81)	104,132.10 (23,351.44)	86,843.33 (12,255.46)
Minimum	76,216.71	72,840.00	67,987.00	68,992.06	69,787.00	68,750.00
Median	99,382.00	87,287.00	81,475.70	106,344.30	99,566.00	84,277.50
Maximum	174,713.70	138,600.00	146,016.00	277,377.80	154,003.50	128,743.40
Observations	13	35	26	30	36	26
Percentage of Faculty	.1625	.1934	.2261	.1493	.2590	.2241
<u>Full Professors</u>						
Mean	148,076.30 (29,661.68)	116,764.20 (25,411.81)	111,628.80 (25,957.13)	169,847.90 (55,251.36)	140,389.30 (42,076.35)	111,689.70 (28,725.85)
Minimum	85,141.48	73,670.00	70,700.00	75,490.17	80,592.00	70,470.00
Median	150,333.40	114,667.50	108,881.00	164,182.50	134,325.00	106,865.50
Maximum	207,000.00	191,520.00	186,413.60	342,141.90	279,180.00	215,234.80
Observations	56	118	73	122	79	66
Percentage of Faculty	.7000	.6519	.6348	.6070	.5683	.5690

Table 3  
Summary Publication Statistics by Academic Rank and Program Tier

a) Assistant Professors

	Agricultural Economics			Economics		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
Top 36 Econ	1.364 (1.502)	.250 (.701)	.438 (1.504)	1.857 (2.151)	.792 (.932)	1.917 (2.781)
Other Econ	3.273 (3.259)	1.536 (1.644)	1.500 (2.338)	1.612 (2.597)	1.292 (1.654)	2.833 (4.114)
Core Ag. Econ	1.909 (2.343)	.964 (.962)	.875 (.957)	--- ---	.167 (.381)	--- ---
Regional Ag. Econ	.182 (.405)	.429 (.836)	1.250 (1.612)	--- ---	--- ---	--- ---
Other Ag. Econ	.545 (.820)	1.179 (1.926)	1.375 (1.408)	--- ---	--- ---	--- ---
Total Articles	7.273 (4.798)	4.357 (3.434)	5.438 (3.366)	3.469 (4.032)	2.250 (2.027)	4.750 (6.476)

b) Associate Professors

	Agricultural Economics			Economics		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
Top 36 Econ	2.077 (2.597)	.771 (1.165)	.308 (.736)	5.933 (2.651)	6.528 (3.975)	3.231 (3.050)
Other Econ	4.846 (4.862)	3.714 (3.635)	3.269 (3.424)	4.733 (3.750)	6.639 (4.237)	8.423 (6.061)
Core Ag. Econ	5.385 (2.755)	3.914 (3.551)	2.577 (2.386)	.100 (.403)	.250 (.649)	.077 (.272)
Regional Ag. Econ	1.615 (2.468)	1.371 (1.215)	2.192 (2.669)	--- ---	.028 (.167)	--- ---
Other Ag. Econ	3.154 (2.996)	3.771 (3.237)	3.962 (2.630)	--- ---	.139 (.833)	--- ---
Total Articles	17.077 (9.041)	13.543 (7.330)	12.3077 (7.609)	10.767 (5.063)	13.583 (6.447)	11.7308 (6.703)



Table 3  
(Continued)

c) Full Professors

	Agricultural Economics			Economics		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
Top 36 Econ	6.929 (7.461)	1.534 (4.165)	.863 (2.440)	15.557 (10.414)	13.038 (9.594)	5.788 (6.653)
Other Econ	10.375 (3.259)	6.958 (10.121)	4.397 (6.361)	17.107 (15.748)	13.772 (9.907)	16.333 (14.536)
Core Ag. Econ	14.143 (9.953)	6.593 (6.443)	4.534 (5.590)	.246 (.956)	.658 (1.739)	.712 (2.111)
Regional Ag. Econ	3.000 (3.021)	3.288 (4.486)	5.110 (5.734)	--- ---	.038 (.250)	.045 (.210)
Other Ag. Econ	6.339 (5.943)	4.805 (4.123)	4.438 (5.487)	.016 (.128)	.089 (.429)	.197 (.684)
Total Articles	40.786 (22.598)	23.178 (19.527)	19.3425 (18.606)	32.926 (21.053)	27.595 (15.723)	23.0758 (19.158)

Table 4  
Log Annual Salary Regressions

	Ag. Econ	Econ	Ag. Econ	Econ	Ag. Econ	Econ
<u>Individual Characteristics:</u>						
Male	.0694** (.0152)	.0720** (.0162)	.0197 (.0137)	.0445** (.0143)	.0164 (.0128)	.0270** (.0106)
International	-.0010 (.0187)	-.0357** (.0146)	.0468** (.0145)	.0106 (.0150)	.0282** (.0141)	.0051 (.0123)
Years Since Ph.D.	--- ---	--- ---	.0113** (.0017)	.0124** (.0019)	.0111** (.0015)	.0143** (.0017)
Years Since Ph.D. ^ 2	--- ---	--- ---	-.00012** (.00004)	-.00020** (.00004)	-.00012** (.00003)	-.00023** (.00004)
<u>Program Tier:</u>						
Ag. Econ Tier 1	--- ---	--- ---	--- ---	--- ---	.1104** (.0143)	--- ---
Ag. Econ Tier 2	--- ---	--- ---	--- ---	--- ---	.0286** (.0109)	--- ---
Econ Tier 1	--- ---	--- ---	--- ---	--- ---	--- ---	.2061** (.0148)
Econ Tier 2	--- ---	--- ---	--- ---	--- ---	--- ---	.0775** (.0115)
R-Squared	.0446	.0417	.3302	.1588	.4398	.4185
Observations	376	456	376	456	376	456

Table 5  
Log Annual Salary Regressions

			Include School Fixed-Effects	
	Ag. Econ	Econ	Ag. Econ	Econ
<u>Individual Characteristics:</u>				
Male	.0062 (.0124)	.0147 (.0105)	.0042 (.0117)	.0073 (.0108)
International	.0223 (.0142)	-.0007 (.0110)	.0179 (.0140)	-.0080 (.0108)
Years Since Ph.D.	.0082** (.0015)	.0059** (.0017)	.0077** (.0015)	.0058** (.0017)
Years Since Ph.D. ^ 2	-.00008** (.00003)	-.00010** (.00004)	-.00006* (.00003)	-.00010** (.00004)
<u>Program Tier:</u>				
Ag. Econ Tier 1	.0731** (.0143)	---	.0433 (.0378)	---
Ag. Econ Tier 2	.0192* (.0102)	---	-.0620** (.0311)	---
Econ Tier 1	---	.1501** (.0144)	---	.1386** (.0247)
Econ Tier 2	---	.0513** (.0101)	---	-.0164 (.0216)
<u>Publications:</u>				
Top 36 Econ	.0004 (.0012)	.0064** (.0007)	.0010 (.0013)	.0063** (.0008)
Other Econ	.0014** (.0006)	.0019** (.0006)	.0012** (.0006)	.0019** (.0006)
Core Ag. Econ	.0041** (.0008)	-.0004 (.0044)	.0038** (.0008)	.0006 (.0042)
Regional Ag. Econ	.0006 (.0014)	.0081 (.0564)	.0031** (.0014)	.0077 (.0509)
Other Ag. Econ	.0016 (.0010)	.0035 (.0142)	.0004 (.0011)	.0102 (.0131)
R-Squared	.5280	.5626	.5959	.6161
Observations	376	456	376	456

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<sup>1</sup> These are the *American Economics Review*, *Econometrica*, the *Journal of Political Economy*, the *Quarterly Journal of Economics*, and the *Review of Economics and Statistics*.

<sup>2</sup> Perry chooses these four journals because according to the Social Science Citation Index (SSCI) they are the only journals to have citation rates close to or higher than the citation rate for the *AJAE*.

<sup>3</sup> We recognize that these journals were previously known as the *Western Journal of Agricultural Economics*, the *Southern Journal of Agricultural Economics*, and the *Northeastern Journal of Agricultural Economics*.