
ACCOUNTING FACULTY IN U.S. COLLEGES AND UNIVERSITIES: STATUS AND TRENDS, 1993-2004



A REPORT OF THE AMERICAN ACCOUNTING ASSOCIATION
FEBRUARY 19, 2008

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REPORT PREPARED BY:

David W. Leslie, Chancellor Professor of Education,
The College of William and Mary

RESEARCH PROJECT COORDINATOR:

Bruce K. Behn, University of Tennessee

2007–2008 EXECUTIVE COMMITTEE MEMBERS
OF THE AMERICAN ACCOUNTING ASSOCIATION:

Gary Previts, Case Western Reserve University
Shyam Sunder, Yale University,
Sue Haka, Michigan State University
David Burgstahler, University of Washington
Joe Carcello, University of Tennessee
Robert J. (Bob) Daugherty, PricewaterhouseCoopers LLP
Sid Gray, The University of Sidney
Mark Higgins, University of Rhode Island
Phil Reckers, Arizona State University
Jane Saly, University of St. Thomas
Arnie Wright, Northeastern University
Chris Wolfe, Texas A&M University

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FOREWORD

The result of a joint project between the American Accounting Association (AAA) and Accounting Program Leaders Groups (APLG), the report entitled *Supply and Demand for Accounting Ph.D.s* (December, 2005) galvanized the accounting community's desire for more information about the state of our accounting environment.

With no central warehouse for information about the accounting supply chain to rely on, various entities have attempted to fill this void by producing studies, papers, and reports addressing various aspects and issues. For example, Jim Hasselback's famous chart outlining age demographics of the accounting professoriate, the American Institute of Certified Public Accountants (AICPA's) renewed efforts to gather information on the supply and demand of accounting students, Deloitte's survey of current doctoral students, AACSB International's report on doctoral shortages in business, the APLG/AICPA/FSA/AAA survey of doctoral program coordinators, and others. All stakeholders and supporters of accounting education working to gather relevant, reliable information that can be useful to decision makers attempting in a number of ways to address problems in the accounting supply chain, including the shortage of accounting doctoral students.

Like the projects conducted before it, this project arose from within the accounting community. To add pertinent information to understanding the state of the accounting academy, the AAA and AICPA looked outside the accounting domain for an analysis placing information about accounting specifically into the context of the larger higher education environment in the U.S. today.

With those purposes in mind, we asked David W. Leslie, Chancellor Professor of Education, The College of William and Mary, to lead our study. David has a distinguished career analyzing demographic data at all levels of education. His recent report, *The Reshaping of America's Academic Workforce*, for TIAA-CREF where he is an Institute Fellow, has been frequently quoted in the mainstream press. A significant portion of Leslie's analysis for that report was performed using the National Study of Postsecondary Faculty (NSOPF) database, which is also the basis of data for this report examining the environment in the accounting academy.

Collaborating on this project, the AICPA and AAA hope to add value to the accounting community by taking a view from outside the accounting environment, providing a context in which to better understand our current situation, allowing us to better forecast challenges and opportunities for the future. Information from this research project became part of the Advisory Committee on the Audit Profession's testimony to the U.S. Treasury Department in Washington, D.C. in the fall of 2007. The Advisory Committee, chaired by former Securities and Exchange Commission Chairman Arthur Levitt and former SEC Chief Accountant Donald Nicolaisen, was chartered by the U.S. Treasury to consider and develop recommendations relating to the sustainability of the auditing profession.

The AAA and AICPA would like to thank David Leslie for the energy and inspiration he brought to this joint effort. David would like to thank Bruce Behn, and AAA Executive Committee members Shyam Sunder, Dave Burgstahler, and Arnie Wright for their review and comments during completion of this report.

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EXECUTIVE SUMMARY

The number of accounting faculty declined 13.3 percent over the period 1988–2004. According to National Study of Postsecondary Faculty (NSOPF) data, accounting faculty (full- and part-time, in all types of postsecondary institutions) had fallen from 20,321 in 1993 to 17,610 in 2004. However, as the number of faculty has declined, student (undergraduate) enrollment has increased (12.3 percent) over the same period. The most serious loss of full-time faculty has occurred at four-year, non-doctoral-granting institutions—amounting to 31 percent of the 1993 total. The number of full-time accounting faculty at research/doctoral universities and at community colleges between 1993 and 2004 changed little, same for the total number of accounting faculty holding Ph.D.s.

Accounting is roughly average (among all disciplines) in the proportion of women in tenured or tenure-track positions, as well as roughly average in the rate at which women have entered the field. However, the total number of women accounting faculty remained almost perfectly stable between 1993 and 2004, while the number of male faculty declined substantially.

The number of accounting faculty over the age of 55 increased *while the number of accounting faculty under the age of 40 declined by half* during the 1993–2004 period. Both this study and the Plumlee (2004) study estimate that the number of retirements is likely to exceed the number of qualified replacements in the immediate future. Given the stability of Ph.D. production at about 140 per year on average, and with retirements estimated at about 500 per year, the production of new Ph.D.s appears far from sufficient to fill the demand. Further, about one-half of the Ph.D. degrees are being granted to non-U.S. citizens, many of whom may not stay to teach in U.S. schools.

A sign of the demand for new accounting faculty may be seen in the apparent salary inversion observed in the 2004 data: faculty under age 41 averaged higher pay than faculty over age 41.

Meanwhile, workload for accounting faculty has increased markedly, especially at research and doctoral universities, where the bulk of enrollment increases have also occurred.

While the data show a rapid escalation of salary for new faculty in accounting and stable levels of job satisfaction, the field faces an immediate future of pressure on faculty to work harder and longer as its workforce turns over through retirement.

I. DEMOGRAPHICS¹

Faculty

The number of accounting faculty at institutions offering baccalaureate and higher degrees – tenured, tenure-eligible, and not tenure-eligible – is estimated to have declined over the period 1993–2004. According to National Study of Postsecondary Faculty (NSOPF) data, full-time tenure-eligible faculty at these institutions declined more than 19 percent between 1993 and 2004. Table 1 (and Figure 1) shows the estimated (NSOPF) numbers of full-time, tenured, and tenure-track (“tenure-eligible”) faculty in accounting and all business fields other than accounting in 1993, 1999, and 2004. (The estimated number of tenure-eligible faculty in business fields other than accounting rose over 20 percent during the same period.) Table 2 presents the counts for full-time non-tenure-eligible faculty.

TABLE 1
NSOPF Estimate Number of Full-Time, Tenure-Eligible Faculty
Accounting and All Other Business Fields
1993–2004

	(institutions offering baccalaureate degrees and higher)			
	<u>1993</u>	<u>1999</u>	<u>2004</u>	<u>% Change</u>
Accounting	6,331	4,555	5,121	-19.11%
All other business fields	16,933	16,027	20,352	+20.20%

TABLE 2
NSOPF Estimated Number of Full-Time Non-Tenure-Eligible Faculty
Accounting and All Other Business Fields
1993–2004

	(institutions offering baccalaureate degrees and higher)			
	<u>1993</u>	<u>1999</u>	<u>2004</u>	<u>% Change</u>
Accounting	1,169	1,976	1,079	- 7.7%
All other business fields	3,649	5,573	6,148	+68.0%

¹ See the Appendix for data sources. Results derived from federal government data (NSOPF) were generated using the Data Analysis System of the National Center for Education Statistics, and should be considered estimates from sampled data. Totals vary among tables as different items on the NSOPF survey were necessarily used to generate tables and graphs (each with a different response rate). Minor differences in wording and aggregation of item responses from year to year of the survey may also affect comparability.

FIGURE 1
NSOPF Estimated Number (in 1000s) of Full-Time Tenured or On-Track Faculty
in Accounting and Other Business Fields at Institutions
Granting Baccalaureate or Higher Degrees
1993, 1999, and 2004

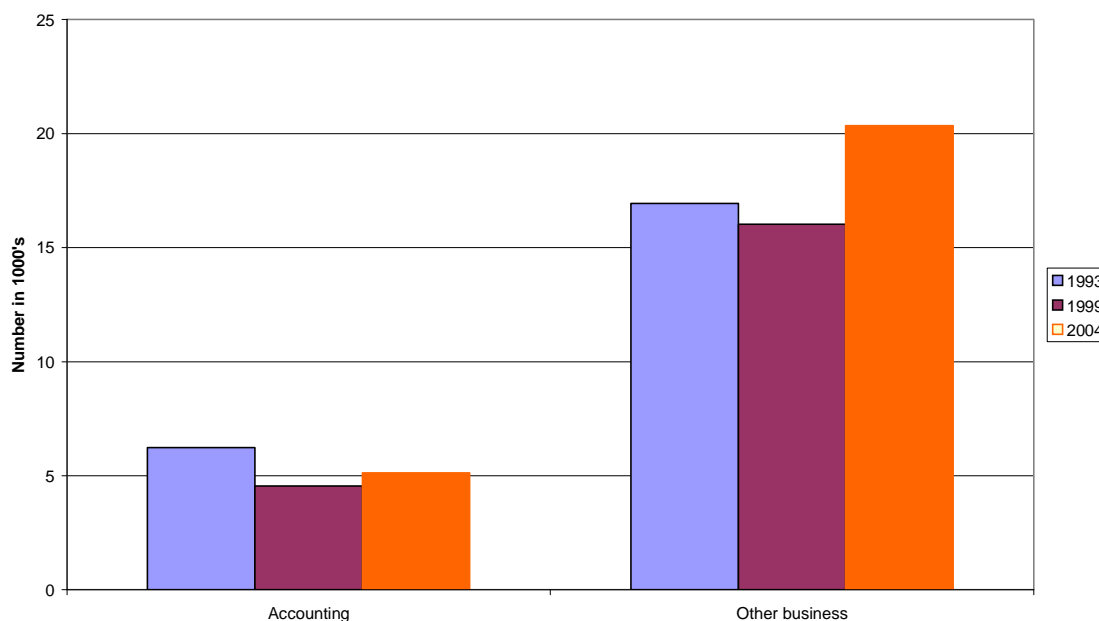


Table 3 presents the overall estimated number of accounting faculty at all types of institutions, including two-year, by tenure status. The number of tenure-track (but not yet tenured) faculty declined for the period, but rose over 36 percent between 1999 and 2004. (The number of all other business faculty is estimated to have increased by 22.6 percent for the same period.)

TABLE 3
Number of All Accounting Faculty at All Types of Institutions
by Tenure Status and Percent Change from 1993–2004

	(including two-year institutions)			
	1993	1999	2004	% Change
Tenured	5,825	4,900	4,779	-18.0%
On-Track	2,384	1,400	1,909	-19.9%
Not Eligible	12,112	11,100	10,922	- 9.8%
Total	20,321	17,400	17,610	-13.3%

As the number of faculty has declined, undergraduate student enrollment has increased.² Table 4 shows American Institute of Certified Public Accountants' (AICPA) estimates.³

² Varying estimates of enrollment may be found in NPSAS data, some suggesting that the trends differ among types of institution. NPSAS, however, does not permit disaggregation to the level of the accounting discipline beyond the year 2000.

³ Full-time undergraduate accounting enrollment estimated for 2000 by the National Center for Education Statistics (NPSAS) is 134,925.

TABLE 4
Estimated (Total) Undergraduate Enrollment in Accounting (AICPA)
and Net Change
1999–2000 to 2003–2004

	<u>1999–2000</u>	<u>2000–2001</u>	<u>2001–2002</u>	<u>2002–2003</u>	<u>2003–2004</u>	<u>% Change</u>
Estimated (total) Undergraduate Enrollment	127,960	134,775	133,435	141,175	143,735	12.33%

With the increase in student enrollments and decline in full-time tenured (or on-track) faculty, the ratio of students per full-time faculty member (baccalaureate or above institutions) has increased sharply from 20.54:1 in 1993 to 28.0:1 in 2004. The trends in numbers of full-time faculty differ by type of institution. Table 5 reports the numbers of full- and part-time faculty by type of institution for 1993 and 2004. Figure 2 shows that numbers of full-time accounting faculty have increased slightly at research and doctoral⁴ universities, declined substantially (31 percent, or nearly one-third) at other four-year institutions, and remained essentially static at two-year institutions.

TABLE 5
Number of Full- and Part-Time Accounting Faculty by Type of Institution
1993–2004

	<u>1993</u> <u>Full-Time</u>	<u>2004</u> <u>Full-Time</u>	<u>1993</u> <u>Part-Time</u>	<u>2004</u> <u>Part-Time</u>
Research/Doctoral	2,853	3,072	2,163	851
4-Year Non-Doctoral	4,572	3,169	2,714	3,555
2-Year	2,274	2,287	4,601	3,911
Total	9,699	8,528	9,478	8,317

It appears that research and doctoral universities have attempted to recapture full-time positions by using fewer part-time faculty, while four-year (typically master's-granting) colleges and universities have turned more of the teaching load over to part-timers. Figure 3 shows how the part-time trend is almost a mirror image of the full-time trend: numbers of part-timers have fallen almost two-thirds at research/doctoral institutions, but risen by almost one-third at four-year institutions. Two-year institutions rely far more heavily on part-time faculty. Figure 4 shows that accounting, on the whole, is more likely than other disciplines to rely on part-time faculty than on full-time faculty.

⁴ The Carnegie Foundation's classification identifies universities by the level of expenditures on research and number of doctoral degrees awarded.

FIGURE 2
Number of Full-Time Accounting Faculty by Type of Institution, 1993–2004

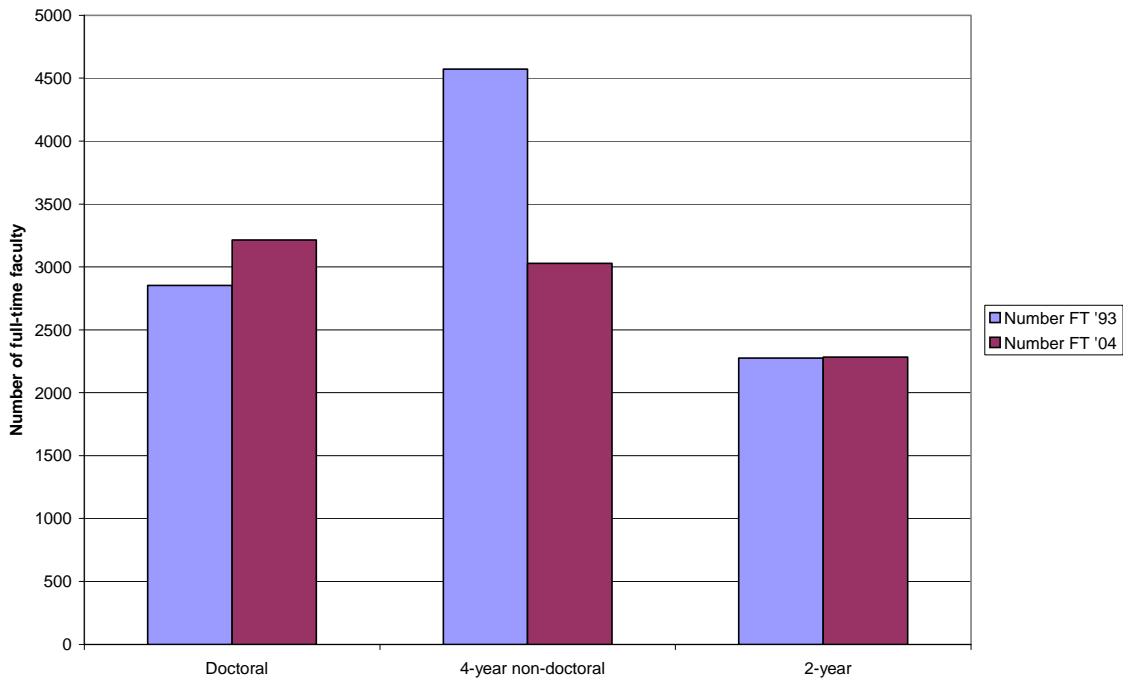


FIGURE 3
Number of Part-Time Accounting Faculty by Type of Institution, 1993–2004

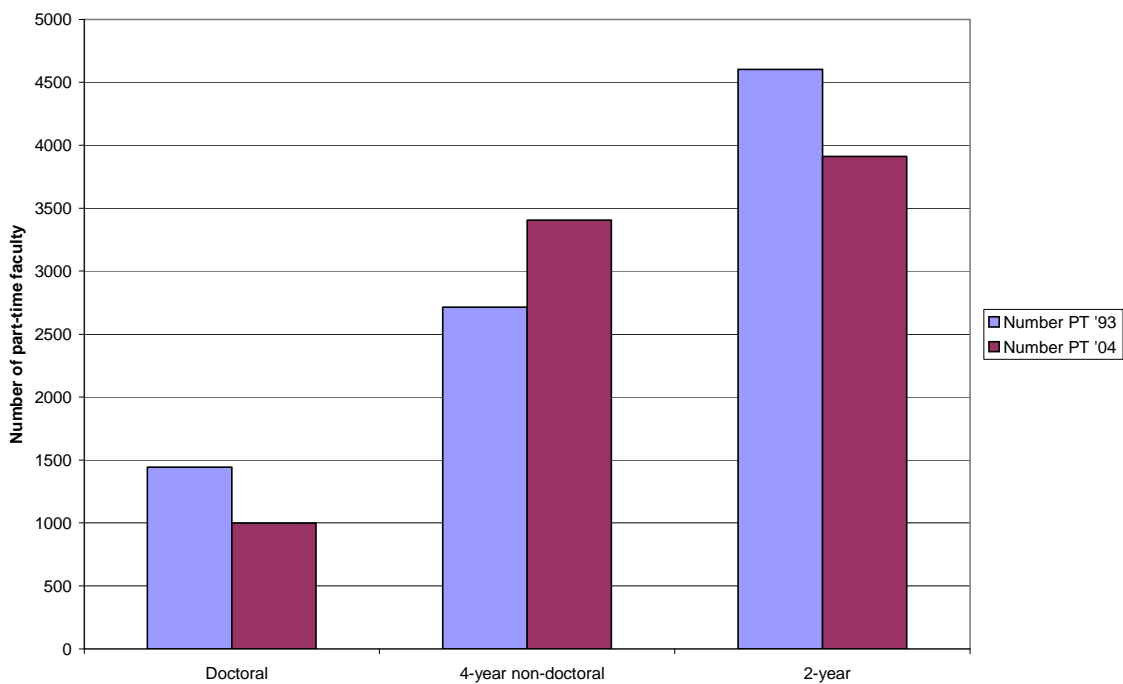
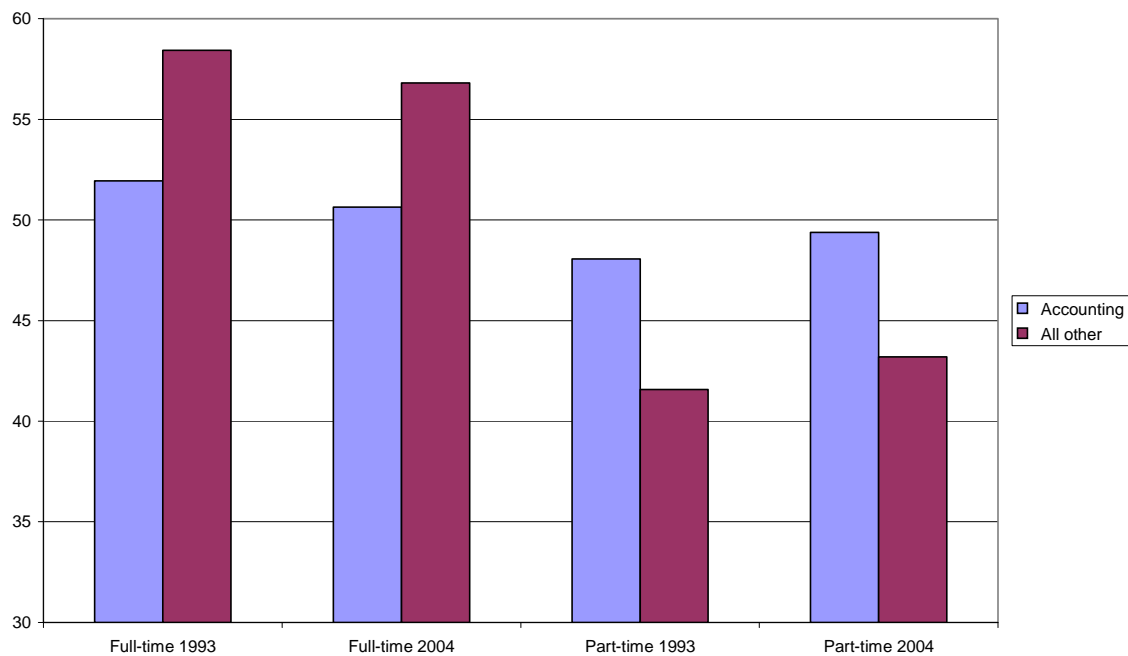


FIGURE 4
Percentage of Faculty Who Are Full- and Part-Time,
Accounting and All Other Fields, 1993–2004



Gender

Accounting, typical of most fields, remains predominantly male. Figure 5 shows that accounting is roughly average in the proportion of females in tenure-eligible positions. In general, accounting falls in the mid-range of disciplines; about one-third of its tenure-eligible faculty are female and a little more than one-third of its non-tenure-eligible faculty are female. The difference between the 1993 and 2004 lines in Figure 5 roughly corresponds to the expanded opportunity for women. Accounting (red triangles) again was roughly average in expanding opportunity. The number of (all) female accounting faculty remained almost perfectly stable between 1993 and 2004, while the number of (total) male faculty declined substantially, resulting in an increase in percentage of women faculty from 29.5 percent to 35.1 percent (see Table 6⁵).

TABLE 6
Numbers (and % Change) of Male and Female Accounting Faculty by Tenure Status
1993–2004

	Male 1993	Male 2004	% Change	Female 1993	Female 2004	% Change
Tenured or on-track	6,068	4,361	-0.28%	2,000	2,253	0.13%
Not eligible	7,838	6,600	-0.16	3,815	3,628	-0.05
Overall	13,906	10,961	-0.21	5,815	5,881	0.01

⁵ As women have earned more terminal degrees, their presence has increased both proportionally and absolutely at research and doctoral institutions.

FIGURE 5
Percentage of Females by Teaching Field, Tenure-Eligibility Only, 1993–2003

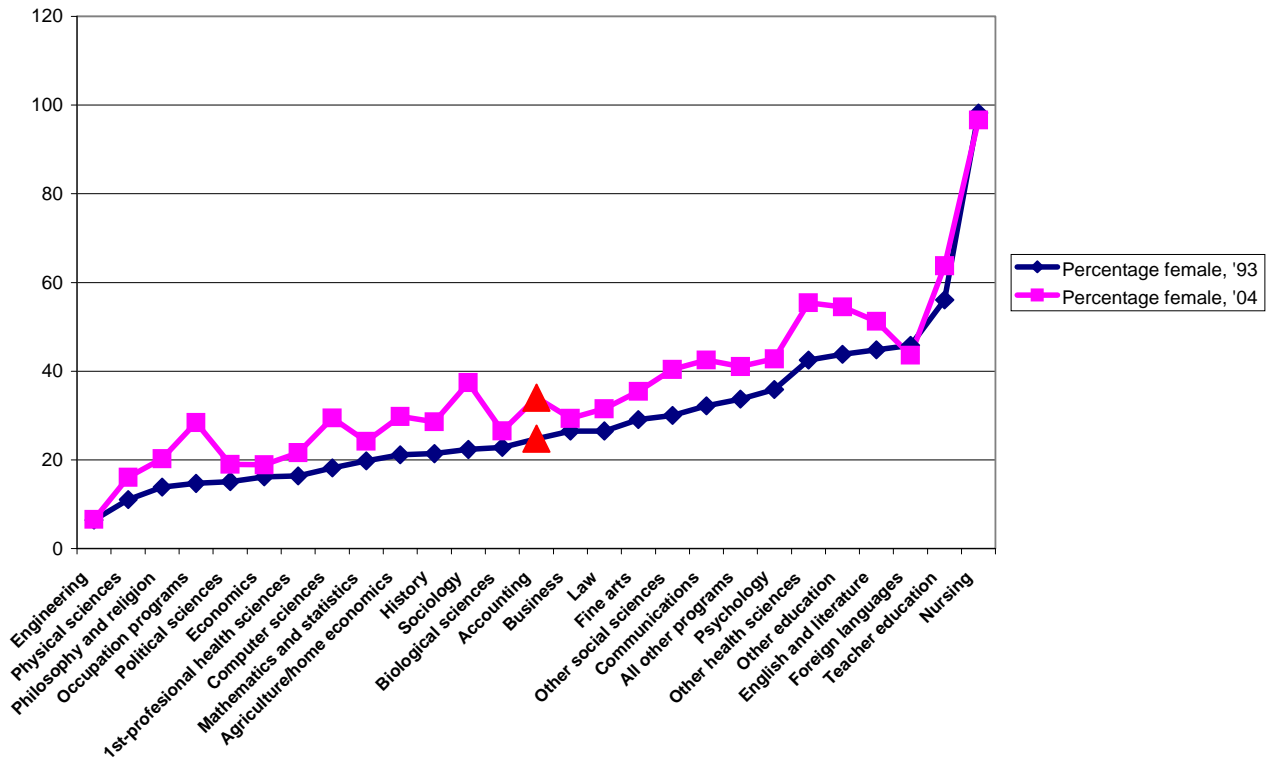


FIGURE 6
Male Accounting Faculty (all) by Tenure Status, 1993–2004

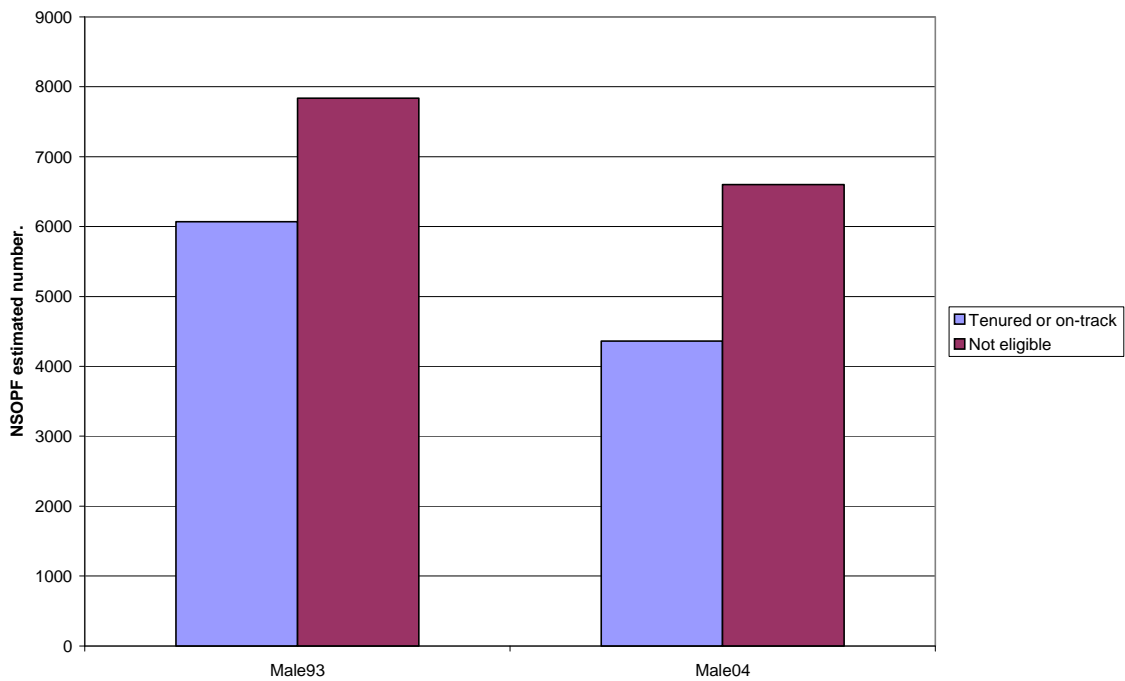
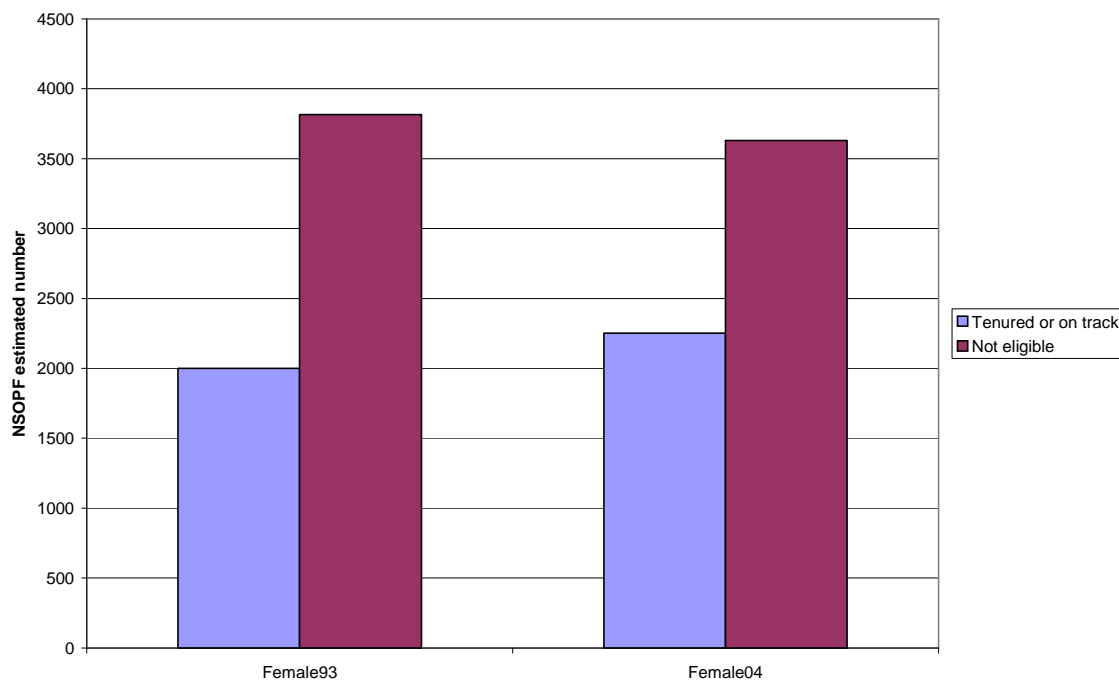


FIGURE 7
Female Accounting Faculty (all) by Tenure Status, 1993–2004



Ethnicity

The academic profession has been, and remains, predominantly white. Over three-fourths (77 percent) of all tenure-eligible accounting faculty in 2004 were white. But the racial balance is rapidly changing in accounting. The number of tenure-eligible Asian accounting faculty increased five-fold between 1993 and 2004, or from 221 to 1,173. Asians now constitute about 17 percent of all tenure-eligible accounting faculty. Accounting is exceeded only by engineering (21 percent) and computer sciences (19 percent) in its proportion of Asians in tenure-eligible positions. In fact, the increase in percentage of Asians in accounting (large red triangles) is by a wide margin the most dramatic shift in ethnic composition among all of the fields represented in Figure 8. The proportion of white faculty has generally fallen as virtually all fields have become more ethnically diverse, but the shift in accounting is well beyond any of the others. (Note, however, that this graph aggregates broad fields; accounting is relatively small by comparison to these aggregations, perhaps leading to an exaggerated comparison.)

Age and Retirement

Accounting faculty are aging. The mean age of full-time accounting faculty increased from 48.5 to 51.6 between 1993 and 2004. The mean age of part-time accounting faculty also increased (from 45.4 to 50.5). Figures 9 and 10 show that women and faculty who are not tenure-eligible are younger on average than males and tenured faculty, which raises concerns for retirement replacements in the future.

Although accounting faculty are aging at roughly the average for all fields, this trend should be a particular concern for a field that has experienced a 20 percent decline in the number of

FIGURE 8
Change in Ethnic Composition of Tenure-Eligible Faculty by Teaching Field, 1993–2004

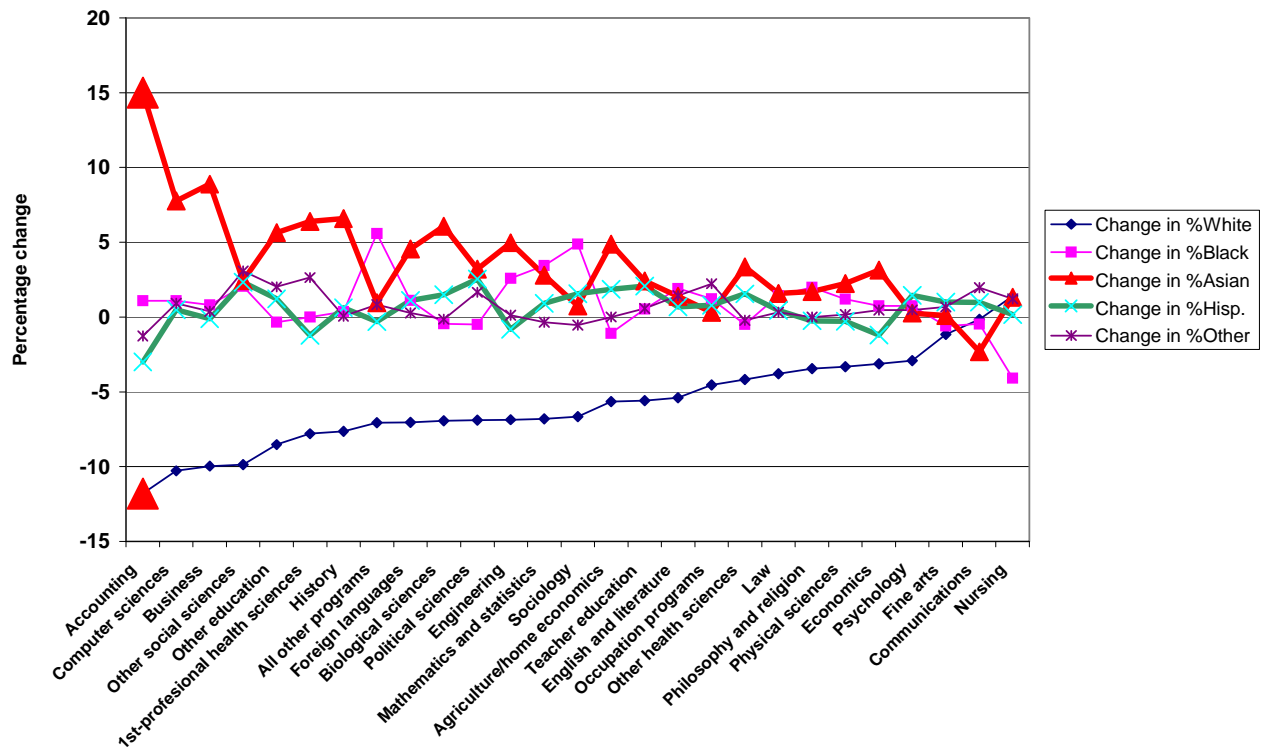


FIGURE 9
NSOPF Estimated Mean Age of Male Accounting Faculty (all) by Tenure Status, 1993–2004

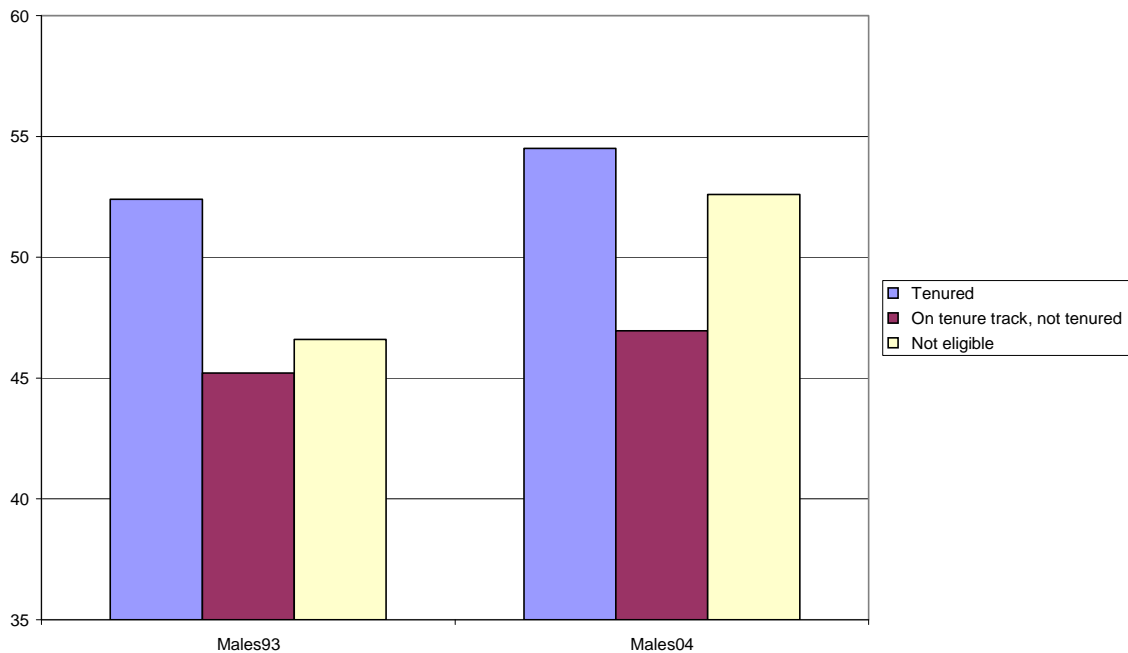
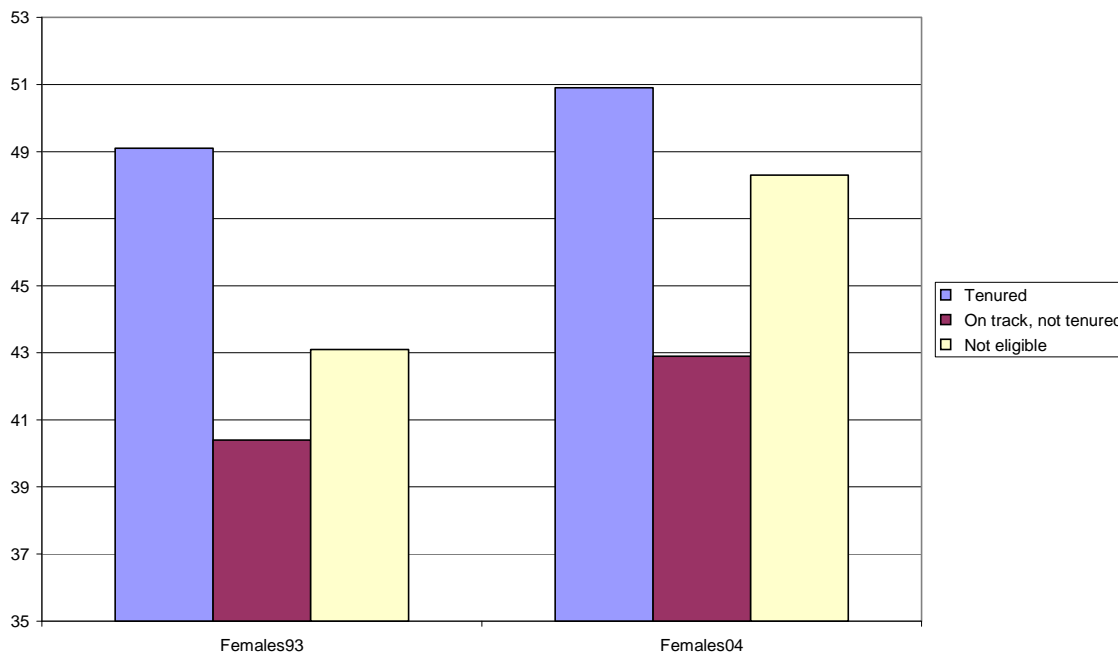
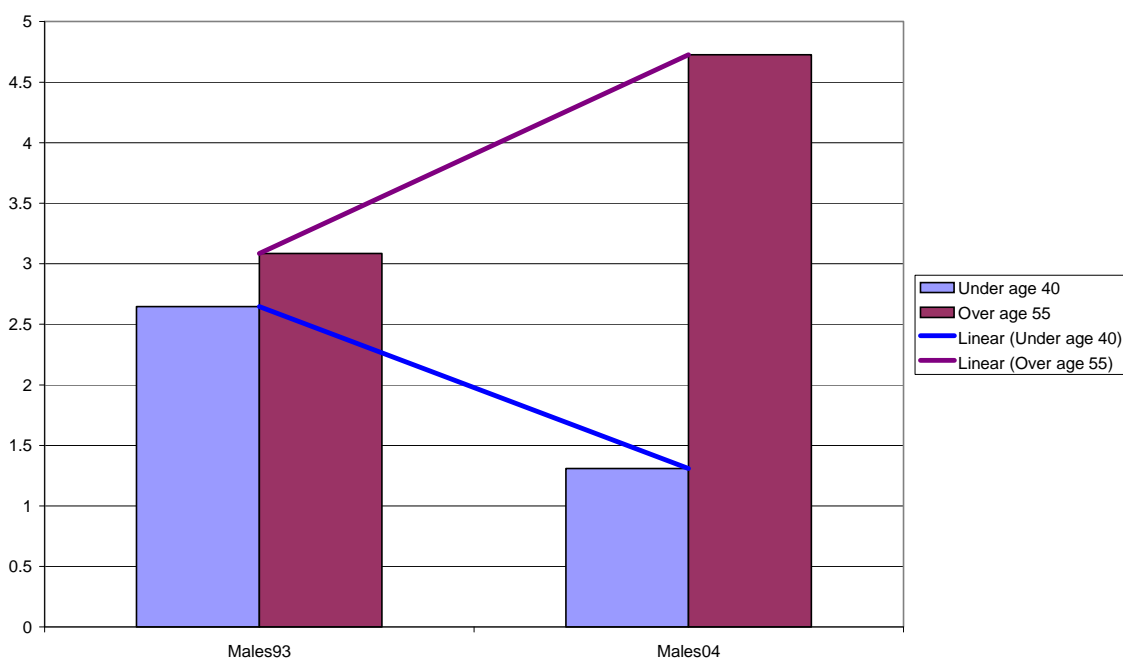


FIGURE 10
NSOPF Estimated Mean Age of Female Accounting Faculty (all) by Tenure Status, 1993–2004



faculty eligible for tenure, and who remain in probationary status. Figures 11 and 12 show the estimated numbers of (all) male and female accounting faculty (in 1000s) who were under age 40 and over the age of 55 in 1993 and 2004. The trend for both genders reveals fewer accounting

FIGURE 11
NSOPF Estimated Number (1000's) of Male Accounting Faculty Under Age 40 and Over Age 55, 1993–2004



faculty under the age of 40 in 2004, and more accounting faculty over the age of 55. These trends may indicate that too few are entering and completing Ph.D. programs, the principal entry point to faculty positions that would replace those who are nearing retirement.

Consistent with the age trend, accounting faculty project shorter times to retirement. Figure 13 shows that, with the exception of community college faculty, full-time faculty at research and

FIGURE 12
NSOPF Estimated Number (1000s) of Female Accounting Faculty
Under Age 40 and Over Age 55, 1993–2004

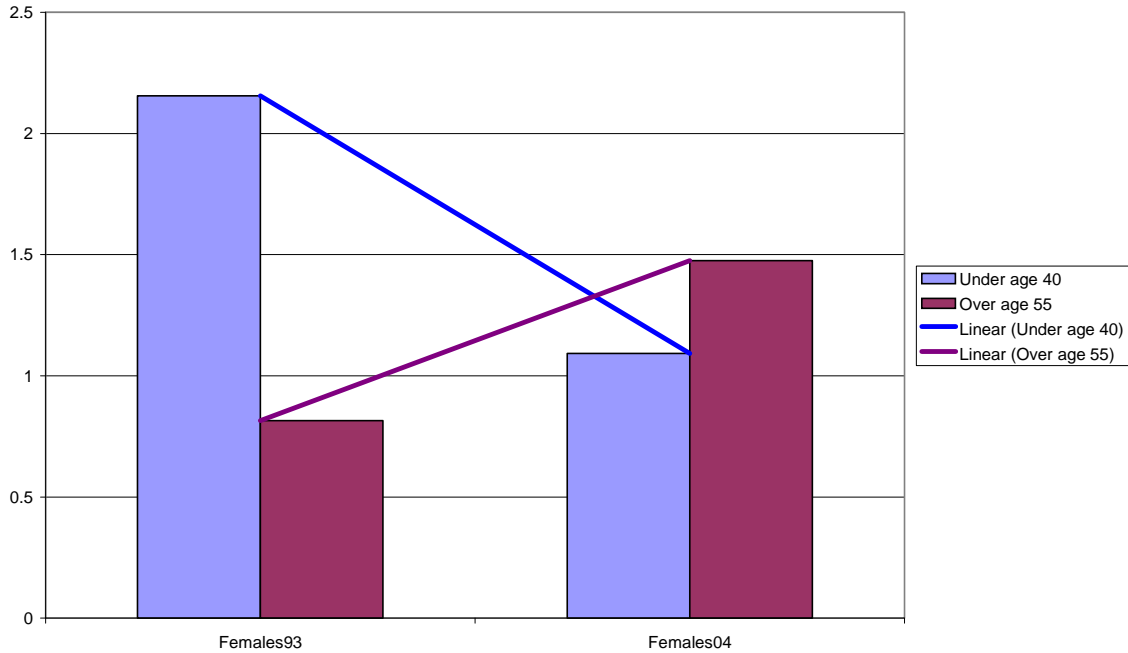
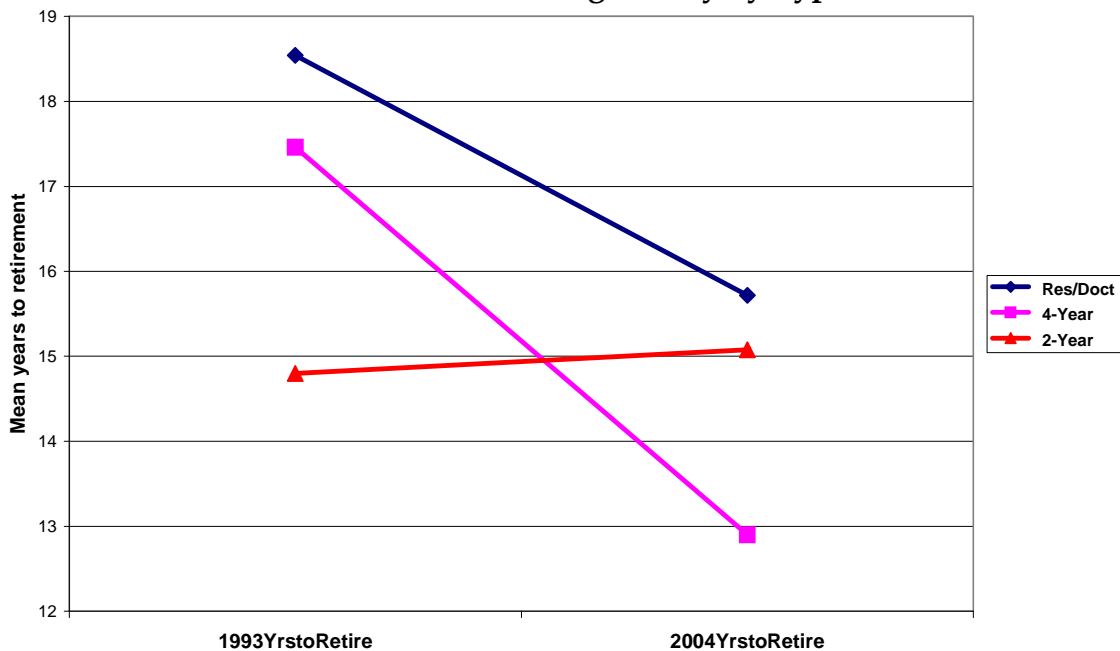


FIGURE 13
Mean Years to Retirement, Full-Time Accounting Faculty by Type of Institution, 1993–2004

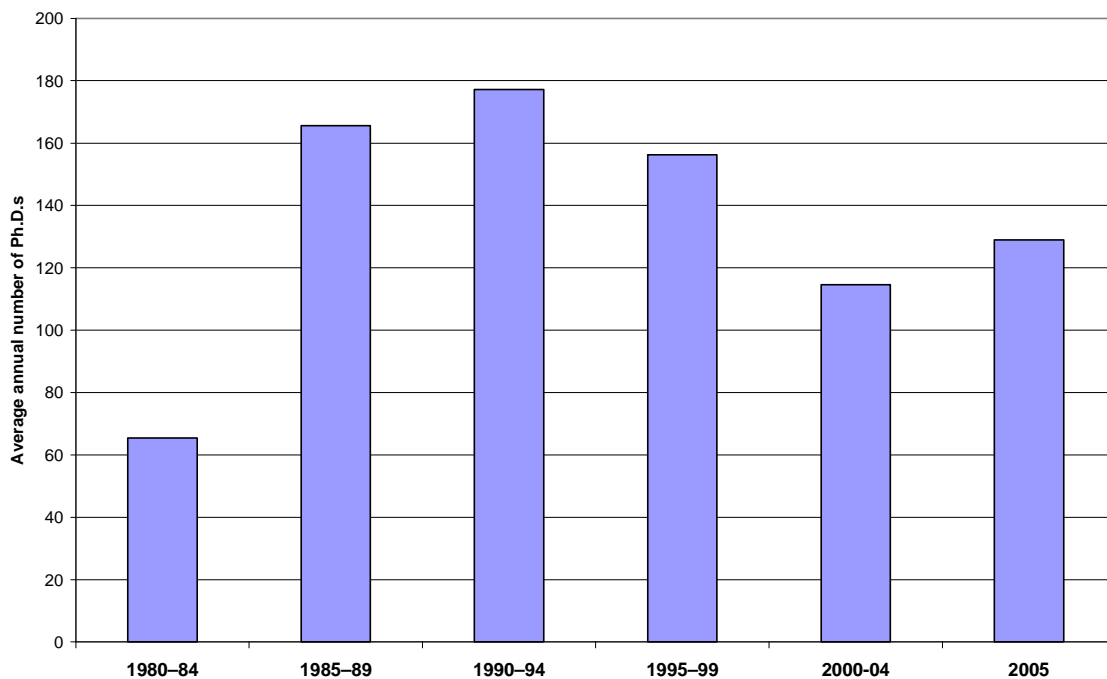


doctoral institutions projected fewer years to retirement in 2004 than they did in 1993. The change was more marked at four-year, non-doctoral institutions (a decline of nearly five years on average) than at research and doctoral institutions, where the decline was about three years. Given the substantial decline in numbers of accounting faculty at four-year non-doctoral institutions, the need for replacements in this sector may be acute in the very near future.

Replacements by New Ph.D.s

Over the past 25 years, accounting has produced between 135 and 140 Ph.D.s, on average, per year according to data from the Survey of Earned Doctorates (Figure 14). But the number has fluctuated, with 129 graduates in the most recent year, 2005. AICPA's 2005 (Sanders 2005, Table 3B⁶) survey of supply and demand shows roughly the same numbers of Ph.D. graduates, an average of about 140 a year, but with a similar pattern of fluctuation.

FIGURE 14
Average Annual Production of Ph.D.s in Accounting, 1980–2005



6

TABLE 3B
Accounting Ph.D's Awarded
1999–2000 Through 2003–04

	Number of Graduates	Rate of Growth
1999–00	195	+ 5%
2000–01	115	– 41%
2001–02	110	– 4%
2002–03	145	+ 32%
2003–04	150	– 3%

The age profile of accounting faculty indicates as many as 500–700 retirements per year in the foreseeable future, which suggests that there will not be nearly enough new Ph.D.s for replacement. Plumlee’s (2005) survey of supply and demand for Ph.D. accounting faculty estimates demand at 350–590 per year between 2005 and 2007, further estimating supply to fill about 50 percent of that demand, with supply unevenly matched to subspecialties.

Pay

Accounting faculty earn more, on the average, than “all other” faculty. Figure 15 shows that their average base pay also increased faster than that of “all other” faculty between 1993 and 2004. The trend for “all individual income” shows an essentially identical trend, indicating that faculty positions in accounting may be increasingly attractive. The same data displayed (Figure 16) for fields that might be expected to compete for prospective full-time faculty (other business fields and engineering) show that income for accounting faculty is fully competitive.

FIGURE 15
Trend (1993–2004) in Base Salary for (Full-Time) Accounting and “All” Faculty

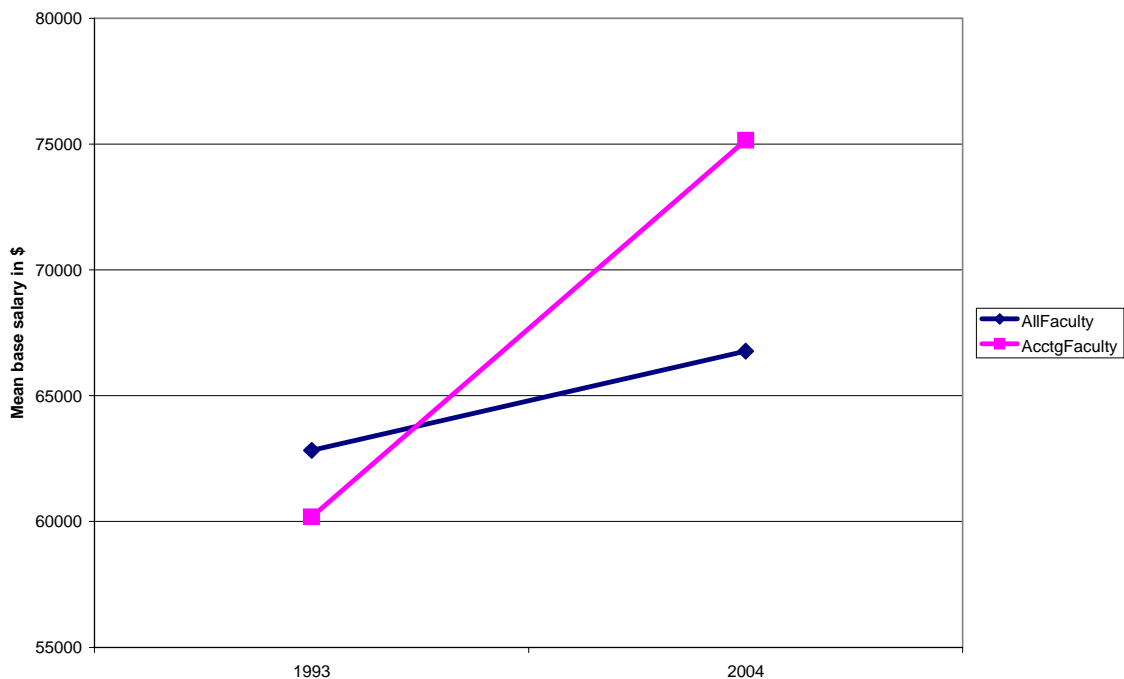
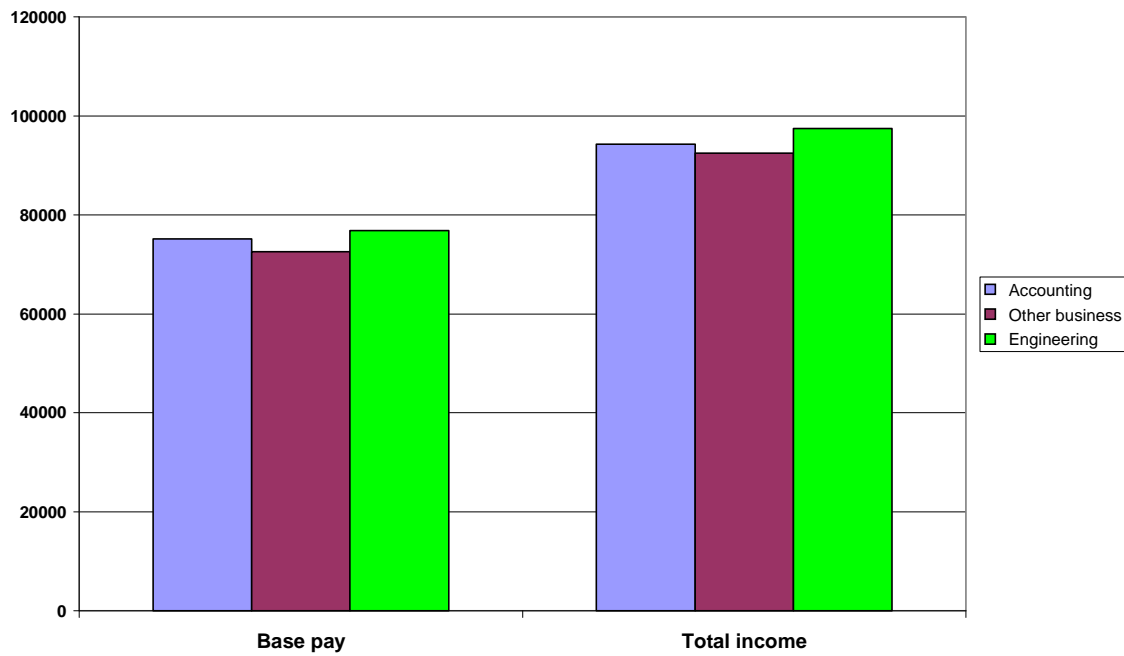


FIGURE 16
Base Pay and Other Income, Full-Time Accounting Faculty
versus Other Business and Engineering, 2004



II. IMPLICATIONS FOR THE FUTURE

The major conclusions of Section I of this report indicate that accounting faculty are likely to retire at a faster rate than they can be replaced. Furthermore, while the number of accounting faculty has been declining, the number of accounting students has been rising. As a result, accounting faculty are working harder and longer, judging by the production of student credit hours and the production of scholarship.

How will the field sustain itself by attracting new faculty? If the projections in Section I are accurate (or even approximately “right”), then the pipeline of prospective faculty is not flowing with enough volume. Producing 140 new Ph.D.s per year would replace only about 28 percent of the anticipated 500 retirees per year. How might that flow be increased?

The opportunity costs of undertaking a Ph.D. program are considerable, but the Ph.D. pipeline has held remarkably steady at American universities over the past two decades. However, the pipeline (across all fields) has not produced Ph.D.s at a level that demand for faculty may require.⁷ Additionally, in many fields, accounting included, foreign nationals have occupied an increasing share of the available places. About half of all Ph.D. students in accounting are now non-native. Therefore, accounting’s problems are not unique, although they are serious, indeed.

In simplistic terms, thinking about a faculty career requires a young (or not-so-young) person to endure the opportunity cost of several years’ study on marginal funding. Furthermore, the investment in earning a Ph.D. would have to pay off in both extrinsic (salary, benefits, etc.) and intrinsic (satisfaction, etc.) ways. What do the recent faculty surveys reveal about these conditions and the appeal of teaching accounting?

In this section of the report, I will try to raise issues that warrant both further study and discussion within the profession.

Income

Given that accountants have competing employment opportunities, assessing the competitive value of their compensation means understanding the broader market. The Bureau of Labor Statistics (BLS 2006) reported, “Median annual earnings of wage and salary for accountants and auditors were \$54,630 in May 2006. The middle half of the occupation earned between \$42,520 and \$71,960. The top 10 percent earned more than \$94,050.” Assuming that Ph.D.s should be paid closer to the top of the scale, the 2004 mean salary of full-time accounting faculty of about \$82,273 (inflated to 2006) would put them roughly at the 82nd percentile in the broader marketplace. Table 7 shows mean base salary for full-time accounting faculty in 1993 (inflated) and 2004.

TABLE 7
Mean Base Pay for Full-Time Accounting Faculty

	1993 Inflated	2004
Age 41 and under	\$45,287.00	\$82,666.80
Age 42 and over	\$65,295.00	\$73,900.80
Mean base pay, all full-time accounting faculty	\$60,190.00	\$75,147.00

⁷ This concern is magnified by the lengthening of time-to-degree observable across all Ph.D. programs, and the concomitant increase in the age at which Ph.D.s enter the job market.

Table 7 (illustrated in Figure 17) also shows that base pay for faculty aged 41⁸ and younger has increased much faster than base pay for faculty aged 42 and older. In fact, faculty in the younger cohort were paid substantially (almost \$9,000) more than faculty in the older cohort. At the same time, *the number of all full-time accounting faculty aged 41 and under dropped by more than half, from about 2,600 to about 1,200 during this period (while the number of faculty aged 42 and over remained unchanged at about 7,300).*

FIGURE 17
Average Base Pay, Full-Time Accounting Faculty
Over and Under Age 41, 1993 (inflated) to 2004

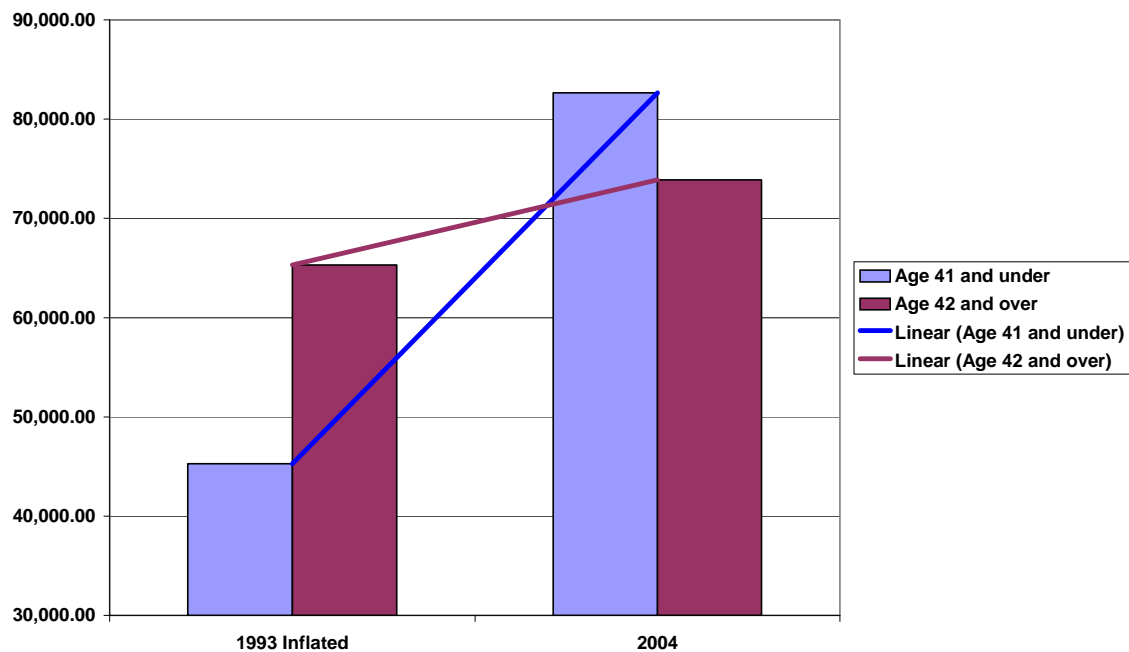


Table 7a (illustrated in Figure 17a) restricts the analysis to accounting faculty who hold either the Ph.D. or first professional degree (including J.D., but not M.B.A.); it shows mean base salary, mean total income from the respondents' institution, and mean individual income from all sources. Table 7a splits older and younger faculty at age 45 because NSOPF requires a minimum cell size to conduct analyses. The trends (including the salary inversion and declining numbers of younger faculty) are the same as those noted in Table 7. Note that base pay and total income from the institution *at least doubled for younger faculty in inflated means from 1993 to 2004.*

These data are a classic illustration of demand exceeding supply. The market appears very sensitive to the impending shortage of prospective faculty – to the extent that salary inversion (a more extreme form of salary compression) appears to have occurred. Senior faculty who experience this inversion (finding themselves paid less than newer, younger faculty) may be tempted

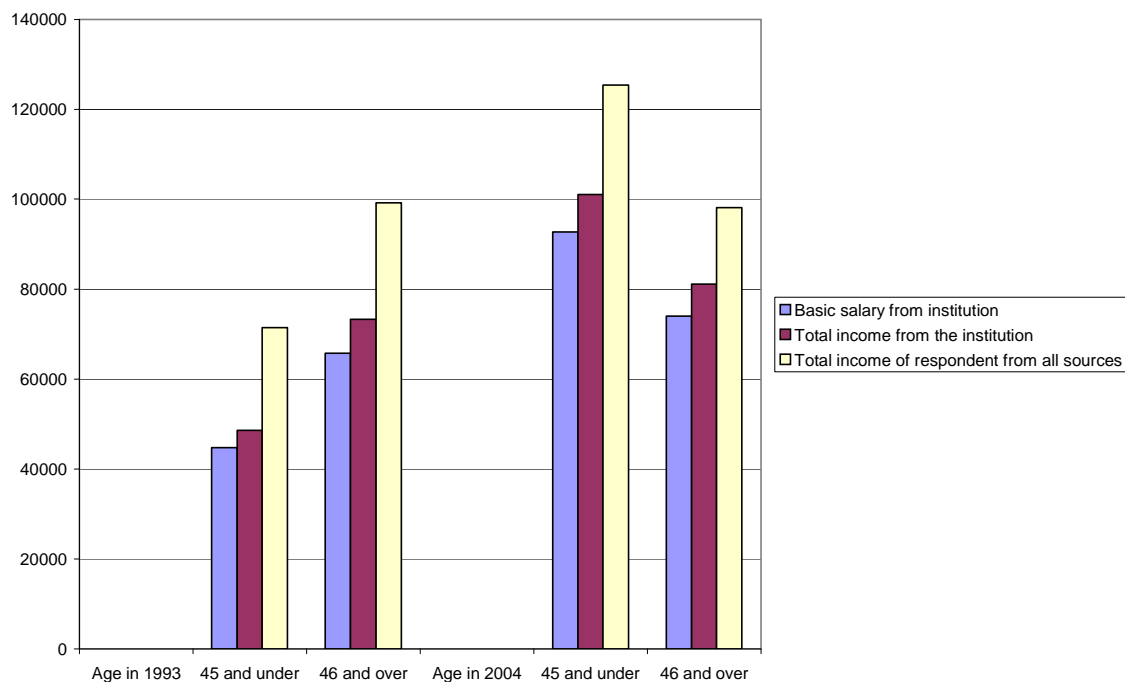
⁸ Although the selection of age 41 appears arbitrary, it was an artifact of the U.S. Department of Education "Data Analysis System" (DAS) limits on retrieval where cell sizes in tables fell below a level required for the protection of individual respondents' identities. At age 40, the DAS would not construct tables, but at age 41, tables in this section were permitted.

TABLE 7a
Income of All Accounting Faculty with Ph.D. or First Professional Degree
Under/Over Age 45
1993 (inflated) to 2004^a

	<u>Basic Salary from Institution</u>	<u>Total Income from Institution</u>	<u>Total Income of Respondents from All Sources</u>	<u>n</u>
Age in 1993				
45 and under	\$ 44,744.25	\$ 48,584.44	\$ 71,418.58	2500
46 and over	\$ 65,751.48	\$ 73,323.75	\$ 99,172.39	4200
Age in 2004				
45 and under	\$ 92,731.80	\$101,061.90	\$125,370.90	1500
46 and over	\$ 73,982.60	\$ 81,149.60	\$ 98,144.60	4400

The age intervals were established to provide adequate cell sizes, given the NSOPF minimums.

FIGURE 17a
Age/Income, Accounting Faculty with Terminal Degree 1993 (inflated) to 2004



to leave for opportunities to increase their own pay outside academe. If senior faculty were to leave, then shortages would be exacerbated, of course. With the prediction of fewer young faculty, pay levels may rise very quickly as competition intensifies.

Productivity⁹

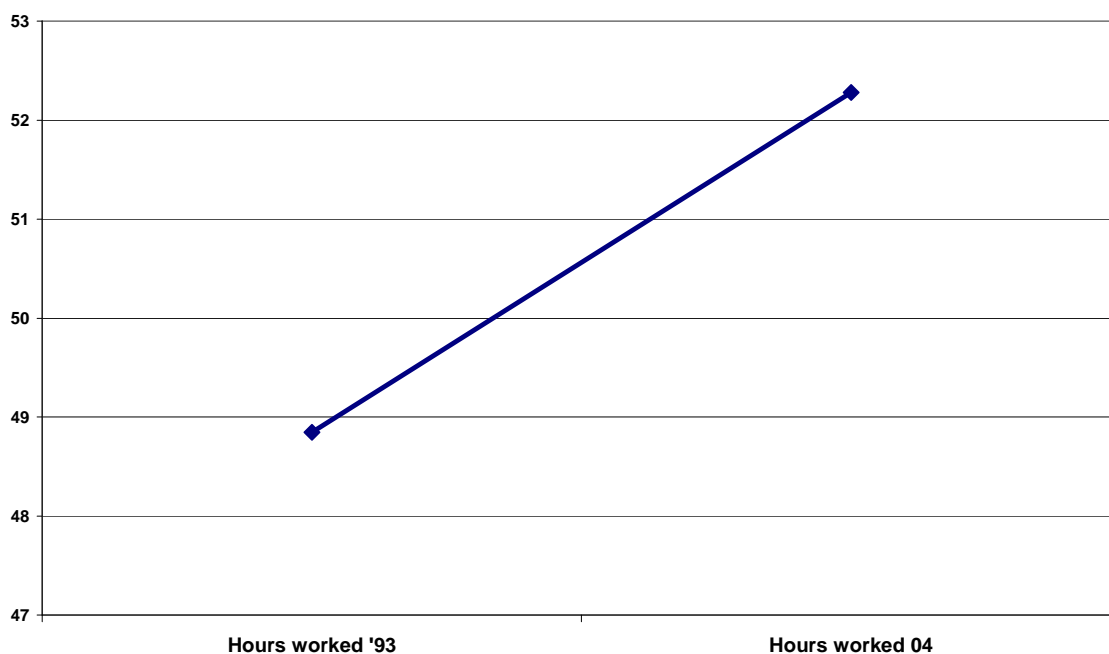
Accounting faculty generated more student credit hours, publications, and grants between 1993 and 2004, but at the apparent expense of spending about 7 percent more time on the job. Figure 18 shows that full-time accounting faculty at four-year institutions reported spending a little over 48 hours per week on the job in 1993, but over 52 hours per week on the job in 2004. (Other business faculty spent an essentially unchanged number of hours on the job over this period.)

Teaching loads, as indicated earlier, grew heavier for accounting faculty. Figure 19 shows that accounting faculty produced about 9 percent more student credit-hours in 2004 than in 1993; the inverse was true for other business faculty.

Notwithstanding the reportedly longer work week and increased teaching obligations, accounting faculty also showed consistent increases in research productivity over the 1993–2004 period. Figures 20–23 show increases in proportion of time reportedly spent on research (an increase of 52 percent), recent publications (an increase of 14 percent), career-total publications (an increase of 2 percent), and percentage of accounting faculty with grant funding (an increase of 67 percent).

These and related measures raise concerns about the sustainability of a workload that appears to be increasing relentlessly. Even as research productivity has increased among accounting faculty, so has the teaching load. As both functions demand more time, the work week of accounting faculty may be approaching a practical limit as it rises beyond 50 hours on average.

FIGURE 18
Average Total Hours Worked Per Week Reported by Full-Time Accounting Faculty at 4-Year Institutions, 1993–2004



⁹ All tables/graphs in this section compare data for full-time faculty in four-year institutions.

FIGURE 19
Average Student Credit Hours Taught by Full-Time Accounting Faculty at Research/Doctoral Universities and 4-Year Non-Doctoral Universities, 1993–2004

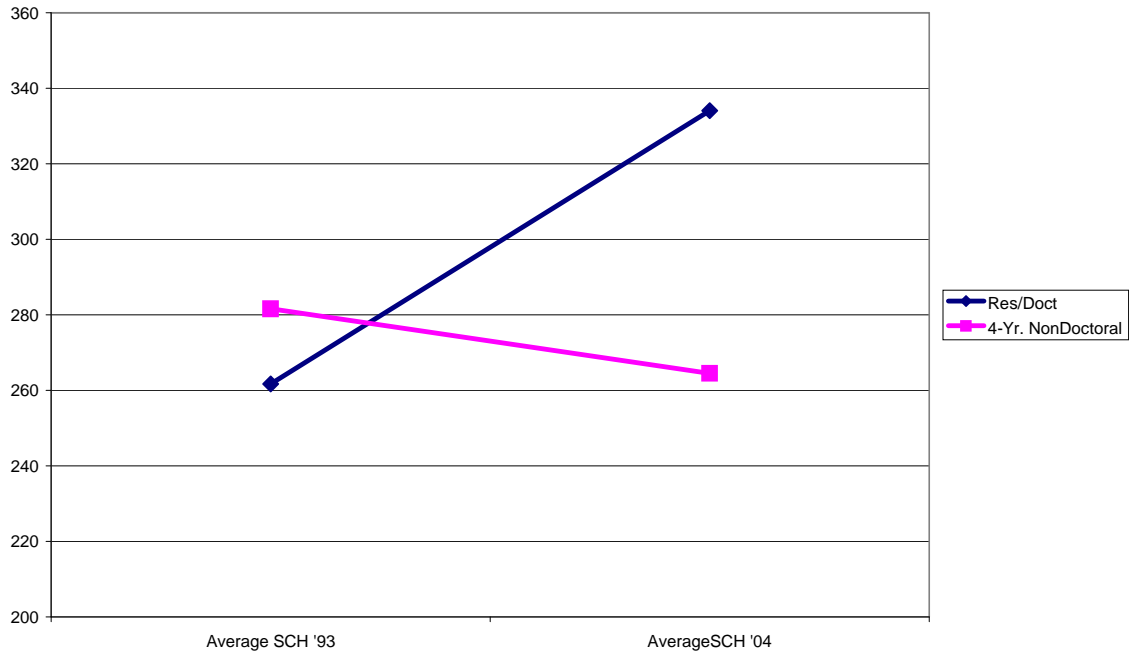


FIGURE 20
Percentage of Time Reported on Research, Full-Time Accounting Faculty at 4-Year Institutions, 1993–2004

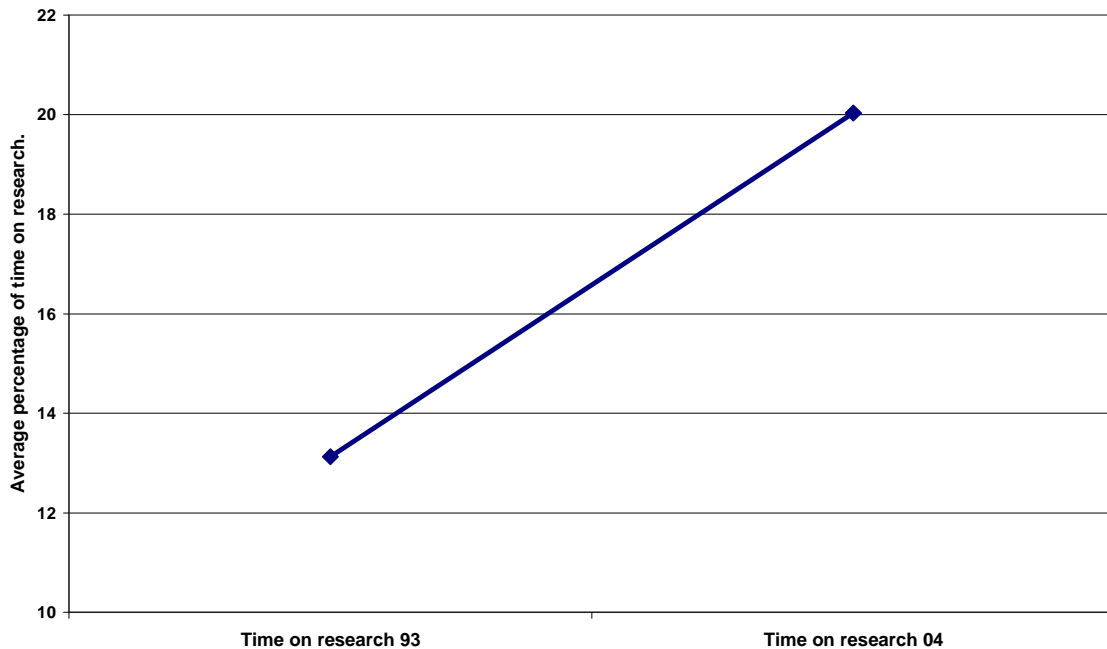


FIGURE 21
Total Recent (2 years) Publications Reported by Full-Time Accounting Faculty at 4-Year Institutions, 1993–2004

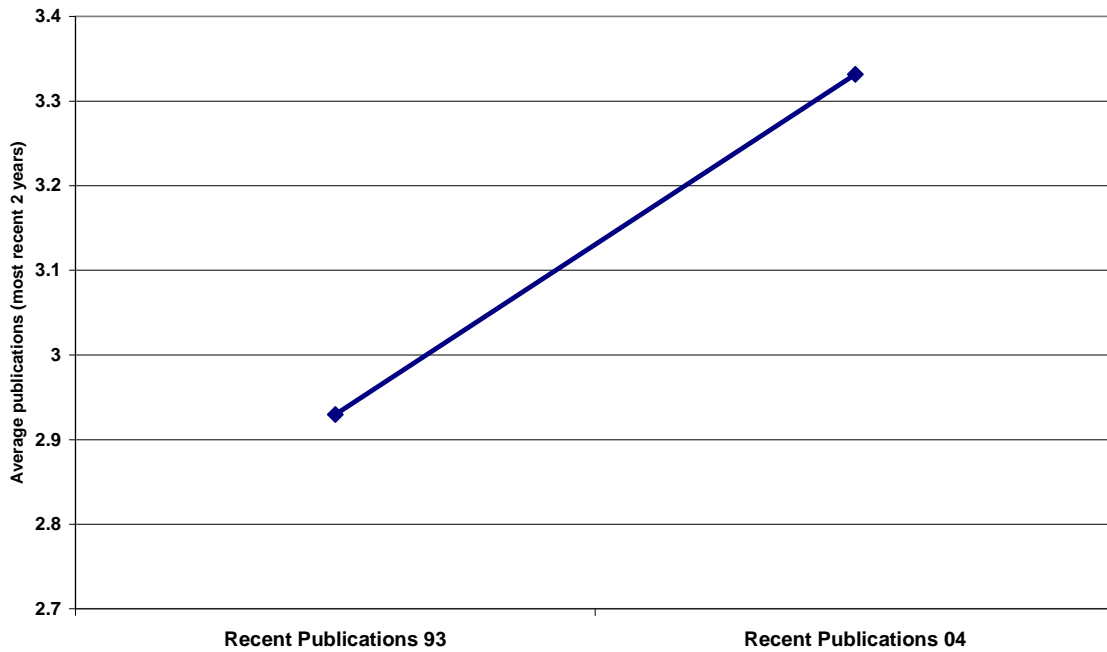


FIGURE 22
Total Career Publications, Full-Time Accounting Faculty at 4-Year Institutions, 1993–2004

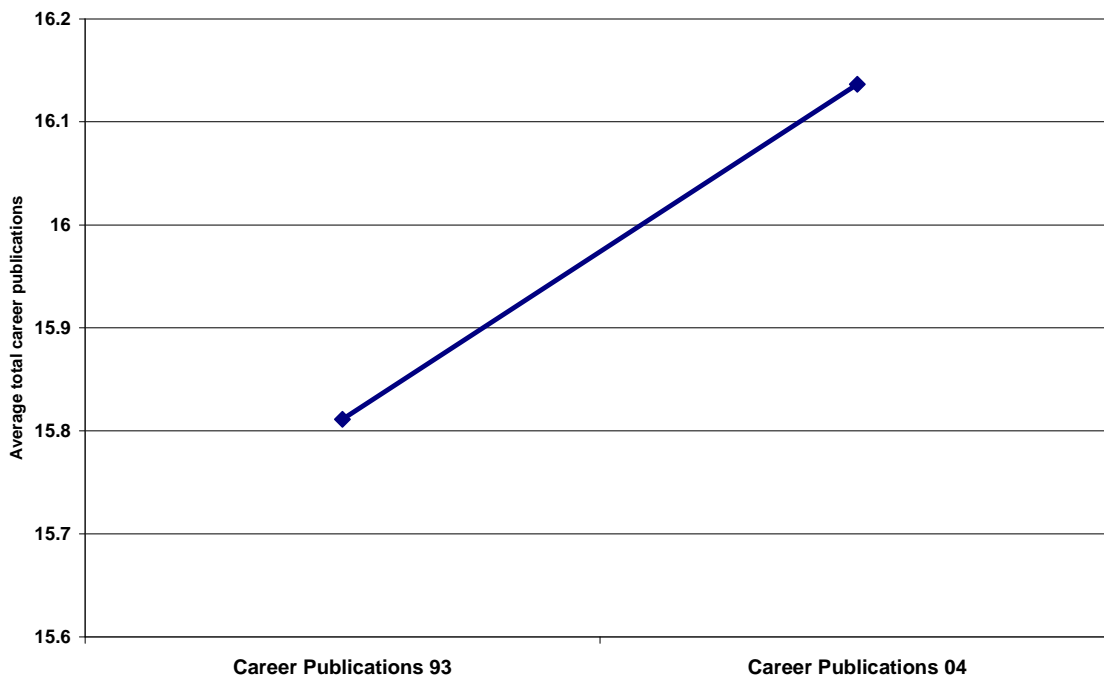
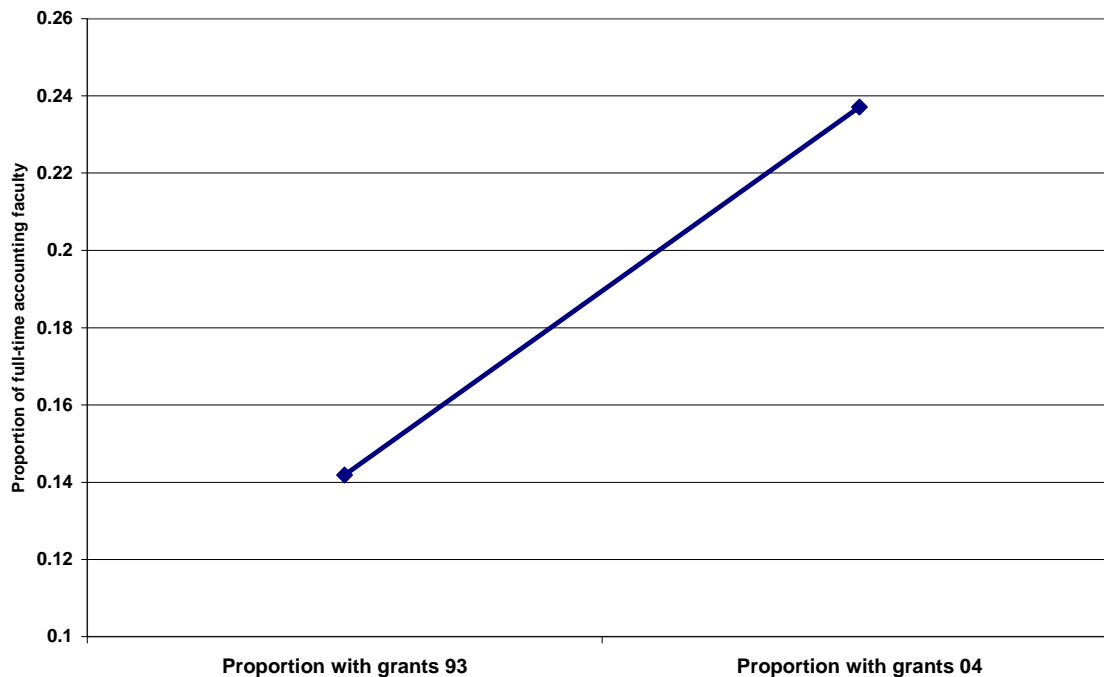


FIGURE 23
Proportion of Full-Time Accounting Faculty at 4-Year Institutions
Who Have Grants, 1993–2004



By working longer and harder, accounting faculty appear to have met demands for production. But when they can no longer work harder, they will not be able to achieve beyond their present levels, especially if the pace of replacing retiring faculty continues to lag.

Total production of student credit hours (SCH) in accounting declined nearly 21 percent (from just over 4,000,000 to 3,226,000) between 1993 and 2004, notwithstanding an increase in full-time student enrollment. Although the measure used is imprecise (calculated by multiplying average student credit hours taught times the number of faculty), it reflects a troubling trend.

At research and doctoral universities, the total number of accounting SCH produced rose substantially (12.4 percent) over this period, while the total number of faculty in this sector declined by about 300 (7 percent). This statistic means the average instructional workload of accounting faculty at research and doctoral universities rose by about 20 percent. (Full-time faculty at research and doctoral universities also produced a greater percentage of all accounting SCH in 2004 than in 1993.) *These data confirm that full-time accounting faculty in research and doctoral universities are carrying an increasing proportion of the entire instructional load in the field.*

Accounting enrollments appear to be increasing principally among upper division and graduate students, while accounting courses at purely undergraduate institutions may be experiencing declines. Figure 24 shows that enrollment in undergraduate and graduate accounting programs (1990–2000) drifted toward research and doctoral universities (or community colleges) and away from four-year non-doctoral institutions. The most substantial change for that period was a 40 percent increase in graduate students (14,100 to 19,800). As a result, accounting faculty at research and doctoral universities are handling an instructional load that has been increasing

substantially faster than that of faculty in other fields. Figure 25 shows the impact of these enrollment trends on SCH production by type of institution. SCH production declined for both full- and part-time faculty at four-year and two-year institutions, but increased for full-time faculty at research and doctoral universities. Figure 25a restricts the analysis to faculty with Ph.D.s or first professional degrees and shows that aggregate SCH production has increased dramatically at research and doctoral universities and declined dramatically at four-year non-doctoral universities. From the point of view of new faculty entering the profession, longer work weeks with a more complex work profile, accommodating both increased teaching and increased research, may diminish the attractiveness of the field.

FIGURE 24
Enrollment of (full-time) Undergraduate and (all) Graduate Accounting Students
by Type of Institution, 1990–2000

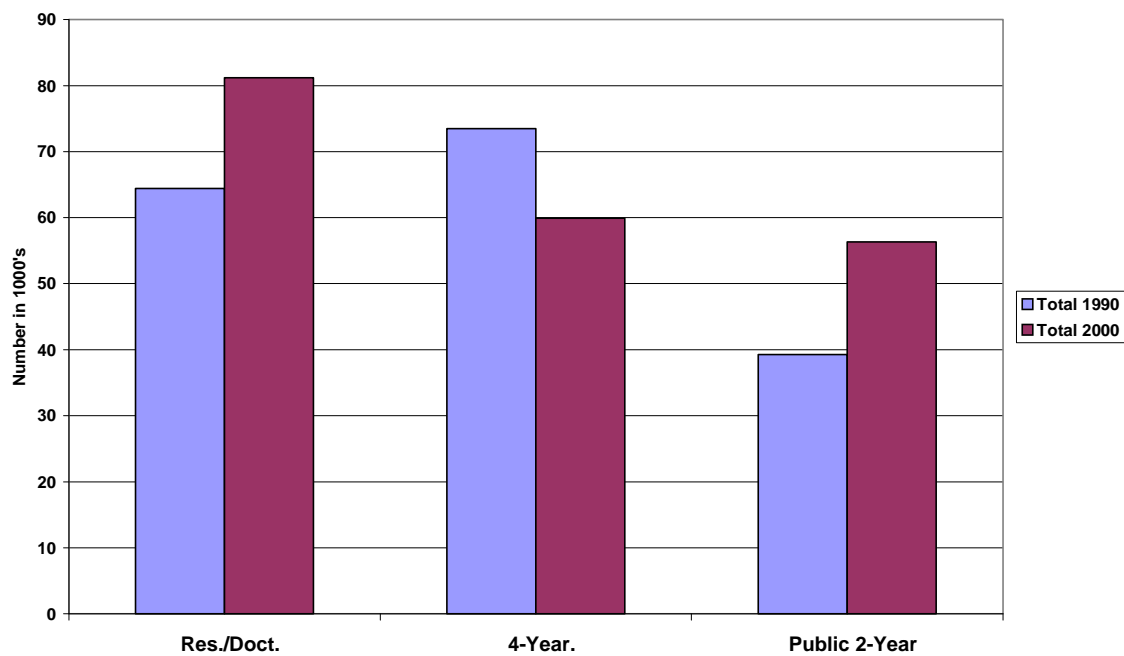


FIGURE 25
Trend in Student Credit Hour Productivity by Type of Institution and Full- versus Part-Time Accounting Faculty, 1993–2004

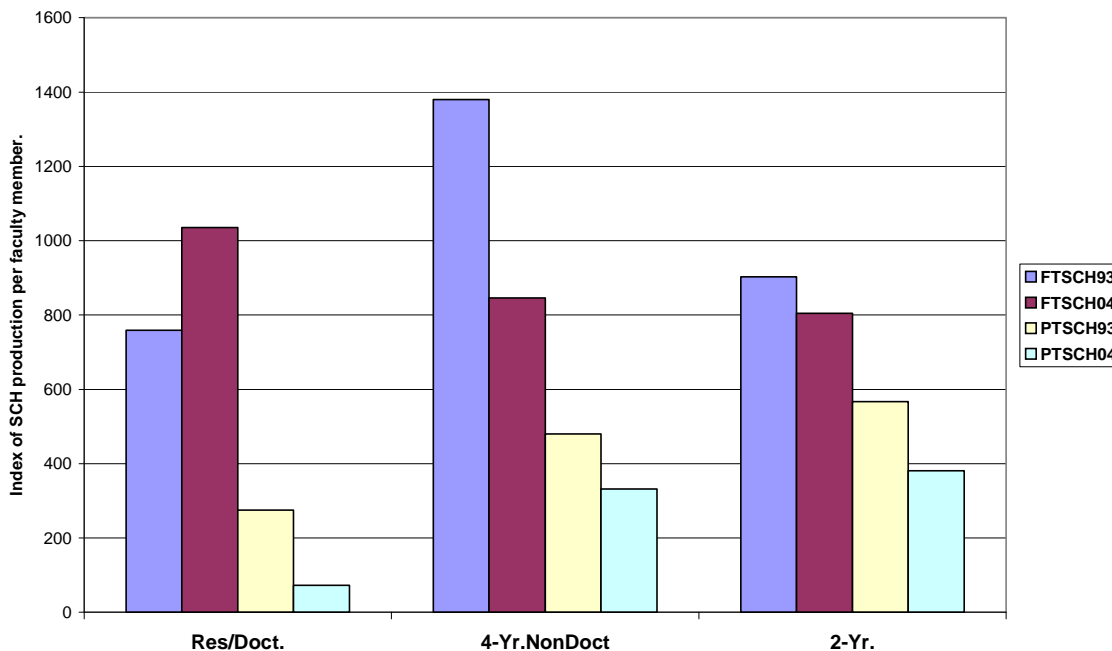
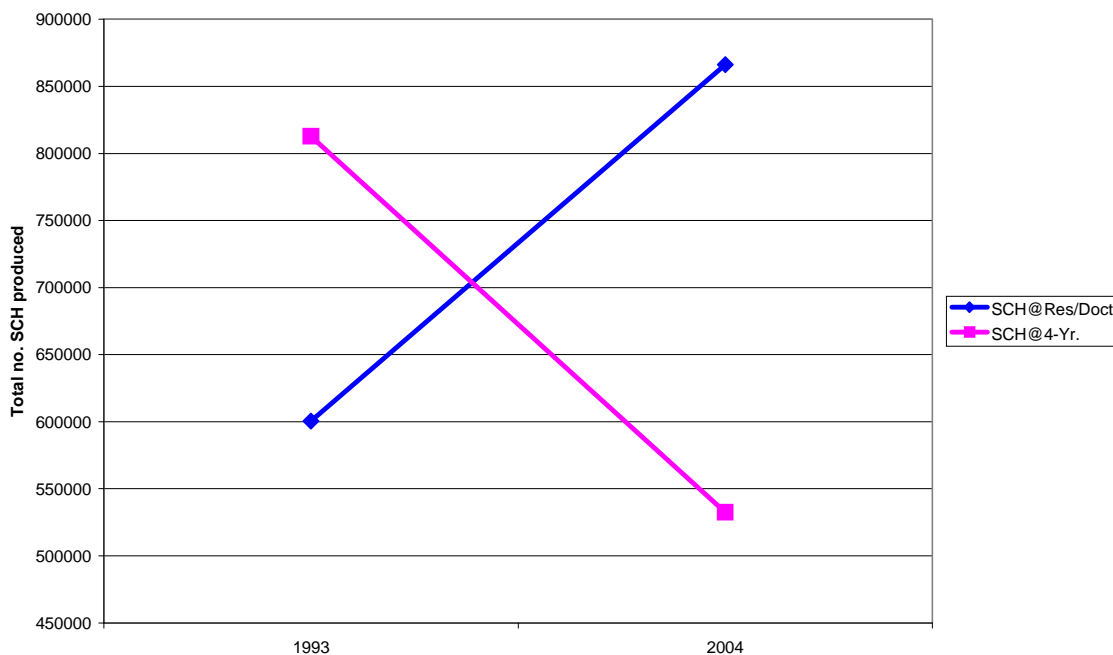


FIGURE 25a
Aggregate SCH Production at Research/Doctoral Universities and 4-Year Non-Doctoral Universities: Accounting Faculty with Ph.D. or First Professional Degree, 1993–2004

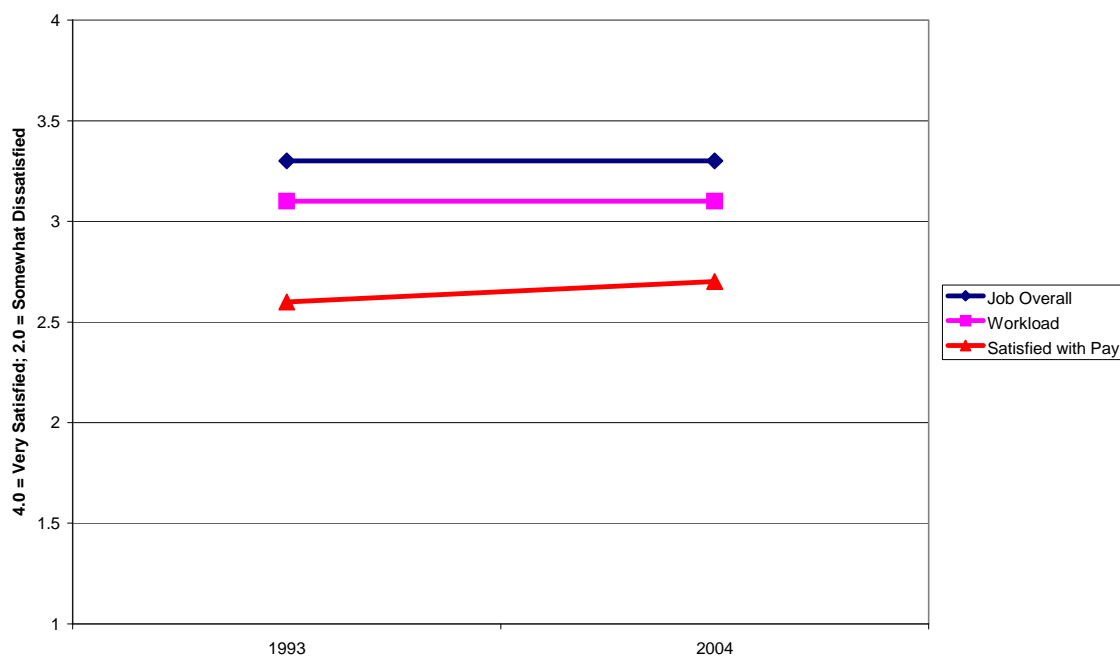


Job Satisfaction

Figure 26 shows three measures of satisfaction: job overall, pay, and workload. All three measures were virtually unchanged between 1993 and 2004. Accounting faculty appear “satisfied” with their job overall and with their workload (notwithstanding the apparent increase in time on the job). They appear to be only slightly more satisfied with pay, which should be a cause for some concern in such a competitive marketplace.

FIGURE 26
Satisfaction with Job Overall, Workload, and Pay
Full-Time Accounting Faculty, 1993–2004

(4 = Very Satisfied; 1 = Very Dissatisfied)



III. CONCLUSIONS

Relying on data from the National Study of Postsecondary Faculty (NSOPF), I have concluded that there were fewer accounting faculty in 2004 than in 1993 and they worked harder and longer hours than did the faculty in 1993. Accounting faculty are aging and retiring substantially faster than they are being replaced. In addition to the low numbers of new Ph.D.s in accounting (roughly 140 per year) compared to the projected annual retirement rate of current faculty (roughly 500 per year), half of the new Ph.D.s are foreign nationals who may not remain and teach in the U.S. The dramatic decline (54 percent) in the number of accounting faculty under the age of 41 is particularly troubling. Some specific findings include:

- The estimated number of accounting faculty (all institutions, all ranks) declined 13.3 percent between 1993 and 2004, while estimated undergraduate enrollment grew more than 12 percent. Business fields other than accounting have added substantial numbers of faculty during the same period.
- The aggregate number of students per faculty member in accounting has increased from 20.5:1 to over 28:1.
- The decline in numbers of faculty has been principally among males; the number of women accounting faculty has not increased in any significant way, although they are an increasing proportion of all accounting faculty (as the number of males has declined).
- The mean age of accounting faculty is increasing.
- The number of individuals within ten years of “normal” retirement (age 55 and over) increased between 1999 and 2004, while the number of accounting faculty under the age of 40 declined during the same period.
- Ph.D. production has remained relatively steady at roughly 140 per year (with annual fluctuations) over the past 10 years.
- Demand for replacement faculty in accounting is estimated at roughly 500 per year for the next 5–10 years, while available supply of new Ph.D.s is estimated to be about 140 per year (half of whom are foreign nationals).
- On the whole, accounting faculty appear satisfied with their jobs and their workload. They are probably less fully satisfied with their pay. (Note, however, that satisfaction levels remained essentially constant from 1993 to 2004, notwithstanding substantial increases in both pay and workload.)
- Workload and productivity have both increased more substantially for faculty at research and doctoral institutions than among other institutions.

The profession appears to be suffering from competition for new talent, whether because pay is insufficiently competitive to attract new Ph.D.s or because the workload for current faculty has increased to a functional limit (or perhaps a combination of both). On measures of job satisfaction, respondents to the NSOPF survey appear to be generally satisfied (indicating “intrinsic” satisfaction), but are neither satisfied nor dissatisfied with pay.

It appears that universities have dramatically increased salaries for new accounting faculty, to the point of “salary inversion.” Accounting faculty under 41 now typically earn more than accounting faculty over 41. This inversion appears to have resulted in a small increase in satisfaction with pay on the part of faculty under age 41. Whether it is enough to attract more junior

faculty in the face of increasing expectations for productivity is a question central to the profession's future.

Briefly summarized, the most pressing concerns for the future are based on these factors:

- Increasing enrollments at the graduate and undergraduate levels, especially at research and doctoral universities, coupled with a steep decline in numbers of accounting faculty under the age of 41, and an overall decline in numbers of faculty, as well.
- Longer work weeks and increasing “productivity” expectations for accounting faculty.
- Increases in salary beyond those of other faculty, but marked by salary inversion, as younger faculty (under 41) now average higher pay than faculty over 41.
- Neutral feelings about current levels of salary.

IV. APPENDIX: SOURCES OF DATA

National Study of Postsecondary Faculty (NSOPF)

<http://nces.ed.gov/surveys/nsopf/design.asp>

The first cycle of NSOPF was conducted in 1987–1988 with a sample of 480 institutions (including two-year, four-year, doctorate-granting, and other colleges and universities), over 3,000 department chairpersons, and over 11,000 instructional faculty. The response rates for the three surveys were 88, 80, and 76 percent, respectively.

The 1992–93 study (NSOPF: 93) was limited to surveys of institutions and faculty, but with a substantially expanded sample of 974 public and private not-for-profit degree-granting postsecondary institutions and 31,354 faculty and instructional staff. The response rates for the two surveys were 94 and 84 percent, respectively.

The 1998–99 National Study of Postsecondary Faculty (NSOPF: 99) included 960 degree-granting postsecondary institutions and an initial sample of faculty and instructional staff from those institutions. Approximately 28,600 faculty and instructional staff were sent a questionnaire. Subsequently, a subsample of 19,813 faculty and instructional staff was drawn for additional survey follow-up. Approximately 18,000 faculty and instructional staff questionnaires were completed for a weighted response rate of 83 percent. The response rate for the institution survey was 93 percent.

The 2003–04 National Study of Postsecondary Faculty (NSOPF: 04) included a sample of 1,080 public and private not-for-profit degree-granting postsecondary institutions and a sample of 35,000 faculty and instructional staff. The weighted response rates for the two surveys were 86 and 76 percent, respectively.

All four cycles of NSOPF gathered information regarding the backgrounds, responsibilities, workloads, salaries, benefits, attitudes, and future plans of both full- and part-time faculty. In addition, information was gathered from institutional and department-level respondents (department-level data collected in 1988 only) on such issues as faculty composition, turnover, recruitment, retention, and tenure policies.

The institution universe for NSOPF has been defined by the following criteria: Title IV participating, degree-granting institutions; public and private not-for-profit institutions; institutions that confer associate's, bachelor's, or advanced degrees; and institutions that are located in the United States.

A two-stage stratified, clustered probability design was used to select the various NSOPF samples. For instance, the first-stage sampling frame for NSOPF: 04 consisted of the 3,381 postsecondary institutions in IPEDS that were public or private not-for-profit Title IV participating institutions and provided formal degree programs of at least two years' duration. While the IPEDS universe includes private institutions that are both for-profit and not-for-profit, the institutional universe for NSOPF excludes the private for-profit institutions.

The 3,381 institutions in the NSOPF: 04 universe were stratified based on the highest degrees they offered and the amount of federal research dollars they received. These strata distinguished public and private institutions, as well as several types of institutions based on the Carnegie Foundation's classification system.

Unlike NSOPF: 88, which was limited to faculty whose assignment included instruction, the faculty universes for NSOPF: 93, NSOPF: 99, and NSOPF: 04 were expanded to include all those who were designated as faculty, regardless of whether their responsibilities included instruction, and other (non-faculty) personnel with instructional responsibilities. Under this definition, researchers and administrators and other institutional staff who held faculty positions, but who did not teach, were included in the samples. Instructional staff without faculty status also were included. Teaching assistants were not included in any cycle of NSOPF.

NORC Survey of Earned Doctorates

<http://www.norc.org/projects/Survey+of+Earned+Doctorates.htm>

The Survey of Earned Doctorates (SED) is a federal agency survey conducted by NORC for the National Science Foundation and five other federal agencies (National Institutes of Health, U.S. Department of Education, National Endowment for the Humanities, U.S. Department of Agriculture, and the National Aeronautics and Space Administration). The SED gathers information annually from 45,000 new U.S. research doctorate graduates about their educational histories, funding sources, and post-doctoral plans. Each year the SED data are added to a larger historical record of doctorate-degree graduates, the Doctorate Records File (DRF). Begun in 1920, the DRF contains annual information used to track the number of graduates in various fields; the educational paths of scientists, engineers, and humanists; movement of graduates into the labor market; and similar information.

National Postsecondary Student Aid Study (NPSAS)

<http://nces.ed.gov/surveys/npsas/design.asp>

The design for the NPSAS sample involves selecting a nationally representative sample of postsecondary education institutions and students within those institutions.

To be eligible for inclusion in the institutional sample, an institution must have satisfied the following conditions: (1) offered an education program designed for persons who have completed secondary education, (2) offered an academic, occupational, or vocational program of study lasting 3 months or longer, (3) offered access to the general public, (4) offered more than just correspondence courses, and (5) was located in the 50 states, the District of Columbia, or Puerto Rico. Also, beginning with NPSAS: 2000, eligible institutions must have a signed Title IV participation agreement with the U.S. Department of Education.

Part-time and full-time students enrolled in academic or vocational courses or programs at these institutions, and not concurrently enrolled in a high school completion program, are eligible for inclusion in NPSAS. The 1987 NPSAS sampled students enrolled in the fall of 1986. Beginning with the 1990 NPSAS, students enrolled at any time during the year were eligible for the study. This design change provided the data necessary to estimate full-year financial aid awards.

With a large, nationally representative sample of institutions and students, NPSAS provides a highly efficient and cost-effective way of identifying a nationally representative sample of other student subpopulations of particular interest to policymakers, and providing baseline data for a longitudinal study of these subpopulations. Specifically, beginning with the NPSAS: 90 survey, alternate NPSAS data collections provide the base year sample for either the Beginning Postsecondary Students (BPS) longitudinal study or the Baccalaureate and Beyond (B&B)

longitudinal study. For NPSAS: 90, NPSAS: 96, and NPSAS: 04, the longitudinal cohort comprised students who began their postsecondary education during the NPSAS year; the BPS surveys followed these students over time to examine such issues as persistence and the effects of financial aid on subsequent enrollment. NPSAS: 93 and NPSAS: 2000 have provided the base-year cohort for a sample of students who completed a baccalaureate degree during the NPSAS year; the B&B surveys followed these students over time to examine issues such as the transition from college to work and access to graduate school.

NPSAS data come from multiple sources, including institutional records, government databases, and student telephone interviews. Detailed data concerning participation in student financial aid programs are extracted from institutional records. Data pertaining to family circumstances, background demographic data, educational and work experiences, and expectations were collected from students using a computer-assisted telephone interview.

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