

Persistent Inequity: Gender and Academic Employment

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There is a common presumption, both within and outside the higher education community, that as bastions of innovation and consideration of ideas and people on their merits, colleges and universities must be at the leading edge of efforts to implement equitable employment practices in their own organizations. Unfortunately the data on gender equity in academic employment do not support this presumption. In the context of a broader discussion about equity, this report provides the most recent data on women’s employment status as faculty members and academic leaders. It reviews various explanations for the inequities that persist, and argues for a renewed commitment to change.

Gender equity in academic employment

The reality on campuses all around the country is clear: women make up a majority of the students in American colleges and universities. In fall 2009, women comprised 57 percent of undergraduate enrollment and 59 percent of graduate enrollment (Knapp, et al., 2011). And as figure 1 indicates, it is projected that this year women will earn the majority of degrees at U.S. institutions, at each level of award. The increase in the proportion of degrees earned by women has been especially dramatic for first professional degrees such as those in law and medicine, rising from only 3 percent in 1960-61 to a projected 51 percent this year. The shift to a predominantly female student body has been dramatic enough that the American Council on Education’s report *Gender Equity in Higher Education: 2006* echoed most reports on higher education with its focus on students and the implicit question “Where are the men?” (King, 2006)¹

What should be a corollary question has received less attention, however: when these high-achieving women students look around campus for faculty mentors and role models, what do they find? The answer by and large is that progress for women into the most prestigious (and well-paid) positions in academia has lagged far behind the advances experienced by women students. This section documents trends in academic employment gender equity, for faculty members, graduate student employees, and college presidents.

Faculty Employment

The examination of faculty gender equity begins with the basic question of employment status. Figure 2 depicts the composition of the full-time instructional faculty over the last 35 years. Like many of the indicators discussed in this section, what this graph shows is slow—actually, *very* slow—progress. After four decades of efforts to fully involve women in the academic workforce, only 42 percent of all full-time faculty members are women.

But faculty members employed full time already represent a somewhat privileged category, as figure 3 shows. As of fall 2009 more than half of all faculty members are employed part time, and there is a significant gap between women and men in the proportion in that situation. Moreover, although the trend in faculty appointments over four decades has been toward an even larger proportion of all faculty members employed part time, the gap between women and men has remained essentially constant.

The other significant aspect of faculty employment is tenure. During the period covered by this analysis, the proportion of full-time faculty members with non-tenure-track appointments has steadily increased (figure 4). But here, too, the proportion of women in that contingent situation has been and remains larger; the gap is not closing. As more faculty members have been appointed to non-tenure-track positions, the proportion of all full-time faculty with tenure has declined. And as figure 5 shows, the tenured proportion is smaller among women faculty members than it is among men, and the differential has not shrunk appreciably.

The overall impact of these trends on women's academic employment status is depicted in figure 6. As of fall 2009, three quarters of the total instructional staff is in contingent positions, including full- and part-time non-tenure-track faculty and graduate student employees. Women are overrepresented in each of the contingent faculty categories and make up nearly half of graduate student employees. They thus have a higher rate of contingent academic employment overall than do men. And although the gap depicted in figure 6 is not quite as large as that shown in the faculty graphs, these trend lines also are not converging.

The culmination of a faculty career, full professor status, remains an elusive goal for women. Although the lines of figure 7 again show steady progress, there is still a long way to go. At only 28 percent of all full professor appointments, women are still outnumbered more than two to one in the most senior rank. And recent reports from the Modern Language Association (2009) and University of Massachusetts Amherst researchers (Misra, et al., 2011) confirm that

women are less likely to be promoted than men, and when they are promoted, the process takes longer.

Leadership

Although the link between a president's gender and women's representation on the faculty has not been established empirically, it is worth noting that women's progress in attaining college and university presidencies has been nearly as slow as that for faculty. Figure 8 shows the most recent figures available and a twenty-year trend. At 23 percent in 2006, women's representation among presidents of all institutions has more than doubled in two decades—yet it remains low. Despite the high profile of women presidents at four of the eight Ivy League universities, the presidency is still a predominantly male office.

The presence of women in other senior academic leadership positions is somewhat greater than it is among presidents; however, we do not have sufficient trend data to assess the likelihood of increased representation of women in the future. The American Council of Education report *On the Pathway to the Presidency* (King, 2008) found that in 2007 women were 38 percent of all chief academic officers, 50 percent of “central senior academic affairs officers” (e.g., associate provost or dean of graduate studies), and 36 percent of academic deans.

There do not appear to be data available on the gender of leaders of major academic organizations, but we can take a look at a few significant examples. Despite the presence of Molly Corbett Broad as its president, the board of directors of the American Council of Education (an umbrella organization) appears to include no more than 11 women among its more than 40 members as of this writing.² Women make up about one third of the members of the council of the American Association for the Advancement of Science, with Alice Huang of the California Institute of Technology as chair.³ The American Council of Learned Societies (ACLS), comprised of humanities and social science organizations and with Pauline Yu as its current president, has a much smaller board of directors; six of its fifteen members are women. More informative is the list of administrative officers of the 70 ACLS constituent societies. Although many of these organizations likely have a majority of women as members, less than 30 of the 70 administrative officers are women.⁴ And, lest I be accused of unfairly casting aspersions only outwardly, I note that as of this writing exactly half the members of the American Association of University Professors national council (an elected body) are women.⁵ These are only a few examples (given the dearth of comprehensive data on this topic), but it

seems that the obstacles for women reaching positions of leadership in academic organizations may be similar to those they face in progressing through a faculty career.

Faculty Salary

Figures 9 and 10 show the two primary aspects of the salary disadvantage for women full-time faculty members, and the numbers have hardly changed in 35 years. Women earn less than men, on average, at each faculty rank and at all types of institutions. In each case, the most remunerative category is where women fare the worst. The salary disadvantage of women associate and assistant professors at all types of institutions is about 7 percent, but at the full professor rank it reaches 12 percent. Women full-time faculty members are closest to parity in associate's degree colleges, where they also constitute a majority of the faculty, but even there they experience a 4 percent salary disadvantage on average. The gap between women's and men's salaries is highest in doctoral universities, at 12 percent. Because women are overrepresented at the lowest ranks and at the lowest-paying institutions, women's overall average salary has remained at around 80 percent of the average for men since the mid-1970s.

As previously noted, women faculty members are more likely than men to be employed part time. We do not have recent comprehensive data on part-time faculty earnings. The US Department of Education's National Study of Postsecondary Faculty (NSOPF) represented the best available source for data on this issue, but NSOPF was last carried out for fall 2003 and is now defunct. Toutkoushian and Bellas (2003) analyzed NSOPF data from fall 1998 and found that women part-time faculty members earned slightly more on average than their male counterparts when only instructional or academic income was considered, but 41 percent less when all employment was included. The average earnings from part-time faculty work were 28 percent of the average full-time faculty earnings for women and only 19 percent of full-time earnings for men. However, for the purpose of this discussion, the key point is that women are overrepresented in these low-paying positions, meaning that the earnings disadvantage for all women faculty members is even greater than the current 19 percent depicted in figure 9. A comparable analysis using NSOPF fall 2003 data has apparently not yet been completed.⁶

Work

A final aspect of the difference in academic employment status is the gendered nature of academic work. Traditionally, the work of faculty members consists of teaching, research and scholarship, and various forms of service. The AAUP has long maintained that all faculty

members should be supported by their institutions for meaningful participation in all aspects of academic work; teaching stimulates research, research informs teaching, and service contributes to the ongoing development and maintenance of shared governance and professional norms. Empirical and anecdotal evidence indicate that the balance among these three basic components of faculty work varies with the type of institution and the employment status and seniority of the faculty member. At community colleges and less selective baccalaureate colleges the focus is on teaching, where in research universities there is a much greater time commitment to research. However, even within research universities, non-tenure-track faculty members generally spend nearly all of their time teaching and may spend almost no time on research or service.

A number of quantitative analyses over the last two decades have found that women faculty members spend a greater proportion of their time on teaching than do men, and even specifically on undergraduate teaching and student advising. They also spend more time on service, whether as part of departmental or institutional committees or outside organizations (Porter, 2007; Bradburn and Sikora, 2002; Toutkoushian and Bellas, 1999; Park, 1996; Blackburn, et al., 1991). As noted above, Misra and her colleagues (2011) found that disproportionate time spent in teaching and service was a significant obstacle for women associate professors to attaining full professor rank. Their survey at one research university found dramatic differences among associate professors:

Although associate professors of both sexes worked similar amounts of time overall—about sixty-four hours a week—the distribution of work time varied considerably. Men spent seven and a half hours more a week on their research than did women. . . . On the other hand, women associate professors taught an hour more each week than men, mentored an additional two hours a week, and spent nearly five hours more a week on service. (24)

Explaining the persistence of inequity

The data presented in the preceding section demonstrate that, even after four decades of focused attention and policy development around the issue of gender equity in academia, women have not achieved the same status as men. Overall, women are less likely than men to be employed as full-time tenure-track faculty members, less likely to hold tenured or full professor positions, and comprise less than a quarter of all college and university presidents. Women in full-time faculty positions earn only about 80 percent of what men earn, and since women are also overrepresented in low-paying part-time faculty positions, the gender gap in earnings is actually even larger than that. Two approaches have emerged in the literature analyzing these wage gaps: one approach is to “explain” gender differences in academic earnings by specifying

the multiple factors that make up the difference and leave an assessment of *equity* unaddressed; the other is to argue that any differences result from “choices” made by women that result in lower earnings. Each approach has its disadvantages.

It’s become commonplace on college and university campuses to dismiss differences in overall average salaries between men and women full-time faculty members as an incomplete picture. This mirrors the standard quantitative social science approach to analyzing those differences, a search for the factors that “explain” the differences. This is important work, because it can show us more precisely where the problems lie. However, as I have noted elsewhere, even the most detailed and sophisticated quantitative analyses using national datasets still find an “unexplained” salary gap between men and women faculty members of at least 5 percent (Curtis, 2010; Porter et al., 2008). More importantly, such analyses do not really question the differences between women and men faculty members on the multiple factors that make up differences in employment situation, “explained” or otherwise: educational qualification, publications, work experience, discipline, employing institution, and others. If we are actually to change this situation of persistent inequities, we must investigate the sources of each of these differences and find remedies for them.

More problematic is the approach that explains away differences in employment outcomes as the result of “choices” women make—in this conception, by the way, it’s almost always the choices of *women* that lead them down the path of career disadvantage. A fine example of this approach was provided by Christina Hoff Sommers in a *New York Times* op-ed (2010), where she opined that the Paycheck Fairness Act then still under consideration in Congress was unnecessary because the gender gap in wages has largely been erased and what little remains “may be almost entirely the result of the individual choices being made by both male and female workers.” This blithe generalization is actually a quote from “a 2009 analysis of wage-gap studies commissioned by the Labor Department.” However, Sommers doesn’t mention that the quote comes from the foreword to the report (by then Deputy Assistant Secretary Charles James, who was not the report’s author) and is not even supported by the report itself.⁷ Although Sommers is careful not to embrace the “choice” explanation entirely, she characterizes a hypothetical counter argument that “those choices are skewed by sexist stereotypes and social pressures” as “interesting and important points, worthy of continued public debate.” Diplomacy notwithstanding, Sommers then proceeds to dismiss any further discussion of discrimination in earnings as “1970s-style gender-war feminism.”

This rhetoric of “choice” is regularly applied to the academic workplace. Women “choose” to devote more attention to caregiving (by taking part-time and/or non-tenure-track jobs), specialize in disciplines that just don’t pay as much, and just don’t put in the time necessary for a high-level academic career.⁸ In her most recent book, Joan Williams (2010) analyzes multiple aspects of this rhetoric. She notes that women are not so much “opting out” of demanding professional careers as they are “pushed out” by a combination of unrealistic workplace expectations, public policies that provide little or no support for caregiving, and male partners who neither provide significant amounts of help with household work nor are in a position to forego their own careers.

Suggesting that women “choose” employment that is less remunerative implies that all career options are equally open to them. Citing experimental evidence produced by University of Massachusetts-Amherst researchers, Shankar Vedantam (2011) argues instead that

These experiments suggest that subtle and unconscious factors skew the “free choices” we make. The career choices of men and women are affected far more by discrimination than by any innate differences between men and women. ... It is true that fewer women than men break into science and engineering careers today because they do not choose such careers. What isn’t true is that those choices are truly “free.”

The reality faced by women in academia, as in other professions, is that their “choices” are constrained by limited career options, socially gendered roles on the job and in the home, and by “simple” economics. The last several decades have produced a massive shift in the social structures that frame our decisions and life outcomes in terms of work, family, and well-being. At the same time, in pursuing academic careers women face continuing hurdles in the form of implicit bias against women and against caregiving, stereotypes about women’s competence, and socially constructed expectations about women, men, and work. All of these factors have combined to produce the persistent inequities documented in the preceding section.

Constrained Choices and Accumulated Disadvantage

The concept of accumulated advantage and disadvantage was originated by sociologist Robert Merton in the 1960s and articulated with reference to the progress of women in academic and other careers by Virginia Valian (1998). Valian’s argument acknowledges that discrimination against women is generally less blatant and open today than it was several decades ago; it is now far more subtle, perhaps even unconscious. She also points out that the process producing inequitable outcomes such as those described in the first section of this report

is often less a matter of a single insurmountable hurdle than of disadvantages and challenges at numerous points in one's career that accumulate.

Mary Ann Mason and her colleagues have carried out a series of studies documenting the effects of childrearing on academic careers, and vice versa. They have quantified the disproportionate impact on women academics, who still face an unacceptable choice between sacrificing career for family or sacrificing family for career. The continued overrepresentation of women in part-time and full-time non-tenure-track faculty positions essentially constitutes an academic "mommy track." Mason and Goulden (2002) found that having a child negatively impacted a woman's academic career, but actually boosted a man's. Conversely, they found (Mason and Goulden, 2004) that women academics were more likely to delay or forgo children than their male counterparts.

Even women employed full time in academic careers are subject to the broader societal expectations about who will do the unpaid work of maintaining a home. Based on data collected in 2006–07, Schiebinger and Gilmartin (2010) find that

despite women's considerable gains in science in recent decades, female scientists do nearly twice as much housework as their male counterparts. Partnered women scientists at places like Stanford University do 54 percent of the cooking, cleaning, and laundry in their households; partnered men scientists do just 28 percent. This translates to more than ten hours a week for women— in addition to the nearly sixty hours a week they are already working as scientists—and to just five hours for men.

They recommend that colleges and universities move to "cafeteria" or "flexstyle" plans for benefits other than retirement. "A flexible benefits package—providing a specific yearly dollar amount—could be used for any aspect of private life that saves employee time and hence enhances productivity."

Although the quantitative evidence of its impact may not yet be as well established, it stands to reason that if current expectations are not altered academic women will also bear the burden of caring for a rapidly aging population. The concept of the "sandwich generation," adult women who are caring for both young children and elderly relatives, is already well established. Will it create yet another barrier for women seeking academic careers?

In his book *Striking A Balance: Work, Family, Life*, Bob Drago (2007) argues that career choices are constrained by the intertwined operation of three norms in American society:

The Motherhood norm – a society-wide belief that women should be mothers, and perform unpaid family care and low-paid care for others in need.

The Ideal Worker norm – a belief among managers and professionals in total commitment to career, and high rewards for this commitment.

The Individualism norm – a society-wide belief that the government should not help those needing care. (7)

Along with Drago and others studying the challenges of balancing careers with caregiving work (and even leisure, a seemingly forgotten concept), Joan Williams has elaborated on the multiple ways in which the interaction of these norms disadvantages women in pursuing academic and other careers.

Several researchers have documented a stigma against caregiving. Williams (2005, 2010) refers to the “maternal wall” that makes it difficult for women with children to pursue high-level careers once they take on childcare responsibilities.

In the maternal wall context, women may experience benevolent as well as hostile prescriptive stereotyping. Benevolent stereotyping polices women into traditionalist roles in a “kinder and gentler” way. After women have children, some find themselves advised to work shorter hours or to eschew travel so they can spend more time with their families. ... By policing couples into stereotypical gender roles, [employers and] colleagues not only rely on traditional stereotypes; they help create them. (2005: 97)

Drago and his colleagues (2005) have documented similar bias in academe, and describe “bias avoidance” behaviors in which women engage to avoid the negative career impacts that result from this bias.

Assumptions about competence and caregiving have variant impacts on women and men. Williams (2005) notes

Women’s successful performances tend to be more closely scrutinized and then assessed by stricter standards than men’s. Men also have to give more convincing demonstrations of incompetence in order to be judged incompetent overall. Thus, women have to “jump through more hoops” to establish themselves. (93-4)

Among the most common effects of maternal wall attribution bias is the perception that when a mother is absent or late for work, she is caring for her children, while a similarly situated father is thought to be researching. (98)

Constrained choices among insufficient options are what have perpetuated the series of employment inequities documented in this report. Both the structures of academic employment and the way in which we talk about balancing work and life outside of work must change.

Implementing equity in academic employment

There is one school of thought that, based on the progress achieved to date in encouraging women to complete doctorates and in recruiting them into beginning faculty positions, gender equity in academic employment is “just a matter of time.” Having reviewed the data presented in

the first section of this report, I think we have to ask how much *more* time that would be. Marschke and her colleagues (2007) constructed a projection based on data from one research university. Although this is clearly a very limited analysis, the results are instructive: at the rate of progress found at this university throughout the 1990s, it would take 57 years for women to make up 50 percent of the full-time faculty. My colleague Marty West has pointed out to me that she made a similar observation as long ago as 1995, although without projecting the trend forward. From that vantage point, 16 years ago and looking back to the same starting point as the data presented in the first section of this report, she noted the “amazingly persistent gender differentials among academic institutions, among faculty ranks, and between men’s and women’s salaries.” (1995: 17) She pronounced the quest for academic gender equity “frozen in time.”

More significantly, such a “just wait” attitude carries with it the implication that nothing further needs to be done. I can only disagree, and conclude with a few comments on strategies that hold the promise of “unfreezing” the persistent gender inequities with which we are currently confronted.

Strategies for Implementing Equity

The fundamental concept of shared governance can serve as an organizing principle for collective faculty efforts to identify and address gender inequities. The AAUP has long held that the faculty should have the primary role in decisions about both faculty appointments and compensation; it is therefore well placed to take the initiative in creating more equitable policies and procedures. To this end, it’s vital that faculty members take an active leadership role on equity, rather than waiting passively for administrators to solve the problem.

Active and forceful participation by women and men faculty members in faculty senates, committees, and taskforces can have an impact—as we have seen in the case of MIT. But change does require commitment and shared activism. A faculty union can enhance the faculty’s collective voice further in ways that should serve to reduce gender inequities. Unions can advocate for policies and practices that promote transparency in hiring, tenure, salary, and promotion decisions. They can negotiate various types of support in the form of leaves and other benefits that make caregiving and career more compatible (Labor Project For Working Families). Perhaps most importantly, faculty unions speak with a collective voice that can help individual faculty women realize they need not face multiple challenges all alone.

Ann Mari May and her colleagues (2010) find that the presence of a faculty union increases the representation of women among full-time faculty members at public universities. By contrast, a recent paper by Smith and Grosso (2009) finds that the presence of a faculty union fails to mitigate pay differentials between men and women at the three upper ranks in public doctoral universities. Their study seems overly simplistic, however, both in the factors considered and the analytical method used. It also contradicts the first author's previous findings.

I have argued elsewhere (Curtis, 2010) that the faculty should take an active role in campus salary equity studies, and suggested some common pitfalls. Chief among these is the dismissal of salary differences between men and women as "not statistically significant" or "sufficiently accounted for" by control variables. In an equity study, as opposed to an academic analysis using sample data, the question of statistical significance is irrelevant and any differences that are identified are real and meaningful. However, as I note

A study alone will not end inequities. The only truly effective remedy for inequity is the adoption of more standardized (and open) methods of determining initial salaries, increases, and special awards. As long as salaries are determined primarily by private individual negotiation or administrative discretion, inequities will re-emerge.

Last year the AAUP issued a set of recommendations on partner accommodation policies (AAUP, 2010). These policies present us with a conundrum: on the one hand, they are a good method for helping keep families together when two academic partners are faced with a rare job opportunity in a distant location. On the other hand, they can establish one partner as the "trailing spouse" and serve to perpetuate the contingent status of that individual. When the "partner hire" is a woman, this practice can serve to perpetuate gender inequities. The recommendations call for a clear statement of conditions for the partner appointment and a formal policy as a means of avoiding introducing further inequities through the exercise of too much administrative discretion.

Joan Williams and colleagues have argued it's important to have a "stick" to supplement the various "carrots" that are now in place in the form of policies designed to promote gender equity. The development of Family Responsibilities Employment Discrimination law (Williams, 2010; Williams and Bornstein, 2008) serves to put employers, including colleges and universities, on alert that inequitable treatment of mothers will have significant legal and financial consequences.

Development of sound institutional policy is a necessary, but not sufficient, step toward more equity in employment. There is still at present a "fear factor" (Ward and Wolf-Wendel, 2004; Drago et al., 2005) among those who might benefit from such policies. The critical

challenge now is making it possible for women—and men as well—to utilize policies designed to address the challenge of balancing an academic career with caregiving responsibilities.

Raising Our Collective Consciousness

I'm an idealist—at least most of the time. It seems to me that significant improvements in gender equity in academic employment require a good old-fashioned dose of consciousness raising, for men especially but for women as well. (Or maybe I should say *another* dose, or *continuing* doses.) I've had my own consciousness about gender equity raised any number of times: when a colleague asked me to break out a set of tables on faculty status by gender (and pretty much every time since when I do a new tabulation); hearing Virginia Valian speak at a conference about unintended, even subconscious assumptions about gender roles that affect our judgments of others; and even quite recently when a colleague pointed out the gendered consequence of an internal office policy. I'm idealistic enough to believe that a significant part of the challenge going forward is to raise our collective consciousness by specifying and talking about many of the subtle ways in which we each act to perpetuate inequities. Awareness of the problem behavior is the first step in changing it.

I believe it's vital that we continue to raise the issues and alert our colleagues, our leaders, and our communities that the struggle for equity has not yet been won. That, in fact, gender inequities persist in many dimensions of academic employment. I offer this report as another step along that path.

Notes

¹ The 2006 ACE report was actually an update of a 2000 report entitled *Gender Equity in Higher Education: Are Male Students at a Disadvantage?* A further update was published in 2010 but was not available for consideration in this report.

² The counts given for the organizations reviewed in this paragraph are based on individuals' names listed as of April 3, 2011, and are therefore imprecise; apologies for any misidentification. ACE list accessed at <http://www.acenet.edu/Content/NavigationMenu/About/ACEBoard/board.htm>.

³ See <http://www.aaas.org/aboutaaas/organization/council.shtml>

⁴ See <http://www.acls.org/about/structure/>

⁵ See <http://www.aaup.org/AAUP/about/officers/>

⁶ The AAUP is part of the Coalition on the Academic Workforce, which carried out a survey of contingent academic work in fall 2010. The Coalition plans to release an initial report of findings in May 2011, although it is not yet clear to what extent a detailed analysis of gender differences in employment status, working conditions, and compensation will be possible.

⁷ The report (CONSAD, 2009) was produced by a private consulting firm, CONSAD Research Corporation, under contract to the Department of Labor, and does not appear to have been subjected to any kind of peer review. It goes to great pains to stipulate detailed concerns about the insufficiency of available data for the assigned task, and concludes

As a result, it is not possible now, and doubtless will never be possible, to determine reliably whether any portion of the observed gender wage gap is not attributable to factors that compensate women and men differently on socially acceptable bases, and hence can confidently be attributed to overt discrimination against women. In addition, at a practical level, the complex combination of factors that collectively determine the wages paid to different individuals makes the formulation of policy that will reliably redress any overt discrimination that does exist a task that is, at least, daunting and, more likely, unachievable. (p. 36)

⁸ The sociological literature labels this perspective in academic analysis "preference theory" (Hakim, 2007; Halrynjo and Lyng, 2009).

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Other Resources

AAUP Resources on Women in Higher Education

<http://www.aaup.org/AAUP/issues/women/resources.htm>

AAUP Resources on Balancing Family and Academic Work

<http://www.aaup.org/AAUP/issues/WF/resources.htm>

Gender Bias Learning Project. Center for WorkLife Law, University of California, Hastings College of Law: <http://www.genderbiaslearning.com/> (See additional resources at <http://www.worklifelaw.org/ForAcademics.html>)

Tutorials for Change: Gender Schemas and Science Careers. Virginia Valian (CUNY-Hunter College) <http://www.hunter.cuny.edu/gendertutorial/index.htm>

Reports on gender equity and climate at research universities (The National Academies):

http://sites.nationalacademies.org/PGA/cwsem/PGA_045079

Gender Differences at Critical Transitions in the Careers of Science, Engineering, and Mathematics Faculty (The National Academies):

http://www.nap.edu/catalog.php?record_id=12062

NSF: *Women, Minorities, and Persons with Disabilities in Science and Engineering*

<http://www.nsf.gov/statistics/wmpd/>

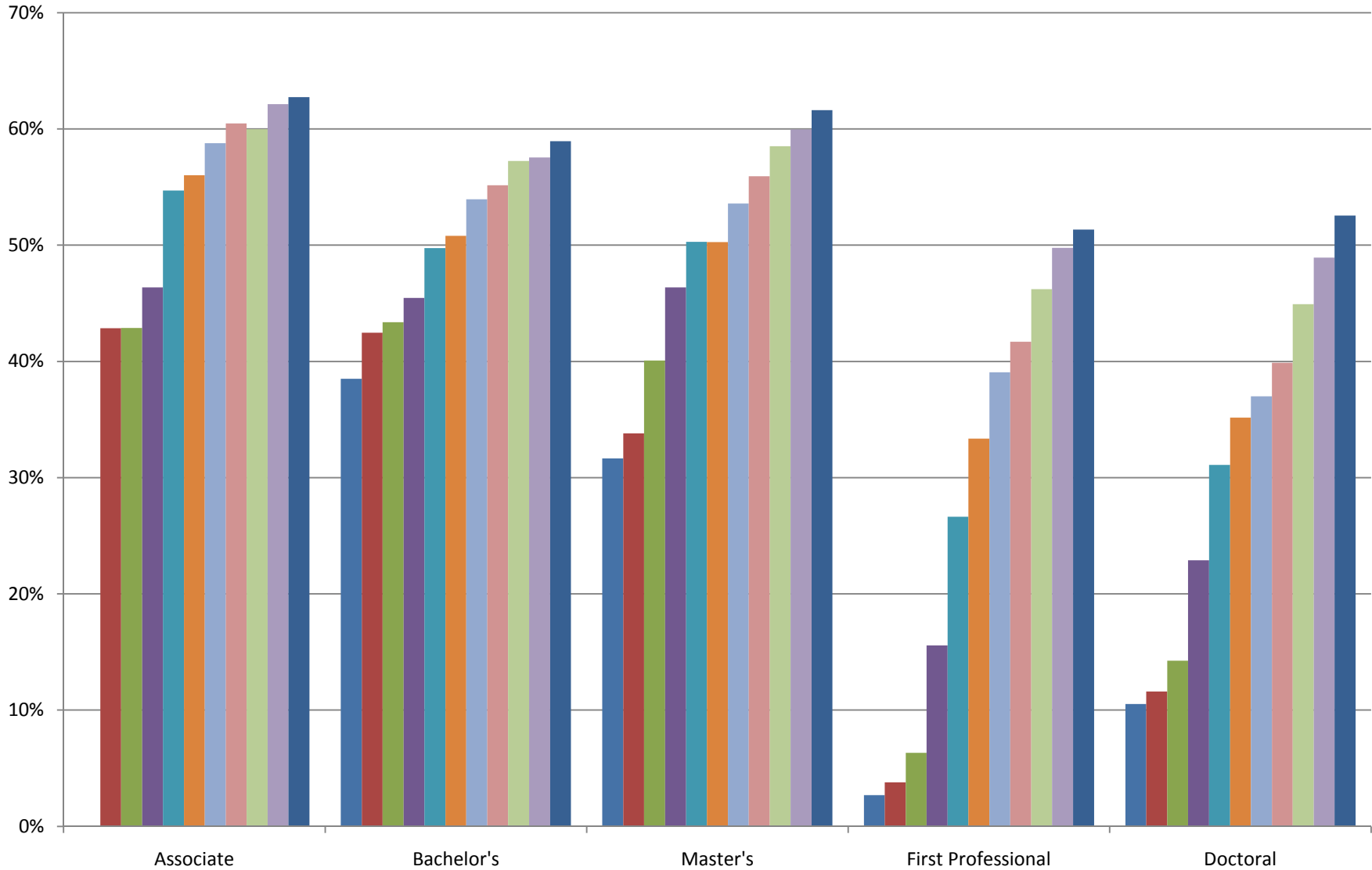
NSF Advance program: <http://www.portal.advance.vt.edu/>

Institute for Women's Policy Research: <http://www.iwpr.org/index.cfm>

Labor Project For Working Families: <http://www.working-families.org/>

National Committee on Pay Equity: <http://www.pay-equity.org/>

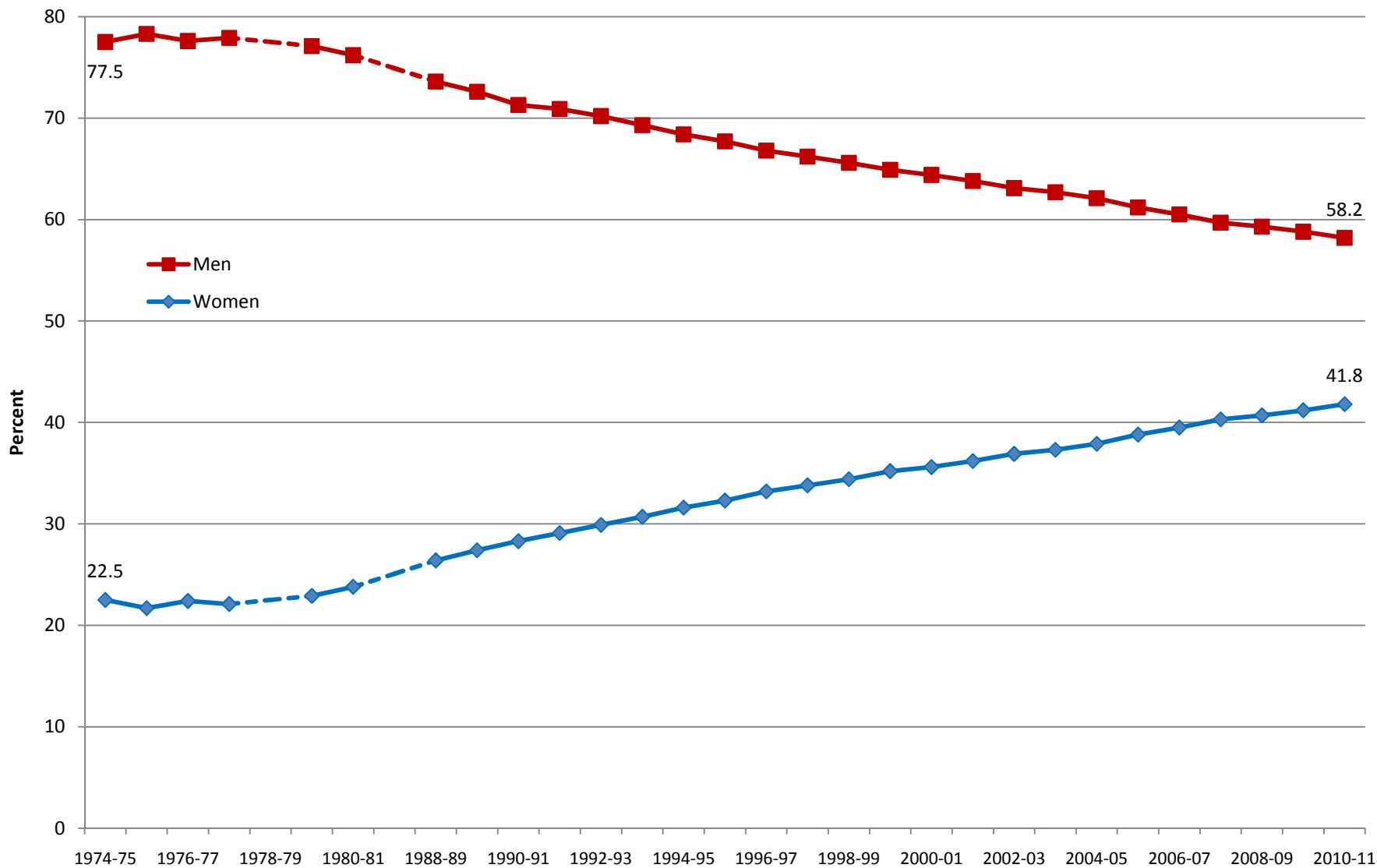
Figure 1. Women's Proportion of Earned Degrees Conferred by Degree-Granting Institutions, 1960-61 to 2010-11*



Source: US Department of Education, *Digest of Education Statistics* 2005 (Table 246) and 2007 (Table 258)

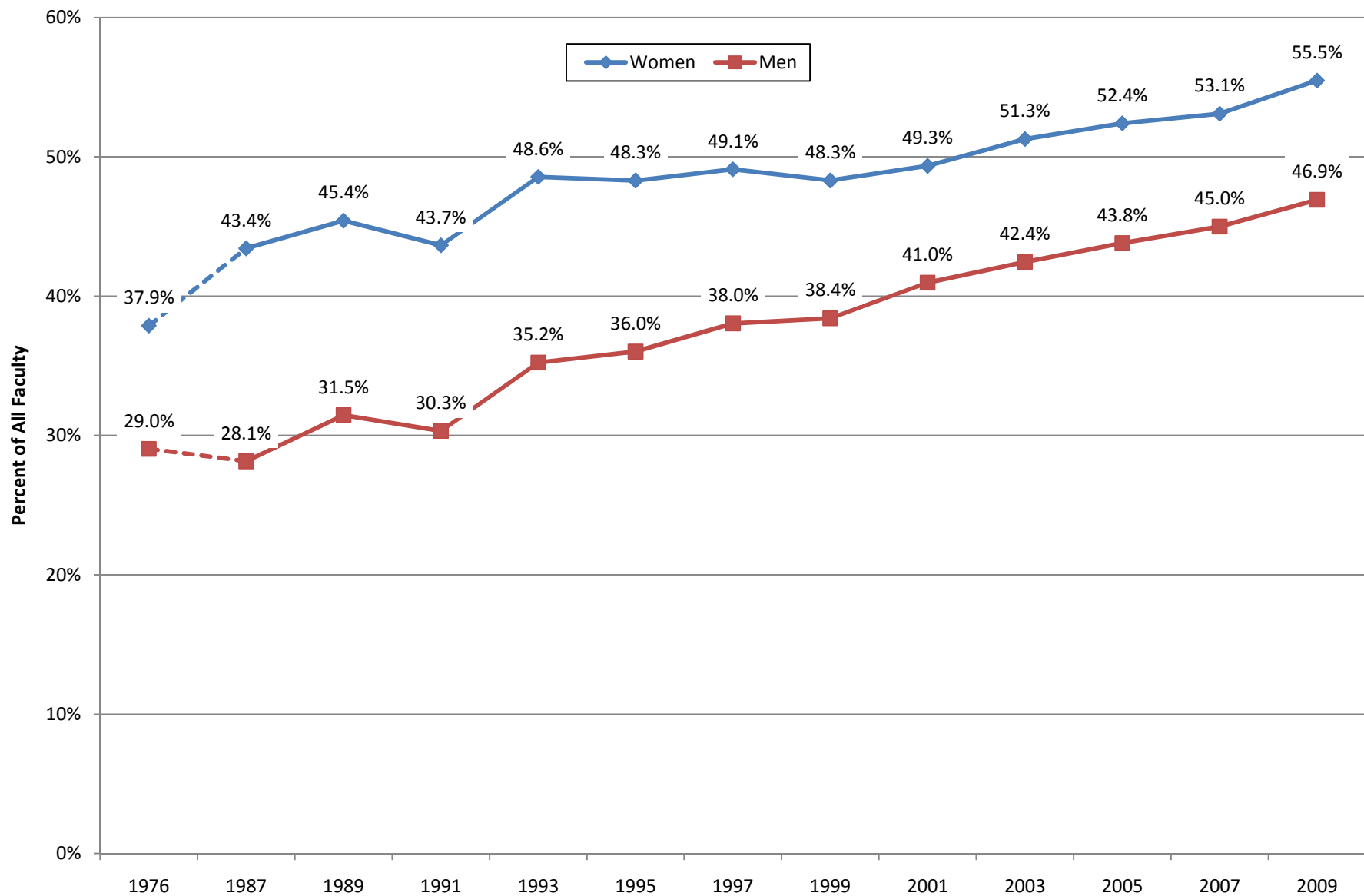
*2010-11 Projected

Figure 2. Percentage Distribution of Full-Time Faculty by Gender, 1974-75 to 2010-11



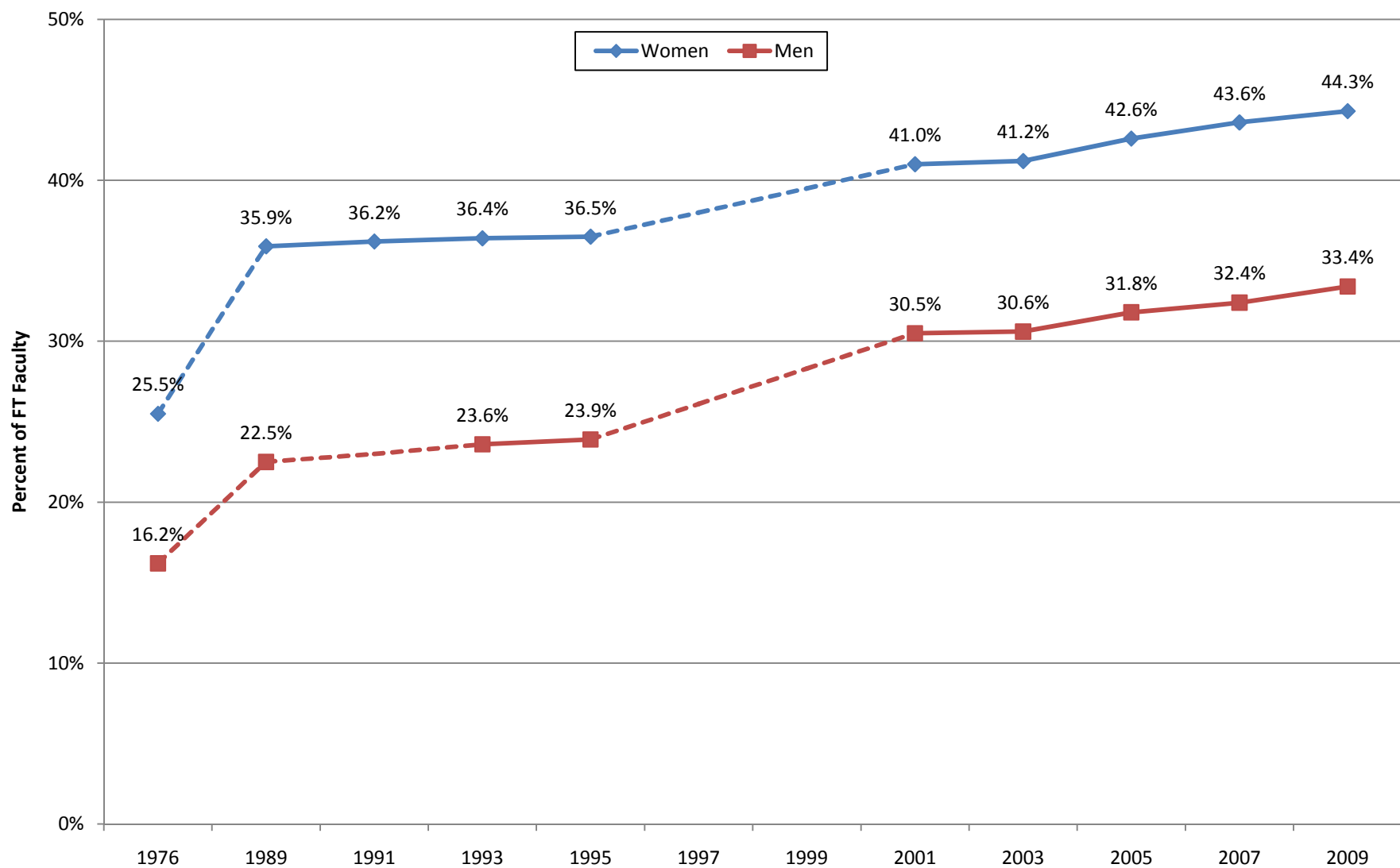
Source: AAUP Faculty Compensation Survey

Figure 3. Faculty Employed Part-Time, By Gender, 1976-2009



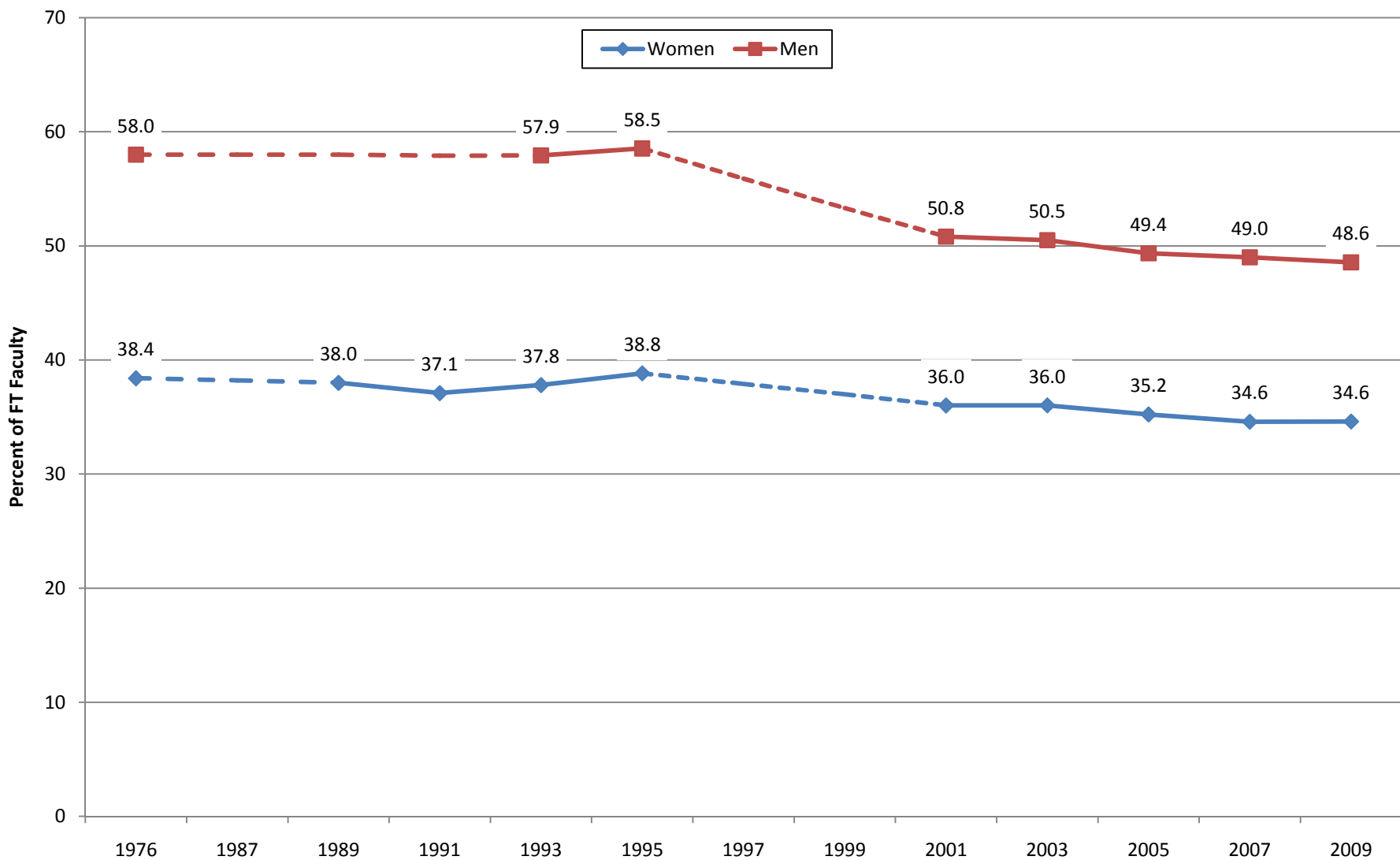
Source: US Dept of Education, "Fall Staff in Higher Education Institutions," various years

**Figure 4. Full-Time Faculty in Non-Tenure-Track Positions,
By Gender, 1976-2009**



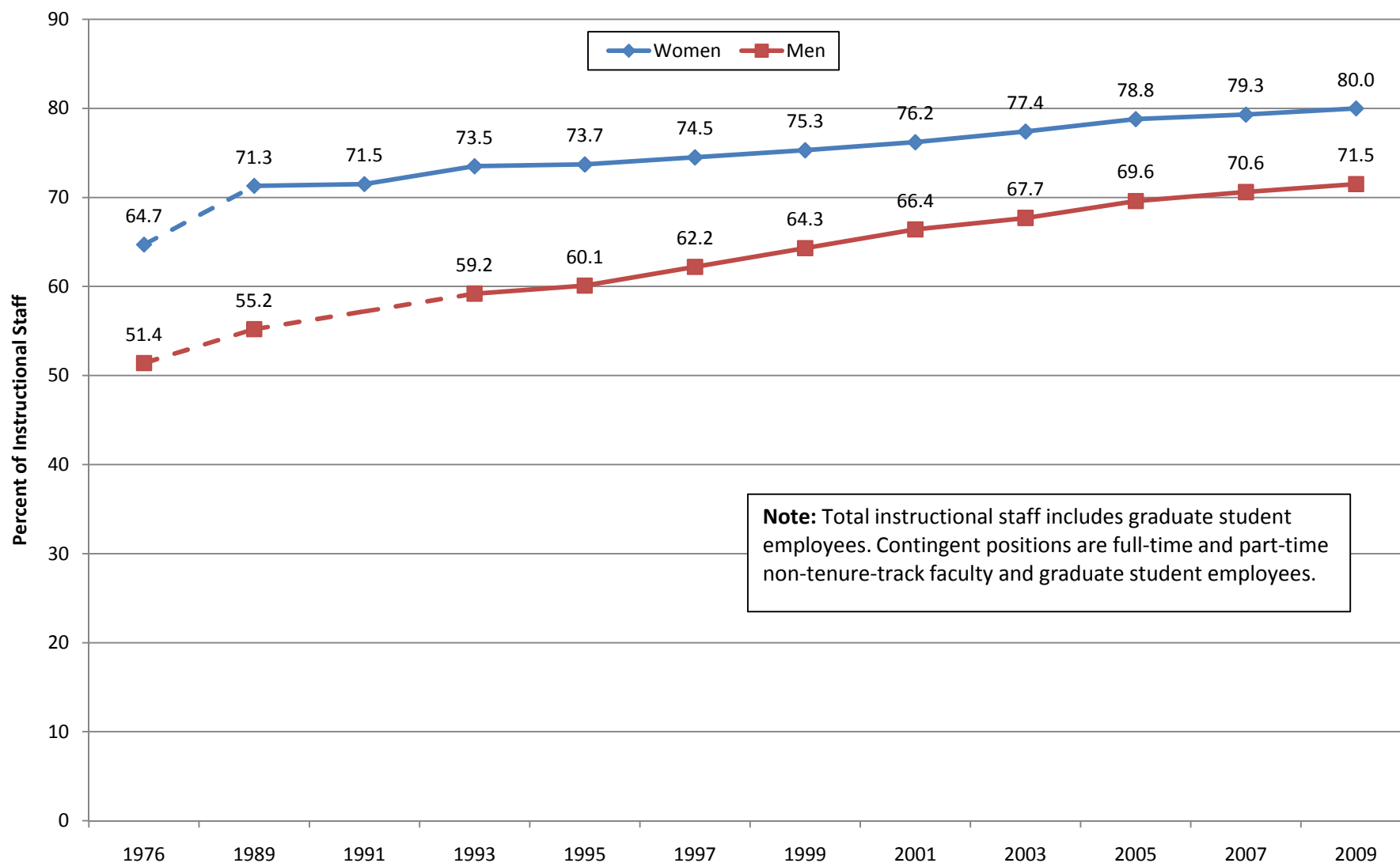
Source: US Dept of Education, "Fall Staff in Higher Education Institutions," various years

Figure 5. Full-Time Faculty With Tenure, By Gender, 1976-2009



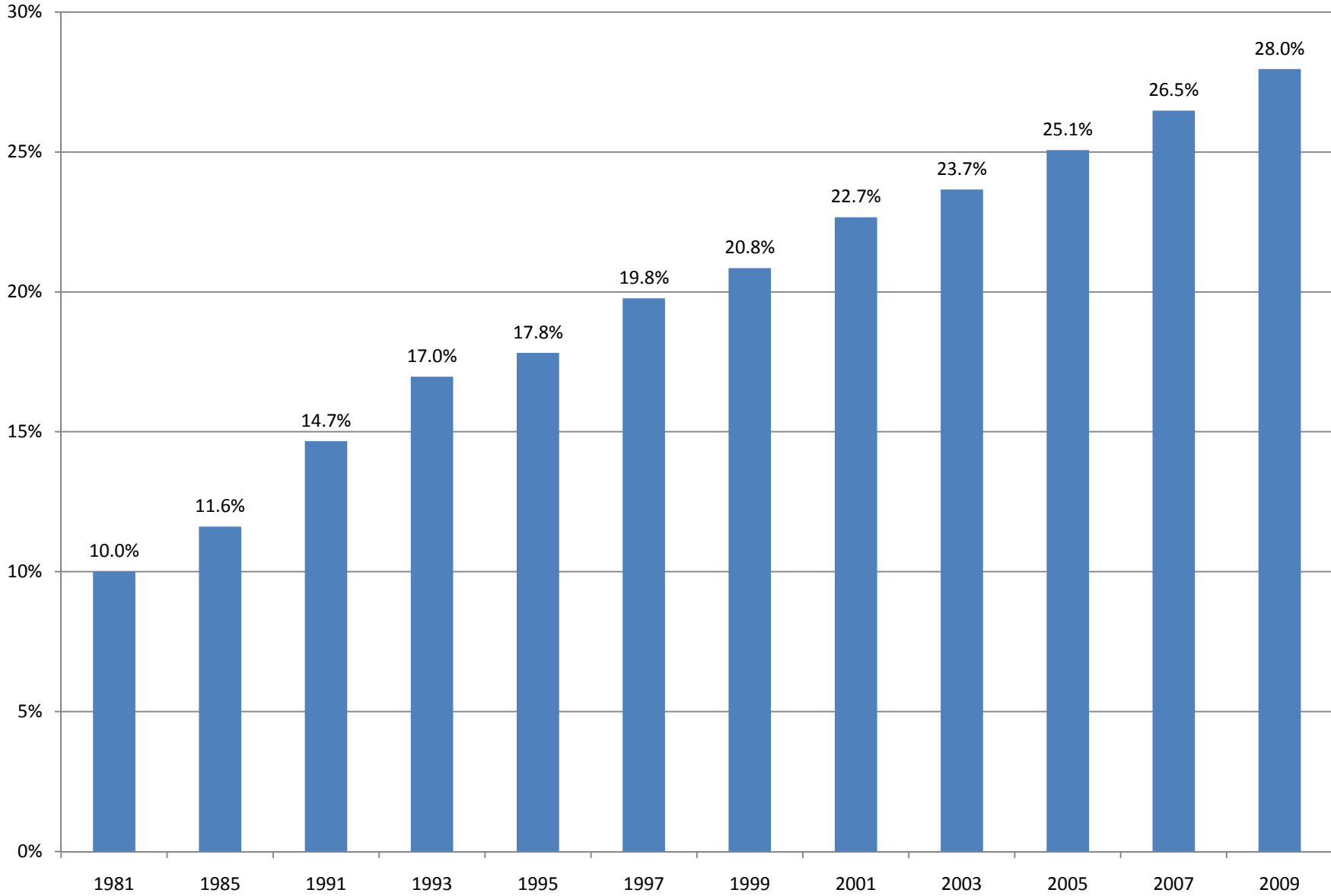
Source: US Dept of Education, "Fall Staff in Higher Education Institutions," various years

**Figure 6. Total Instructional Staff in Contingent Positions,
By Gender, 1976-2009**



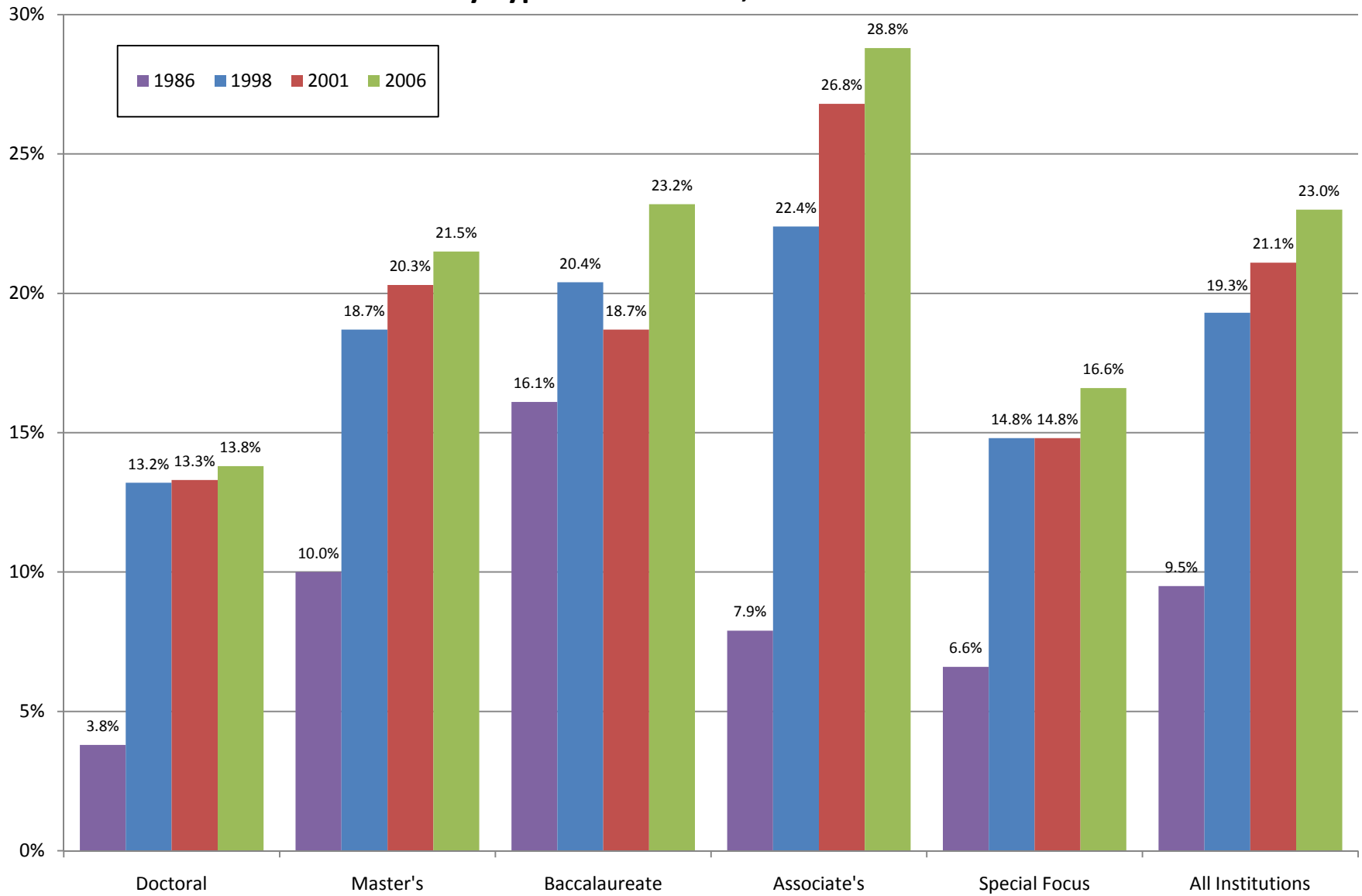
Source: US Dept of Education, "Fall Staff in Higher Education Institutions," various years

Figure 7. Proportion of Full Professors Who Are Women, 1981-2009



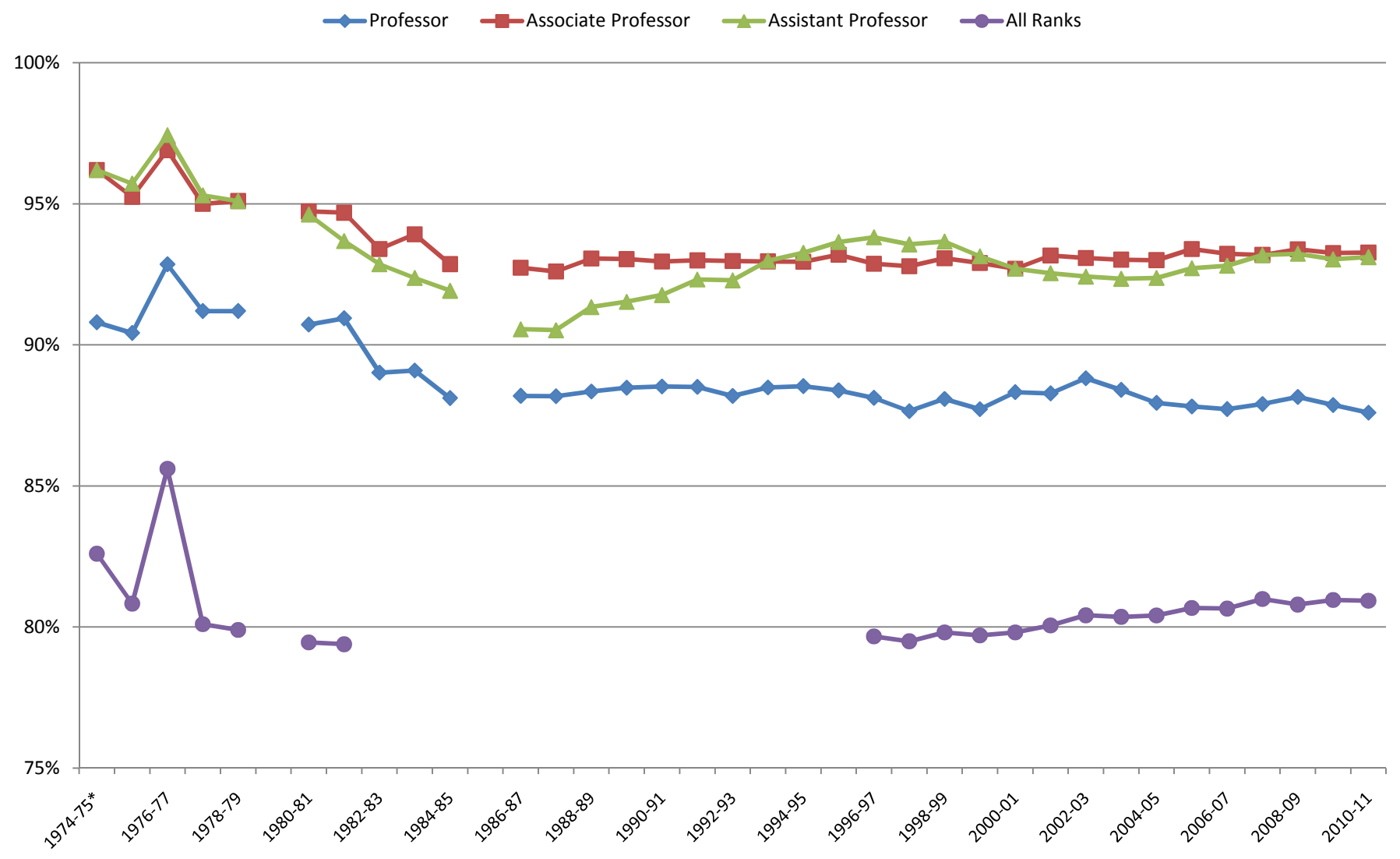
Source: US Dept of Education, *Digest of Education Statistics* and "Fall Staff in Higher Education Institutions," various years.

Figure 8. Proportion of College Presidents Who Are Women, by Type of Institution, 1986-2006



Source: American Council on Education. *The American College President*, 2007. Table 4, p. 15.

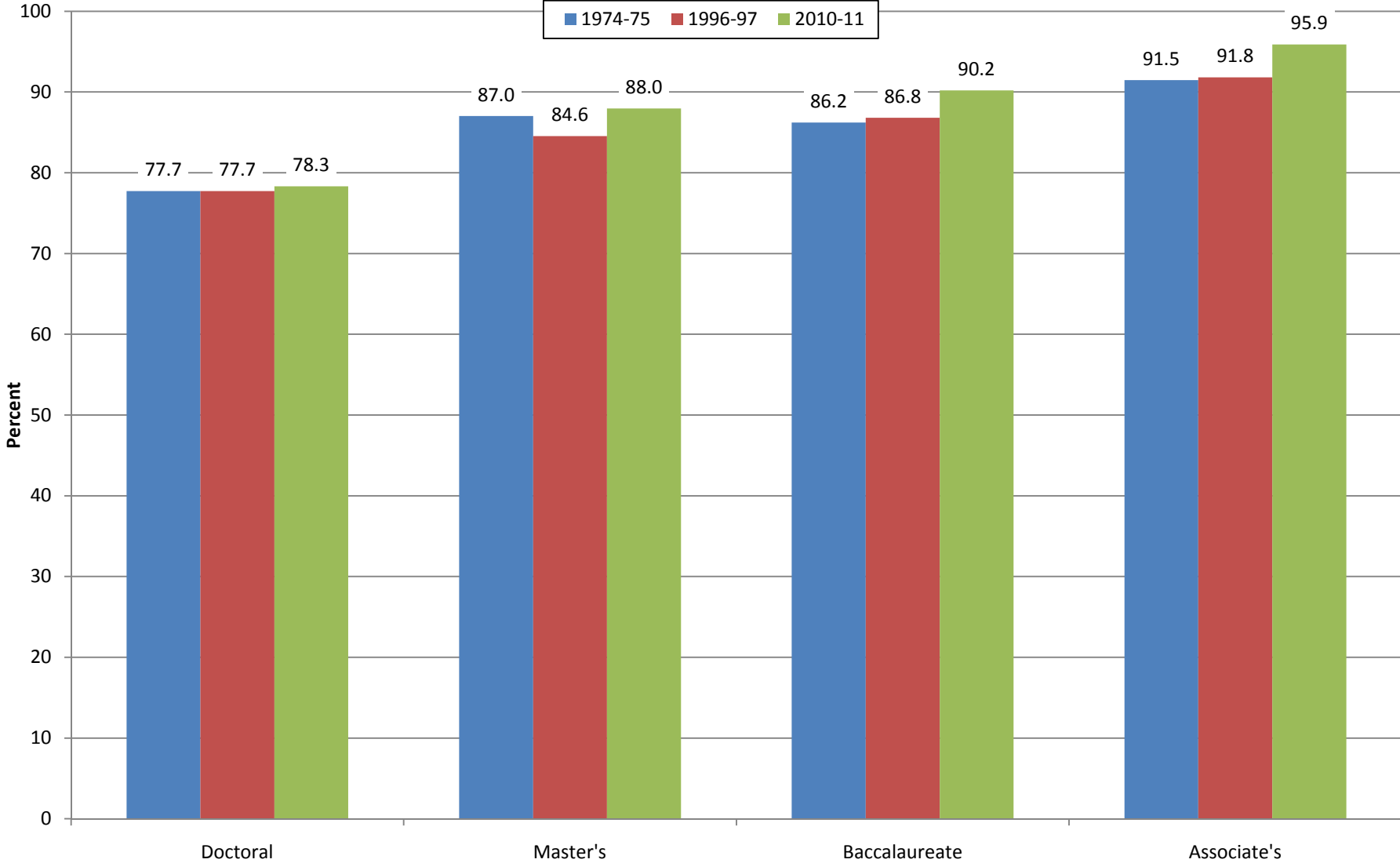
Figure 9. Full-Time Faculty, Women's Average Salary as a Percent of Men's, by Rank, 1974-75 to 2010-11



Source: AAUP Faculty Compensation Survey

*For 1974-75, the published figure was the salary disadvantage for women.

Figure 10. Full-Time Faculty, Women's Average Salary as a Percent of Men's, by Type of Institution, 1974-75 to 2010-11



Source: AAUP Faculty Compensation Survey