Faculty salaries are a prominent feature of the reward systems under which academic work is done. Not surprisingly, therefore, they are also becoming a rather prominent element in the recent attention paid to college and university productivity. Among those examining salaries in recent years have been legislators curious over how $100,000 a year professors spend their time, journalists worried about rises in tuition rates, attorneys investigating charges of discrimination in hiring and promotions, and faculty concerned about salary imbalances within and across academic departments. Also increasingly interested in salary structures have been central administrators aiming to manage rising costs. Because faculty salaries are usually the largest single item in academic budgets, they are unquestionably central to the productivity of the enterprise.

The growing internal and external attention to salaries has brought to light the need to develop both conceptualizations and policies in this arena. Too much of the recent attention to the topic has been based on anecdotal and incomplete information. This article, aimed toward providing a more expansive and more balanced perspective, focuses on research universities, the setting in which many of the current controversies over salaries have arisen.

The ultimate goal of the analysis is to help leaders craft salary policies that improve productivity in their institutions.

Historical Patterns in Faculty Salaries in Research Universities

For many years, salary issues were relatively invisible in research universities. Analysts rarely studied them, and faculty only rarely complained loudly or mobilized collectively around them (Hansen, 1988b). Even in the context of declines in the 1970s in real and comparative faculty pay (AAUP, 1996b), salaries tended not to be prominent. Faculty labor unions were formed on many other campuses in the 1960s, 1970s, and 1980s but were successfully organized at only a handful of research universities, and university faculties' attitudes toward unionization often depended...
more on working conditions and job security than on financial concerns (Becker, 1985).

Thus, prior to the 1990s, research universities reflected a distinctive normative legacy concerning faculty salaries. Simply put, that legacy suggested to all concerned that the main rewards of academic life lay beyond mere finances and that, relatedly, faculty salaries were not problematic enough to merit extended policy debate or aggressive mobilization. Citing national survey data, Burton Clark (1987, p. 222) translated this normative legacy into a syllogism which, he argued, represents "the sustaining myth" of academic careers in this country. Paraphrased, Clark's argument is that education is critical to the hopes of humanity and, therefore, the limited material rewards provided by a faculty career are overshadowed by the richness of [End Page 392] other kinds of rewards. Support for Clark's inferences comes from a finding that a majority of U.S. research-university faculty in the late 1980s labeled themselves "satisfied" or "very satisfied" with their salaries (U.S. Department of Education, 1990).

Whatever one's views regarding the historical authenticity of Clark's sustaining myth, there are signs that it could be losing some of its hold on faculty and others. While tenured faculty have certainly viewed security and autonomy as valued components of their jobs offsetting any deficits in their compensation (Tierney, 1997), their comfort with existing salary levels and salary policies may decline to the extent that their job security is threatened and their working environment becomes less attractive. For those faculty with nonacademic opportunities, significant improvement in salaries may be needed for retention. Yet dramatic salary gains may be unlikely. It can give faculty no comfort that their salaries are the largest single item on university budgets in a time of growing public scrutiny of those budgets. Policy makers have begun to question traditional assumptions about the performance and pay of faculty, and a variety of observers and analysts have begun to explore alternatives to the ways salaries are currently awarded (Moore & Amey, 1993). The legacy of secrecy, diffidence, and silence may be giving way.

Faculty Salaries in Research Universities: What Contemporary Data Show

The 1940 Statement of Principles of the American Association of University Professors [AAUP] noted that tenure is a means not only to academic freedom but also to "a sufficient degree of economic security to make the profession attractive to men and women of ability" (qtd. in AAUP, 1996a). In other words, academic careers on the traditional tenure track should provide sufficient financial rewards to maintain commitment and loyalty. Recent data on twelve characteristics of salary patterns in research universities show mixed success in meeting that goal in the 1990s.

Salaries Relative to Inflation. In the 1990s, the salaries of university faculty are no longer regularly losing ground relative to inflation, as indexed by the Consumer Price Index (CPI). Average salaries are currently at a level roughly equal to that of the early 1970s (AAUP, 1998). In 1997-1998, salary gains of 3.4% doubled the rate of inflation (AAUP, 1998). Recent concerns that the CPI overstates inflation have led some to suggest examining salary trends using a reduced inflation index. When examined using the CPI minus one point, faculty salaries may actually be as much as 15% above their levels in 1972-1973 (AAUP, 1996b). Although overall data of this kind do not illuminate salary variations among individuals, fields, and institutions, there is clearly no sign of a pervasive crisis developing in faculty salaries. [End Page 393]

Salaries Relative to Total Income. Faculty's base nine-month academic salaries are not their only sources of potential income. Bowen and Schuster (1986) suggest that faculty earnings fall into four categories: base contract pay for nine months, extra contract pay for 11 or 12 months, extra pay ad hoc for special services such as summer work, and outside earnings from consulting and other services. Among full-time university faculty who have at least some involvement with
undergraduate teaching, well under one-half report spending any time at all on consulting or free-lance work, and fewer than one-tenth spend more than four hours a week on such activities (Sax et al., 1996). Base salaries are, therefore, by far the dominant source of income for most faculty.

**Salaries Relative to Other Professional Fields.** In the last two decades, longstanding salary differences have grown between academics and those in the health professions, law, engineering, and nonacademic science (AAUP, 1998). This deficit in salaries led Linda Bell, lead analyst for the 1997 AAUP report on salaries, to comment that "the large bulk of us do not earn what some of the most poorly paid professionals [in other fields] earn" (qtd. in Magner, 1997, 8).

**Differences by Institutional Control.** Public and private universities differ in average faculty salaries. Some of these differences are due to distinctive patterns of program offerings, but two patterns are noteworthy. First, salaries are appreciably higher in each faculty rank in the private institutions. Notably, full professors in public doctoral institutions in 1997-1998 earned on average $75,154, while full professors in private doctoral institutions earned on average $95,023 (AAUP, 1998). Second, average faculty salaries have grown more rapidly recently in private institutions. Specifically, salaries grew 66% in the private doctoral sector between 1985-1986 and 1995-1996, while increasing only 52% in the public doctoral sector (AAUP, 1996b).

**Field Differences.** Two patterns stand out in recent data on field differences in salary. First, those differences are substantial. Full professors of engineering earned on average about $20,000 more than full professors in education at four-year institutions in 1994-1995 (College and University Personnel Association, 1995). Differences between law or medicine faculty and faculty in the liberal arts are even more striking (Hamermesh, 1988). Second, inequality in salaries among fields seems to have been growing for decades (Hamermesh, 1988). Over the period 1985-1986 to 1995-1996, the salaries of management faculty in public institutions showed a gain of over 2% a year beyond inflation, while salaries among faculty in foreign languages and literatures barely managed to keep pace with inflation (Tarrant, 1996).

**Gender Differences.** Women faculty in higher education earn appreciably less than men, regardless of age or the number of hours worked, and there is no indication of any substantive trend since the late 1970s in the relationship of female to male earnings (AAUP, 1996b). The proportions of women faculty have increased overall, and the new entrants have tended to be in the junior ranks, but women's lack of seniority does not seem to play a primary role in their continuing deficit in earnings. The deficit is primarily associated instead with the fact that women are disproportionately located in lower-paying fields without substantial demand outside universities (AAUP, 1997). The relatively few women faculty in business, computer science, and engineering departments tend to be paid far more generously than those in such fields as social work and languages. Nevertheless, within ranks in given fields, there is evidence of gender differences not explainable by other factors (Bellas, 1997).

**Racial/Ethnic Differences.** There is a striking lack of evidence concerning the relative earnings of different racial/ethnic groups in higher education. Federal and institutional commitments to increasing minority representation on faculties have undoubtedly raised the demand for minority scholars and perhaps put upward pressures on their salaries as well. On the other hand, the number of minority faculty members remains shockingly small (U.S. Department of Education, 1996), and recent evidence suggests that they may still be at some salary disadvantage: Minority faculty salaries in research universities in 1988 averaged over $1,000 less than the average for nonminorities (Fairweather, 1996, p. 229). Minority faculty may tend to be more junior overall than other faculty and may tend to cluster in lower-paying fields as well; those differences might
account for some of the salary deficit. For now, however, it is impossible to draw firm conclusions about relative salaries for similarly situated minorities and nonminorities.

Salary Compression. A significant challenge for academic reward systems is salary compression: the shrinking of inter-rank salary distances due to market conditions. A typical example of compression is the hiring of a junior professor at a salary equal to or above that of a veteran full professor in the same department. In the 1980s, salary compression became a significant problem in management, engineering, and some other fields with labor shortages (Tarrant, 1996). Overall, however, the ratio of assistant and associate professors' salaries to full professors' salaries in doctoral institutions remained remarkably steady over the years 1980-1981 to 1996-1997 (AAUP, 1997).

Intersections of Salary Structures with Seniority Distributions. Different fields, institutions, and systems face different seniority structures. In general, a more senior faculty implies higher average salaries and therefore more costs. Changing labor markets and other factors can confound forecasting based on seniority structures. Still, the nation's faculty work force will quite likely grow somewhat younger on average over the next two decades, and average salary outlays per faculty member after inflation are also likely to decline over that period. Faculty hired in the 1960s and 1970s will be retiring in increasing numbers in the coming decade (Hearn & Anderson, 1998). Their departure from the scene will bring changes in the nature of faculty salary distributions. The shape of age-salary profiles is an important factor in budgeting and planning. Just as the aging of the faculty workforce brought higher salaries and higher budgets in the 1980s, the reverse of that trend in the early years of the 21st century may bring some financial savings to institutions, not only through replacement hires at the junior level and the canceling of lines in certain units, but also because part-time, clinical, and non-tenure-track faculty will not receive full salaries and benefit packages.

Intersections of Salary Structures with Faculty Career Stages and Perceived Well-Being. A national survey of college faculty found that 75% of the faculty under 35 years old said that personal finances were "somewhat" or "extensively" stressful but that only 46% of those 55-64 and 36% of those over 65 agreed (Sax et al., 1996). Thus, older college faculty view themselves as reasonably secure financially, while younger faculty apparently perceive their financial status as tenuous. It is unclear whether marginally improved salaries alone would significantly ameliorate this perception. The stress may well stem more from the unknowns of the struggle for tenure and promotion than from the inadequacies of current salaries. Still, there is little question that financial matters, whether writ large (long-term financial prospects) or small (current salaries and assets), are quite salient in the personal lives of young faculty.

What Determines Salaries? Fairweather (1996) found in a 1988 national faculty sample that four nonbehavioral factors positively affected faculty salaries in research universities: rank, being in a private institution, being male, and being in a high-paying field. Fairweather also found several behavioral factors influential, including classroom hours, teaching only graduate students, and publications output. These findings generally match those of earlier studies in research universities (see, for example, Fox, 1985).

Of course, the academic labor market is highly differentiated, largely on the basis of academic disciplines. Fairweather (1996), for example, found that publications played a notably larger role in salaries in the health sciences and business fields than in the humanities. Earlier, Smart and McLaughlin (1978) concluded that fields varied so substantially in the factors critical to their individual faculty's salaries that attempts to identify singular "institutional reward structures" were seriously misguided.
What Do Salaries Determine? Salaries are a major budget item, so they certainly affect research institutions' financial health, but there is no evidence that salaries strongly affect the attitudes and performance of faculty at those institutions. Beyond a certain minimal standard, salaries as elements in the professional lives of faculty seem to be secondary to rank, tenure, recognition by peers, publications, and working conditions (McKeachie, 1979).

Yet salaries are not trivial to faculty. For one thing, they are tangible. Unlike tenure or promotions, salary changes are an annual event, and dealing with a paycheck is a monthly or biweekly event. More importantly, salary gains may be emphasized on a symbolic level by faculty as legitimation and recognition of their worth to their home institution (Tuckman, 1976). In that vein, relative salary and raises can affect a faculty member's attitudes and performance (McKeachie, 1979). The importance of relative pay is heightened by its endurance: Salary differences tend to persist because salary adjustments in the U.S. university tend to be small and incremental (Hansen, 1988a).

The evidence on the importance of salaries to faculty and to institutions clearly merits more consideration. The heart of the question, both conceptually and from a policy perspective, is the connection between salaries and productivity. Do salaries reflect performance? How? In the following section, these questions are explored in more detail.

Salary Structures and Faculty Performance: A Tenuous Relationship

In a number of ways, the salary structures of research universities confound the core tenets of both normative equity theory and neoclassical labor-market theory. I explore some of these contradictions in this section in the context of two theories, introduced with special attention to their connections to performance and productivity issues. 4

Equity theory is a value-based, prescriptive perspective. In its most familiar form, it is descended from the classic Aristotelian view that equity in organizations or social groups is achieved through proportionality, or at least ordinal consistency. This view translates, in part, into the tenet that organizations should pursue both "horizontal" and "vertical" equity in the ways they treat their employees. Horizontal equity is exhibited by rewarding those of equal worth to an organization equally. Vertical equity is exhibited by rewarding people of greater worth to an organization more generously than those of less worth to the organization. In both domains, organizational worth is the sole criterion for rewards. Factors irrelevant to organizational performance should be irrelevant to organizational rewards.

In contrast to equity theory, neoclassical labor-market theory is descriptive rather than prescriptive. In its usual form, it suggests that in competitive environments, salaries will be tightly connected to the marginal productivity of labor. That is, workers will be paid an amount approximating their contribution to the firm's output: The stronger the worker's performance, the more he or she is to be rewarded financially (Freeman, 1979; Beaumont, 1985). An underpaid worker will move to another competitive organization. Traditional versions of neoclassical labor-market theory would add that those performing a particular set of tasks within an organization (e.g., in a university, teaching, researching, and performing service) would face a rather homogenous external labor market determining the going price of their labor (i.e., salaries). Less traditional versions of the theory recognize more variation in external and internal labor markets.

Common to both equity theory and neoclassical labor-market theory is the notion that salary and performance in an organization should be tightly connected. No one would suggest that these
theories' ideal-type notions of the salary/performance relationship fully fit any one actual organization or any set of actual organizations, and few would agree with every one of the theories' implications for university policy. Still, the theories do have philosophical appeal and do seem to be violated by higher education's salary structures. Exploring those violations may contribute to productive dialogue and policy development. Seven areas of disjunction in salaries and performance may deserve particular attention.

Organizational Ambiguities in the Enterprise. Academic organizations--especially research universities--differ from the profit-seeking firms depicted in classical labor-market theories in a number of ways. For one, organizational goals tend to be contested, multiple, and ambiguous. Units in the organization may dissent on what the institution is "all about," and these disagreements are resolved through the acceptance of diverse, often vaguely phrased goals. The differences surrounding goals can also extend to the individual level. To a greater extent than classical theories would predict, faculty may be motivated by nonpecuniary factors only loosely connected to the interests of their home institutions. Relatedly, the technology for achieving goals tends to be unclear in universities. Modes of instruction are extremely varied; and admissions standards, grading standards, curricular design, graduation requirements, and the like are hotly debated. Finally, decision-making authority tends to be diffuse. Notably, who is really in charge of a given domain on campus is not always predictable from an organizational chart, and seemingly parallel or linked units and individuals may in fact rarely be in contact. These notions are central to organization theorists' focus on "loose coupling" and "anarchic" qualities in higher education (Birnbaum, 1988). In such a setting, those theorists assert, there are multiple individual and organizational definitions of "success," as well as multiple perceptions of how success might be measured. Obviously, these ambiguities will affect locally operational definitions of marginal productivity.

Of particular importance is the existence of multiple products of faculty labor. Beaumont (1985) and others have questioned the relevance of labor-market theories to higher education on the grounds that, in a multiproduct service arena like higher education, labor input and output cannot be precisely quantified. Without such quantification, markets cannot rely on clear-cut assessments of productivity and therefore cannot sort the supply and demand of labor efficiently.

For our purposes, these conclusions by economists and organizational analysts boil down to a convincing litany of doubts about the likelihood of ever determining appropriate levels of compensation in higher education, either from the perspective of equity theory (in determining what is fair, how does one weigh contributions to different kinds of goals?) or from the perspective of labor-market theory (what is marginal productivity in a context of shifting, debatable institutional priorities?).

Within-Unit Salary Dislocations Based on Time of Hire. In some university units, faculty hired more recently receive salaries starkly different from comparable faculty hired in earlier years because of the rising or falling demand for their services in other institutions or organizations. The phenomenon of widely differing salaries for faculty of similar productivity within academic units clearly involves a violation of horizontal equity, i.e., the notion that those doing similar things similarly well should be paid similarly. In general, when rank and other confounding factors are controlled, recent hires are paid more (Webster, 1995), but the opposite pattern has arisen recently in medical schools (Mangan, 1996). While this pattern is no doubt partially caused by real merit differences, the pattern surely also reflects conditions unrelated to performance.

Across-Unit Salary Dislocations Based in Differences in Fields' Internal and External Markets. Like the preceding phenomenon, the phenomenon of widely differing salaries for faculty of similar rank and productivity across academic units involves a violation of horizontal equity. Here,
however, the tenet being violated is that those doing similar things similarly well in various parts of the campus should be paid similarly. External markets, and some internal dynamics, have produced salary profiles varying notably by academic units. Differential performance does not seem to explain these variations. Faculty in some areas are simply paid more than similarly performing faculty elsewhere on campus. If one adopts the restrictions of traditional neoclassical theory, defining productivity uniformly across units, the higher salaries of some professors relative to other professionally comparable professors makes no sense. Clearly, there is no single internal or external marketplace for university professors. Instead, fields differ not only in the ways they evaluate productivity but also in the external labor markets they face.

Distinctively Different Salaries for Women. The fact that men and women of comparable abilities, performance, and other characteristics are sometimes rewarded differentially is an archetypal example of horizontal inequity. In an official policy statement based on a research review, the American Association of University Professors (1992) combines equity theory and labor-market theory to suggest that some differences in salaries between men and women are legitimate but that others may very well not be. The association argues further that, within departments, the assignment of tasks tends to be gender-based and tends to disadvantage women in salary contests. Such subtleties often are ignored in analyses of gender inequities. If gender is irrelevant to faculty members' productive capacity, then our focal theories would suggest it should also be irrelevant in the determination of their salaries. Such seems not to be the case.

Moderately Flat Salary Structures Across Fields. Although there are, as noted above, clear differences in salary levels across fields, these differences are not so great as those in the nonacademic world, according to a number of economists (e.g., see Freeman, 1979). If academic salaries fully reflected external markets, the range would be far greater than it really is. In actuality, the potential salary differences are apparently muted by academic's internal values and norms (Freeman, 1979; Bowen & Schuster, 1986). This middling level of by-field variation constitutes a violation of not only the strict labor-market theory assumption that faculty operate in one labor market with consistent definitions of productivity and value but also the more relaxed assumption of other versions of the theory that, if differential salaries by field exist, differences in salaries will fully reflect differential market valuations by field. In other words, the existence of a moderate level of salary dispersion across fields may be what is least expected by labor-market theory, but that is precisely what we find in higher education. As usual, realities are somewhat more complex than ideal-type theories suggest.

Uniform Salary Increments. In many institutions and academic units, salary increments are awarded "across-the-board," i.e., all faculty receive essentially the same percentage raises (Hansen, 1988a). Bowen and Schuster (1986) defend the use of the across-the-board approach on the basis of its low costs (largely avoiding individualized assessments) and its benefits in preserving collegiality and the special nature of higher education. Whether one likes across-the-board raises or not, they clearly involve some significant deviations from equity and labor-market theories. From those perspectives, choosing to adopt the across-the-board approach means choosing to ignore individual and unit differences in performance and thus differences in worth to the institution. Inequities and inefficiencies emerge; and simply put, the connection between salary and productivity is compromised (Becker & Lewis, 1979).

The "Annuity Feature" of Salaries. Regardless of whether a salary system awards raises across-the-board or is more merit-centered, annual salary adjustments in universities are usually awarded on the basis of percentages rather than raw dollar amounts, awards are usually made independently of the base dollar salary, and large individual salary changes from year to year are discouraged (Hansen, 1988a). Effectively, these norms have meant limiting salary raises for most faculty to a small percentage range (usually 2 to 6%). These policies tend to prevent higher-performing,
lower-paid faculty from gaining much on lower-performing, higher-paid faculty.

For example, there is rarely any formal consideration of the fact that a 3% raise for a faculty member earning $75,000 is $2,250, while for a faculty member earning $30,000 the same raise is only $900. Even under a strongly merit-centered system, a 3% merit raise for the higher-earning faculty member of the example would provide a greater raise in dollar terms than a 7% merit raise for the lower-earning faculty member. Ultimately, the nation's progressive income-tax system will even this score somewhat in take-home pay, but the fact remains that the poorly performing but higher-paid faculty member would lose little if any economic ground to the high-performing but poorly paid faculty member. Under the normal ranges of faculty salary increments, it would take many years for the latter to catch up with the former, if indeed she ever did.

This phenomenon is an aspect of what is sometimes called the "annuity feature" of faculty salaries: Early salary advantages tend to dissipate very slowly if at all, even in the face of superior performance by others. Under the annuity feature, initial salaries are crucial for future salaries, so dramatic salary advancement for faculty at any rank often depends upon a willingness to leave after obtaining a high initial salary offer elsewhere or at least upon the willingness of an employing institution to match a higher salary offer obtained elsewhere. The great majority of faculty have no outside offers; so for them, initial salaries continue to exert their ancestral holds on later salaries throughout the course of employment at an institution.

If initial salary differences are based in inequities (e.g., gender-based discrimination in salaries), the implications of the annuity feature are even more troubling. Lower initial salaries propel lower savings as well as lower contributions to pension funds. Year after year, the funds lost through unjustified salary deficits could have been compounding in a disadvantaged employee's investment account. Unjustly absent institutional matching funds for pensions could have been compounding as well. Therefore, simply equalizing annual pay for a disadvantaged group at some career midpoint falls far short of truly evening the score. What is more, if unfairly low salaries are allowed to persist unameliorated throughout a working career, their effects do not end with the end of employment: they also can eventually lead to lower retirement benefits.

The annuity feature of academic pay contradicts the theoretical notions that salary changes should be tied closely to merit in both percentage and dollar terms and that existing salaries should reflect current rather than past worth to the organization. Academic compensation systems that add merit pay to base salaries in small percentage increments allow inequities to persist and sometimes grow. Faculty who have long ceased being top performers tend to have few outside offers, so they remain on campus where they continue to reap the financial advantages of their earlier successes. In contrast, unless special institutional funds are available for making strong counter-offers to faculty being wooed to go elsewhere, high performers who arrived early in their careers may be recruited away by those who can pay salaries better approximating their current worth on the marketplace. Institutional effectiveness and efficiency thereby suffer.

Unfortunately, these fundamental problems are not easily solved. Alternatives to the annuity feature tend to be unattractive and tend themselves to be inconsistent with equity and labor-market theories. For example, awarding lower merit raises (in dollar or percentage terms) to those with higher salaries in a unit, simply on the a priori basis of their initial salaries, seems contrary to the spirit of matching salary and current performance. Given the legal and cultural constraints on university salary policies, fully satisfying solutions to the problems generated by the annuity feature may not exist.

**Improving Salary Structures in Research Universities**
Salary structures in research universities frustrate simple explanations and simple solutions. Those interested in more closely linking salaries and performance face daunting challenges. Institutions must develop both overarching principles on which their salary structures may be evaluated and specific salary policies based in those principles.

**Evaluating Faculty Salary Structures**

Institutions need to consider broad criteria on which any salary system, whether current or planned, should be judged. Eight such criteria may be suggested here. First, is the system efficient? That is, does it devote an appropriate level of time and other resources to training, communication, and oversight? Second, are the procedures for salary determination equitable? Do affected parties have a role in the process, for example? Third, are the outcomes equitable for those in different fields, for those suffering from the effects of salary compression, for women, and for racial/ethnic minorities? Fourth, is the system well understood on campus and, as necessary, beyond the campus? Fifth, does the system allow adequate flexibility for responding to crises and special cases? Sixth, does the system fit with the strategic initiatives, management approach, and organizational culture of the campus? Seventh, does the system make sense from an internal political perspective? That is, does it balance the interests of various parties on campus and reflect current political realities there? Eighth, is the system assessed and evaluated regularly?

Of course, these eight criteria must necessarily be weighted and adapted in particular ways at any given institution. Doing so is not always easy. Judging how well a salary structure deals with questions of salary equity for women faculty can be especially complex and may expose conflicts among the criteria. For example, the route to equitable salaries for women may not be entirely compatible with participatory decision making in certain units, if gender equity is not valued in those units. Relatedly, the costs of achieving salary equity may be greater than some are willing to accept from an efficiency perspective. One of the most difficult salary-related challenges for leaders in academic settings is operationally defining outcome equity, procedural equity, and efficiency and then determining appropriate tradeoffs among these three desired outcomes. In the end, the question of judging salary systems becomes thickly intertwined with institutional culture and individual values.

**Policy Choices**

Specific policy recommendations are rarely appropriate for every institution and, not surprisingly, there are no discernible "silver bullets" for those interested in salary policy. Effective policy development can take place only after detailed review of relevant data and literature, and only after tailoring the results of that review to particular campus circumstances. Still, it may be useful to highlight a few of the more prominent policy choices facing contemporary leaders.

**Choice 1: Deemphasizing the External Marketplace.** A fundamental aspect of salary policy is the choice of an underlying strategic stance regarding the role of the external marketplace in faculty salary structures. A number of the issues we have discussed in this essay (including salary compression within fields, salary dispersion across fields, gender differences in salaries, and the willingness to make sizable retention counter-offers to current faculty being recruited by other institutions) involve dislocations driven by external markets. Some institutions may choose to deemphasize the influences of the external marketplace. The argument for deemphasizing the
market holds that institutions cannot and should not respond aggressively to changes in the marketplace, maintaining instead a more locally determined and presumably more egalitarian approach to salaries. Other institutions may be willing to allow external markets to more directly shape their salary structures. With that choice comes a willingness to accept sizable differences in salaries for individuals in different academic fields (and, in concert, the probability of substantial gender differences in salaries on campus).

Choice 2: Adopting the "Core-Salary" Approach. In response to growing financial pressures, some institutional leaders have proposed a radically new approach: breaking up the traditional base salary into a stable "core" component and a second component that is "flexible" or "at risk" (see Mangan, 1996). That is, a professor's current and future salaries are unbundled into a foundational component guaranteed year to year and a supplemental component based in research or clinical revenues generated in the current year. Institutions have historically not been allowed to reduce the salaries of individual tenured faculty members without the due process guaranteed by tenure. Operationally, this has meant that even clearly justified efforts at salary reductions have required lengthy hearings and appeals and have often been abandoned. The core-salary approach, if upheld by the courts, would mark the end of this traditional form of financial security for faculty. Individual salaries could be reduced far more easily, facilitating institutional flexibility but perhaps also threatening professors' sense of community and well-being. [End Page 404]

Choice 3: Tying Annual Salary Changes More Directly to Annual Performance. In classic economic theory, efficient salary systems allow downward as well as upward movement in individual salaries, in proportionate response to variations in employee performance (i.e., worth to the organization). As noted above, however, universities rarely pursue salary reductions, even when the marketplace suggests them. Beyond the legal challenges lie potentially unpalatable results: Any system tightly aligning pay with performance can create wide salary advantages for those performing well. Such differentiation goes against traditional preferences for rather flat salary profiles. In short, efficiency in salary systems can mean dispersion in salary levels, and institutions have to decide whether, for them, that dispersion means unacceptable discomfort.

Choice 4: Standardizing Salaries in Association with Career Ladders. Most faculty work under the contract salary system, in which each faculty member negotiates a salary individually with a representative of the employing institution, usually the head of the home academic unit. A contrasting system is used in the military, government, K-12 education, and a few state systems of higher education: the standardized salary schedule (Beaumont, 1985). Such systems, when used in higher education, offer a single, officially specified salary for each academic rank and, usually, a standard time-in-step salary increase. This approach imposes highly elaborated procedures and a regulated chain of command on salary determinations. The appearance of rigor may help protect such systems against internal disputes and legal challenges. Also, because standardized systems employ straightforward formulaic procedures for salary adjustments, they are often viewed as relatively inexpensive. Such systems can decouple salaries and performance, however, and thus are arguably inefficient as strategic human-resource management tools (Becker & Lewis, 1979).

Choice 5: Decoupling Merit Evaluation for Salary Increases and Faculty-Development Efforts. Administrators often seek to reward productive faculty with merit-based salary raises and to improve faculty productivity through individually tailored development efforts. Both of these activities can involve peer observation, self-reporting, and the compilation of documentary evidence on faculty performance. Unfortunately, faculty's incentive to do well in salary evaluations can come into conflict with their incentive to improve their teaching, research, or service. That is, while the most desirable attitude toward faculty-development efforts is a willingness to expose one's own weaknesses for evaluation by others in the interest of improvement, the understandable attitude toward salary determinations is to present oneself in the
best possible light in the interest of higher pay. In terms of evaluation research, one process (salary determination) is summative, while the other (faculty development) is formative. When units confound the two processes, the potential for true faculty improvement may suffer. Decoupling the two processes makes sense but seems easier said than done.

Choice 6: Pursuing Internal Consistency in the Determination of Salaries. Many analysts (e.g., Clark, 1987) have observed that flexibility and decentralization contribute to institutional effectiveness. Nevertheless, salary determination may well be an issue requiring aggressive central attention. When there is substantial across-unit and across-time variation in criteria and processes for salary advancement, women, minorities, and others may be disadvantaged (Lee, 1989). Importantly, administrators should allow enough variation in departments' specific criteria for raises to ensure that distinctive, strategically defensible departmental goals need not be abandoned in order to follow centralized institutional guidelines.

Choice 7: Welcoming Faculty Participation in Determination of Merit-Based Salary Increases. There are benefits to a relatively democratic approach to awarding merit salary increases. When unit faculty are represented in the determination of salary changes, decisions can be consensually legitimated, decision quality may be improved, and administrators may be better protected from charges of favoritism. An elected departmental salary-advisory committee, for example, might buffer a merit-based system from charges of discrimination and lessen legal vulnerability. On the other hand, elected committees may not always reflect the core values of central or unit administrators. They may produce decisions which are more politically driven or more protective of certain interests or people than would be organizationally desirable from a purely strategic or purely economic perspective. What is more, privacy concerns can arise in some circumstances. In the end, the use of faculty participation in salary determination seems an approach best used contingently and cautiously.

Choice 8: Facilitating Public Scrutiny of Salaries. The public visibility and accessibility of salary information varies appreciably by unit and by institution. Often, leaders are concerned that information about relative salary levels can lead to dissatisfaction (see AAUP, 1992). It is somewhat uncomfortable to argue, however, in a setting driven by democratic and scientific ideals, that professionals benefit from being deprived of information, especially information about something so fundamental. Institutions may at least wish to consider making salary data more available to interested internal and external observers.

Choice 9: Elevating Teaching and Public Service as Criteria for Salary Adjustments. Recent years have brought some reconsideration of the primacy of research in university life (Rice, 1996). Beyond the philosophical rationale for such a move lies some pragmatic reasoning. Societal and political pressures on higher education are trending toward more attention to teaching and service (Rice, 1996). Also, retention-minded administrators may have some practical interest in elevating teaching, which allows faculty less bargaining power in external academic labor markets. Nevertheless, it is unclear how well internal and external authorities will be able to succeed in elevating teaching and service through salary reforms. The research-oriented organizational culture may be highly resistant to change.

Conclusions

Salaries are only one piece in a mosaic of elements comprising the environment for faculty productivity. More fundamental than the adoption of any of the specific policies and evaluation
criteria introduced above is the thoughtful consideration of broader institutional values and strategy. What are the most important equity, effectiveness, and efficiency issues on this campus? What kinds of financial and nonfinancial solutions are most acceptable? What should be the driving principles behind an institution's faculty reward systems, as they relate not only to salary but also to tenure, promotion, and other rewards? How should the institution's mission and core culture shape reward systems?

Only in this wider context is the recent increase in public, legislative, and administrative attention to salaries justifiable, and only in this context can effective salary policy be developed. Alone, salaries are neither the most important motivators for faculty in research universities nor the most uplifting of topics for those who view academe through a transformative lens. A single-minded focus on reforming salary policy alone, without consideration of its place in larger institutional concerns, makes little sense.

Yet a single-minded focus on reforming faculty reward systems without close attention to salaries makes equally poor sense. To ignore salaries is to ignore not only a critical factor in institutional budgets and a central element in public critiques of higher education but also a noteworthy element in professors' feelings of satisfaction and productivity. Indeed, from an administrative perspective, salaries have the advantage of relative concreteness compared to the other factors in the motivational context surrounding professors. An academic leader may find it virtually impossible to learn about, much less influence, the scholarly work schedule or interests of a tenured professor, but he or she can change, with relative ease, the ways in which that professor is financially rewarded. Here, at least marginal administrative influence on senior faculty performance seems possible. Salaries may be secondary to other factors in the reward context affecting senior professors, but they tend to be notably more measurable and manipulable than those other factors. [End Page 407]

The problems in faculty salaries are significant. The opportunities for developing more effective salary policies are real. Salaries' potential as a lever for changing faculty behavior is perhaps more significant than many observers realize. Institutions' futures are highly dependent on their salary structures. In those four simple observations lies ample reason for academic leaders to focus energetically on the topic.

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**Notes**

1. Because of space limitations, the paper does not consider at any length elements of faculty compensation beyond the standard academic contract, questions relating to faculty unions and collective bargaining, or the salaries of part-time faculty, graduate-student instructors, clinical faculty, and adjunct faculty.

2. The absence of change in overall female/male earnings ratios does not necessarily imply that there have been no improvements in the equity of hiring or remuneration processes in individual
cases.

3. Some tentative evidence is available. In a multivariate study using national data, Fairweather (1996) found that minority status was unrelated to salaries in research and doctoral institutions.

4. Obviously, only caricatures of those theories can be presented here. I encourage readers to follow the citations to analysts who have studied the issues in more depth.

5. See Becker and Lewis (1979) and Moore and Amey (1993) for useful examinations of some of these issues.

6. Noting these difficulties, the Commission on Women of the American Council on Education suggests that the criteria for salary decisions, the process for making decisions, and actual salaries should be matters of public record, that all new employees should be informed about how salaries are determined, that institutions should conduct and act aggressively upon salary-equity reviews, and that campuses should establish mechanisms to ensure that the principle of equal pay is incorporated in each round of salary decisions (Moses, 1996).

7. The difficulty of determining amounts for gender equity salary increments is a prominent example.

8. Others have also explored these choices productively. For especially useful discussions, see Becker and Lewis (1979); Fox (1985); Bowen and Schuster (1986); Hansen (1988a, 1988b); and Moore and Amey (1993).

References


