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Running Head: SALARY COMPRESSION REVIEW AND CASE STUDY

Salary Compression Among University Faculty: A Review and Case Study of Remediation and Prevention in a Collective Bargaining Environment

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Abstract

Salary compression has been an issue in higher education for almost four decades, during which a diverse literature on the topic has accumulated. Perhaps because of the absence of a compilation and review of this literature, administrations and collective bargaining agents commonly develop their own methods for identifying and rectifying salary compression on each campus. Most responses are short-term and do not prevent the problem from recurring. We review the literature concerning salary compression in higher education, then summarize our approach to correcting salary structure and preventing future compression.

Literature Review

The Problem

Becker's (1975) theory of specific human capital suggests that experience provides workers with knowledge and skills that are valuable to employers, and so workers with greater seniority are worth more. Furthermore, current effort and performance may be encouraged by the promise of higher wages in the future Lazear (1981). There are a variety of economic models that draw similar conclusions, such that it is widely accepted that wages should rise with seniority (Topel, 1991). Some have suggested that this is not true for university faculty because faculty are attracted by non-monetary forms of compensation, leading to meager pay increases with seniority and resistance to pay differentials based on productivity or discipline (Bowen and Schuster, 1986; p 248-9; Hearn, 1999; Clark, 1987).

However, a considerable positive correlation between seniority and pay among university faculty in most fields is generally well established (Barbezat, 2003). Work from the, 1970's found professional experience to be the most powerful factor in predicting salaries (Braskamp et al., 1978; Hamovitch and Morgenstern, 1975). Across the 1980s, pay for Professors was about two-thirds higher than that of Assistant Professors (Bowen and Schuster, 1986; Scott and Bereman, 1992) and salary ratios across the ranks remained steady through the mid-1990s (Hearn, 1999). Given the average years on the job between these ranks, such pay increases as a result of seniority in academia are probably similar to those of United States workers in general, where ten years of seniority is worth about 25 percent in additional pay (Topel, 1991).

Variation in faculty salaries may also result from disciplinary differences, and these began to grow in the 1980s as a result of an imbalance of supply and demand for faculty in certain fields. As salaries rose in high demand areas, budgets were balanced by reducing salaries for low demand areas. Thus, while the differences between average salaries at junior and senior ranks were constant from 1971 to 1987, the coefficient of variation increased (Hammermesh, 1988). High paid fields became higher and low paid fields became lower. Scott and Bereman (1992) found a similar pattern at land grant institutions; much larger salary increases in business, computer science, and engineering than in education, fine arts, foreign languages and letters. This pattern continued into the 1990s, with business, law, medicine, and engineering faculty rising faster than those in education, liberal arts, languages and literatures (Hearn, 1999). The

factors that influenced average faculty salaries across disciplines also affected salaries within disciplines.

Competition for faculty in certain fields can result in relatively high salaries for new hires. Funding for new faculty salaries may be obtained by restraining inflationary and promotion increases for current faculty. This reduces the effect of seniority on salary, resulting in a situation termed "salary compression" (e.g., Kassem, 1971). In extreme cases, the salaries of those with less seniority is greater than those with more, resulting in a pattern that has been termed "salary inversion" (Jennings and McLaughlin, 1997). We will refer to both patterns generically as "salary compression." The first peer-reviewed journal article to examine this pattern in academia was Gomez-Mejia and Balkin in 1987, although it was apparently already widely recognized and discussed. They state that "One can scarcely attend a professional meeting where this topic does not come up." Blum (1989) suggested that salary compression became an issue in academia only in the 1980s. Many institutions have worked to identify and rectify salary compression and this has produced an extensive literature on the topic. Regardless, it continues to be an issue (McDonald and Sorenson, 2017; Rees, 2017).

Does salary compression exist in academia? The answer is dependent on many factors and various studies have produced sometimes conflicting results. Some researchers have found an absence of salary compression (Barbezat and Donihue, 1998; Barbezat, 2004a, 2004b; Toutkoushian, 1998; Seaman, 2005, 2007a; Yeh and Wang, 2012). There may be significant variation across disciplines and time (Bereman and Lengnick-Hall, 1994; McDonald and Sorenson, 2017; Seaman, 2007b). Compression seems to be most prominent in a few rapidly growing fields, especially business (Gomez-Mejia and Balkin, 1987; Hammermesh, 1988; Scott and Bereman, 1992; Snyder et al., 1992; Bereman and Lengnick-Hall, 1994; Webster, 1995; Barbezat, 2004a; Brown and Woodbury, 1998; Toutkoushian, 1998; Bai et al., 2011; Murawaski and King, 2011; Arnold et al., 2012; McDonald and Sorenson, 2017). Bratsberg et al. (2003) found strong salary compression among economics faculty after accounting for research, service and the fit of faculty to the university. Barbezat (2003) provides an excellent review of various factors that may be confounded with seniority, creating the appearance of salary compression or inversion where none exists.

Methods for Detecting Salary Compression

Salary equity studies became widespread as a result of The Equal Employment Opportunity Act and the Equal Pay Act, both in 1972 (Barbezat, 2002). Seniority was often used as a factor in these salary models, leading to the detection of salary compression and inversion (Gordon et al., 1974; Hoffman, 1976; McCulley and Downey, 1993; Barbezat, 2004a). Barbezat (2003) provides an excellent review of efforts to detect salary compression through about 2001. There have been two primary approaches to identifying salary compression: comparison of ratios of salaries at various ranks and multiple regression (Seaman, 2005). A few other techniques for identifying salary compression have seen limited use. These include stochastic dominance (Arnold et al., 2012; McDonald and Sorenson, 2017), multiple objective programming (Sun, 2002) and calculation of a coefficient of inversion (Jennings and McLaughlin, 1997).

Earlier studies of academic salary compression tended to rely on salary ratios (Gomez-Mejia and Balkin, 1987; Barbezat, 2004a). National level data sets often lacked the detail necessary for regression analysis, and so were commonly analyzed by determining the ratios of salaries at various ranks or relative to some other benchmark (e.g., Pfeffer and Langton, 1988; Bereman and Lengnick, 1994; Midha et al., 2004; Seaman, 2005). Comparisons can be made both within and between institutions (Dworkin, 1990; Snyder et al., 1992). The problem with ratio data is that there is often no reference for how much difference between average salaries is appropriate. If a time series of data is available, narrowing of the gaps between average wages at various ranks can indicate salary compression (e.g., Hammermesh, 1988; Scott and Bereman, 1992; Seaman, 2007b; Arnold et al., 2012; June, 2014; McDonald and Sorenson, 2017). Another problem with this approach is that it ignores many confounding variables. These problems led to more widespread use of regression analysis.

Regression analysis allows removal of salary variation due to a number of factors (e.g., highest degree, previous experience, administrative assignments, unionization, mobility, tenure, productivity) in order to better isolate effects of seniority on salary. One of the earliest and best studies to identify salary compression used regression on national level data (Ransom, 1993). However, many national level data sets lacked detail, and so regression analyses were commonly based on data from one or a few institutions (e.g., McCulley and Downey, 1993; Hallock, 1995; Brown and Woodbury, 1998; Moore et al., 1998). More detailed national data sets that became available in the late 1980s made regression analysis more feasible (e.g., Barbezat and Donihue, 1998). A significant methodological improvement in the analysis of salary compression was presented by Toutkoushian (1998) who developed a five step process for identifying salary compression, as well as the extent to which each faculty member's salary differed from the expected salary in the absence of compression. Some regression analyses have found evidence of salary compression after controlling for confounding factors (Twigg et al., 2002; Bratsberg et al., 2003; Yeh and Wang, 2012; Allen et al., 2015), while others have not (Toutkoushian, 1998; Barbezat, 2004b; Monks and Robinson, 2001; Seaman, 2007a). Sometimes, compression is found for certain disciplines, tenure statuses, or stage of career, but not others (Barbezat and Donihue, 1998; Barbezat, 2004a). Only a few studies have considered the effects of gender on salary compression (Hoffman, 1976; Brown and Woodbury, 1998; Burke et al., 2005).

Causes of Salary Compression

Early examination of salary compression in nonacademic fields blamed the phenomenon on inflation, which drove up the salaries necessary to hire new employees. Lack of funds prevented comparable salary increases, plus increases for seniority, for ongoing employees (Kassem, 1971). Although faculty salaries are clearly affected by inflation (Scott and Bereman, 1992), salary compression in academia is generally thought to be a result of low supply and high demand for faculty in certain disciplines, and the lack of funds to raise senior faculty salaries in a commensurate manner (McCulley and Downey, 1993; Burgan, 2005; Burke et al., 2005; Seaman, 2007a).

In contrast, some authors have suggested that salary compression is normal and may not be a problem (e.g., Bereman and Lengnick-Hall, 1994). Economists separate human capital (what

makes an employee valuable) that is accumulated with experience into general (not specific to an employer) and specific (valuable only to the current employer) (Becker, 1975). Faculty skills tend to be of the former type, allowing faculty to easily move between universities. If faculty can obtain higher salaries by moving to a different university, then it is likely that the best faculty will move, while low performers will stay (Gomez-Mejia and Balkin, 1987). As a result, low performers with low pay will have high seniority and higher performers with high pay will have low seniority, especially in disciplines with a shortage of faculty (Ransom, 1993; Brown and Woodbury, 1998; Monks and Robinson, 2001).

It is thought that university faculty are in a unique situation with regard to economic factors affecting salaries. Tenure and the distance between academic institutions make it especially costly for faculty to change employers. Thus, administrations have less need to increase pay with seniority in order to retain faculty. This has been termed “monopsony power” (Ransom, 1993; Barbezat and Donihue, 1998; Brown and Woodbury, 1998; Siow, 1998). Hallock (1995) argued against monopsony effects on faculty salaries. He suggested that his findings may have reflected collective bargaining and the urban environment that made it relatively easy to change universities. Faculty who stay at relatively low pay may have little incentive to maintain high productivity, thus creating justification for the low pay (Moore et al., 1998; Barbezat, 2003). However, Ransom (1993) found that productivity did not decrease with seniority.

Salary compression may be greater at research universities (Ransom, 1993; Brown and Woodbury, 1998; Glandon and Glandon, 2001; Allen et al., 2015), although another study found more compression in mid-sized universities (Hoffman, 1997). Unionization may decrease compression (Barbezat, 1989; Hallock, 1995; Hoffman, 1997), although another study found no effect of union representation (Martinello, 2009). It is even possible that higher ranked faculty tend to have higher salaries with collective bargaining than without, because collective bargaining agreements are almost invariably negotiated by senior faculty.

Effects of Salary Compression

Salary compression is not necessarily a problem (Snyder et al., 1992). But in general, there is concern about salary compression because of its potential for negative effects on individual, and hence institutional, effectiveness. Almost all authors have cited low morale, and consequently poor performance, as results of salary compression (Kassem, 1971; Gomez-Mejia and Balkin, 1987; Blum, 1989; Scott and Bereman, 1992; Snyder et al., 1992; Jennings and McLaughlin, 1997; Seaman, 2007a). Glassman and Mcafee (2005) argue that such salary inequities are unethical, with resulting negative effects on university culture. Alternatively, some have argued that flat salary structures promote collegiality, cooperation, and commitment (Lazear, 1981). There is an extensive literature regarding these contrasting perspectives in the context of corporations (Gomez-Mejia et al., 2014), but they have rarely been examined empirically in academia. However, Pfeffer and Langton (1988) found that compressed salaries in academic departments were associated with more social and democratic interactions. The same authors in a later study (1993) found that salary dispersion was negatively correlated with productivity, satisfaction, and collaboration among faculty.

When salaries of new hires are higher than those of more senior employees, there is incentive for employees to move to a new employer (Amey and VanDerLinden, 2002; Seaman, 2007a). The cost of remaining with an employer has been termed a "loyalty tax" (Blum, 1989; Barbezat, 2004a). Resulting turnover is detrimental due to loss of human capital, hiring costs, and training costs for new employees. It is interesting that this hypothesis has received little empirical attention. One study concluded that salary compression has decreased faculty retention in pharmacy (Murawski and King, 2011). Another found no correlation in business schools (Glandon and Glandon, 2001) and a third found that greater pay dispersion among college administrators led to higher turnover of lower paid individuals (Pfeffer and Davis-Blake, 1992).

Employees who are dissatisfied with salary structures may find an alternative remedy in the courts. More senior employees are generally of greater chronological age, providing an opportunity to challenge salary inversion on the basis of age discrimination. These have not been successful (Mooney, 1991; O'Boyle, 2001; Euben, 2003).

Responding to Salary Compression

Once a university has determined that salary compression exists, it must decide what to do about it. Some argue that salary compression is not a problem and may simply reflect the value of faculty at various levels of seniority with regard to productivity (Moore et al., 1998; Barbezat, 2004a) or market forces (Euben, 2003), or that flat salary structures promote cooperation and productivity (Bowen and Shuster, 1986; Pfeffer and Langton, 1988, 1993; Lazear, 1981). Still, there is widespread agreement that salaries should rise with seniority (Becker, 1975; Topel, 1991), so it is common for institutions to attempt to restore this correlation. The problem has been recognized in academia for decades, and it does not seem to be going away (Boggs, 2015; Flaherty, 2016; McDonald and Sorenson, 2017; Rees, 2017). As stated in the seminal work by Gomez-Mejia and Balkin (1987) "Identifying pay compression, its causes, and its effects is a far simpler task than devising ways in which universities, or other employers, can deal with the problems that such a condition creates." Consequently, the literature on the latter is far less extensive than the former.

A number of strategies have been suggested to prevent salary compression from occurring. Lillydahl and Singell (1992) note that, while salaries are often positively correlated with research productivity, teaching quality is not similarly rewarded. They suggest that if it were, late-career faculty who concentrate more on teaching than research might not have compressed salaries. Although we have not found this suggestion in the literature, it is possible that greater value might be placed on service. It is possible that senior faculty are more valuable, not because they produce more scholarship, but for the same reason that administrators are more valuable; they have knowledge and experience that allows them to wisely contribute to shared governance of the university. If this were recognized in performance evaluations, then merit raises might alleviate salary compression. It may be possible to balance lower salaries of senior faculty with non-monetary compensation. These might include first pick of paid tasks such as consulting or additional teaching assignments, better offices, and more convenient schedules (Gomez-Mejia and Balkin, 1987; Glassman and Mcafee, 2005). Snyder et al. (1992) surveyed provosts who

suggested increasing raises associated with promotions, setting salary minimums, and promoting more rapidly.

Universities also commonly attempt to correct for salary compression by identifying individual faculty with unjustifiably low salaries, followed by calculation of the salary increase required to rectify the problem. There are difficulties with this post-hoc approach. One must find the necessary money, and lack of funds was probably the primary cause of the problem in the first place. Further, it is a temporary solution that must be repeated frequently if future salary compression is to be prevented.

Most often, factors such as merit rank, time in rank, longevity at the institution and market conditions for each discipline are used to build a multiple regression model to predict salaries, and negative residuals are indicators of the degree to which individual salaries should be raised (Huseman et al., 1996). At Indiana State University, residuals from a multiple regression analysis were used to flag low paid faculty, who then argued their case for raises to departmental personnel committees (Lamb and Moates, 1999). Duncan et al. (2004) avoided penalizing high-performing faculty for having high salaries by removing the effects of earlier merit raises before addressing equity. Similarly, Herzog (2008) developed a four-step process to address discrimination prior to equity and merit. Jennings and McLaughlin (1997) found that, out of five models for calculating salary compression corrections, none decreased compression best for all departments, or for various funding levels within departments.

Methods other than regression are also used to calculate salary adjustments that correct compression. Rather than regression analysis, Stewart et al. (1996) used standard salary predictors to build a salary goal table for each rank and discipline. Richardson and Thomas (2013) recommended using an “equity-performance matrix” to merge compression and performance influences on salary adjustments. The University of Wisconsin Oshkosh combined productivity increases for full professors with internal equity adjustments based on regression and larger promotion salary raises (Flaherty, 2013). Although they note that differential salary increases are viewed with skepticism by most faculty union members, Blitz and Cross (2013) recommended balancing equity and market forces through the collective bargaining process. They reviewed collective bargaining agreements and describe how Eastern Illinois University avoided salary compression by changing promotion raises from a consistent dollar amount (a smaller percentage of higher salaries) to a consistent percent of base salary.

Case Study

It is widely accepted that salary compression in higher education results from competition for high demand/low supply faculty in certain disciplines. In order for a university to hire such individuals, they are offered high salaries, often higher than their more senior colleagues. This is compounded when cost of living and promotion raises are minimized in order to budget for high salaries of new hires (McCulley and Downey, 1993; Burgan, 2005; Burke et al., 2005; Seaman, 2007a). The causes of salary compression at Northern Michigan University (NMU) were quite different and previously undescribed in the literature on this topic. Further, the solution, which is

also unique, has been gradually devised across five contracts, and has resulted in both correction and prevention of salary compression.

Demographics

Northern Michigan University (NMU) is an upper-Midwest four-year comprehensive university with an enrollment of roughly 7,000 students. Its faculty are represented by two unions: the NMU Chapter of the American Association of University Professors (AAUP), and the Northern Michigan University Faculty Association (NMUFA). The former is the largest, with both part-time and full-time faculty numbering close to 400, while the latter represents around 20 full-time only faculty. Thus, the AAUP faculty were chosen for this analysis, as its membership comprises nearly 90% of teaching faculty representing most of the 160 programs.

Overview of the Problem

Serious discussion of salary compression at NMU was initiated during contract negotiations between NMU Administration and AAUP in 2003. Although, some authors have suggested establishment of salary minimums and salary increases for promotion as a remedy for salary compression (Snyder et al., 1992), these were the primary cause of compression at NMU. Negotiation notes from 2003 indicate that it was already clear that salary increases associated with promotion were only about one-quarter of the dollar gap between minimum salaries for all ranks. Consequently, even when faculty were hired well above the minimum for a rank, they almost always were increased to the minimum salary at the next rank. Additionally, for almost two decades, promotion amounts and salary minimums tended to increase each year at a percent value equal to the across-the-board (ATB) cost-of-living salary adjustment. Thus, even after promotion, salary minimums for each rank increased at the same rate as salaries of faculty already in that rank, resulting in most faculty salaries falling within a narrow range near the rank minimum. The following is a summary of discussions and solutions resulting from labor/management contract negotiations that occurred at three-year intervals from 2003 through 2015.

The Beginning - 2003

In the 2003 contract negotiation, AAUP proposed to address this problem by setting minimums for full professors that increased with seniority. In contrast, Administration proposed that rank minimums should be held relatively constant, while ATB moved more senior faculty above the minimums. Either approach would alleviate compression, but the former would be more costly than the latter. No resolution or action was agreed upon, but language was inserted into the contract that required formation of a joint faculty/administration committee to study market factors, salary compression, and faculty compensation in the subsequent academic year, with the stipulation that the committee's recommendations would be given serious consideration in the next contract negotiation.

The salary compression committee's final report was submitted May 24, 2005. They affirmed salary compression for associate and full professors based on a subjective identification of the narrow range of most salaries for each rank that were clustered around the minimum, regardless

of seniority. Four systemic causes of compression were identified. First, while merit, equity, and enrollment incentives in addition to ATB salary increases had created some variation in salaries, these had not occurred for over a decade. Salary dispersion was then lost as faculty who had received such increases in the 1980s and 1990s retired. Second, contracts in the 1970s had specified salaries based on years in rank, as well as rank, but these were abandoned in favor of minimum salaries for ranks alone. From 1985 on, minimum salaries increased at the same percentages as ATB. Third, the impact of large differences between minimum salaries for faculty ranks (as explained in the previous paragraph) usually brought faculty to the same minimum level after promotion. Fourth, although market factors influenced initial salaries, promotion tended to erase these and there was no recurring market review that would maintain such differences. The committee recommended adjustments to salaries based on merit, seniority, and market to remedy compression. However, they noted that this would require acceptance from the bargaining unit of unequal raises, and that these would all be short-term solutions. They provided a number of long-term solutions that all revolved around differential increases to rank minimums, ATBs, and promotion amounts.

CUPA & Inversions - 2006

During negotiation of the 2006 contract, Administration proposed several interconnected strategies to address salary compression that were ultimately accepted. First, in addition to ATB increases, a market and seniority adjustment totaling 3.1% of total faculty salaries was distributed. Faculty received the highest of a) the College and University Professional Association for Human Resources (CUPA-HR, or simply CUPA) disciplinary average, b) rank minimum plus 0.6% for each year in rank (up to 6 years for assistant and associate professors and, 20 years for full professors), or c) the individual's previous year salary times 1.015. Second, ATBs went up faster than rank minimums. A third strategy to combat salary compression was a large increase in promotion raises (almost five times the previous amount on average) that varied with an individual's pre-promotion salary (a flat amount plus 3% of the previous salary). This allowed faculty with relatively high salaries to maintain that position after promotion, rather than simply going to the minimum for the next rank. Finally, it was recognized that these changes would create salary inversions. Therefore, it was agreed that a Faculty Salary Inversion Review Committee would be formed to consider these and recommend adjustments to the Provost and Vice President for Academic Affairs.

No guidelines for the committee were provided. The committee recommended that salary of faculty whose salaries were inverted by promotion of a colleague at the same rank and CUPA classification should be brought up to that of the promoted colleague, plus $100 for each year in rank. This resulted in salary adjustments for 12 faculty in 5 departments at a total cost of $20,864 to base salaries. This contract was the first in many years in which minimum salaries for each rank increased by a smaller percentage than the ATB.

Inversions are Corrected - 2009

In the 2009 contract, the salary inversion committee and its procedures were defined in a memorandum of understanding attached to the contract. Salary inversions were determined to

occur when a newly promoted faculty member's salary is greater than someone in the same CUPA Classification of Instructional Programs (CIP) code who was previously at that rank and the newly promoted faculty member does not have a justifiably high salary based on market or achievement. Such unusually high value hires who were exempt from triggering salary inversions were to be identified at the time of hire. Faculty whose salaries were inverted based on this definition would have their salary adjusted in an amount equal to the difference in salaries plus $100 for each year in rank up to five years. Minimum salaries at each rank again increased at a smaller percentage than ATB.

Getting to Market - 2012

Two steps were taken in the 2012 contract to alleviate salary compression. First, procedures for the salary inversion committee were moved from the addendum to the 2009 contract into the main body of the 2012 contract, providing the perception of a more permanent component of the salary determination process. Such committees meet in the fall of each academic year to mutually agree to adjust inverted faculty salaries, however, the committee is under no obligation to do so.

Second, market and seniority issues were addressed with the dedication of 0.5% and 1.0%, respectively, of total faculty salary dedicated to the effort. Target salaries for each faculty member were calculated as market salary for CIP code and rank based on CUPA data at public institutions, plus a proportion of salary for fringe benefits, plus 1% of salary for each year in rank capped at 20 years for full professors and 5 years for all other ranks. Target salaries were multiplied by 1.25 for 12-month faculty and by 0.8 for those without a terminal degree. Salary adjustments based on these calculations were capped at $4000. Prior to these adjustments, salaries of 81 of 300 full-time faculty were under their target, while only five were under target after adjustment. Minimum salaries at each rank again increased at a smaller percentage than ATB.

Initial Hire Salary - 2015

The final component of our process was negotiated in the 2015 contract. While annual and promotion increases were almost entirely dependent on contract specifications that were applied to all faculty equally, initial salaries were negotiated individually at the time of hire. These then have a huge effect on base salary and raises (usually a percent of base salary) throughout one's career. This difference is compounded because the salary differences between faculty who start with salaries higher and their peers gradually grow throughout a career. This problem is exacerbated because it is often suggested that negotiation of initial salaries can be biased as a function of gender (Porter et al., 2008; Freund et al., 2016). Specification of a formula for calculation of initial salary removes the potential for such bias and creates a justification for salary differentials throughout the faculty, in all disciplines and career stages. Initial salaries are determined by the following:

1) contractually mandated salary minimums if these are higher than any of the following.

2) if there is another faculty member with the same CIP code and rank currently in the hiring department, initial salary will be the current faculty member's salary minus 1% for each year in rank.
3) average CUPA salary for the CIP code and rank.
4) if there is no discipline and rank specific CUPA data, the most recent CUPA average for "All Disciplines and All Institutions Combined" times the CUPA market factor for the next highest rank.

Conclusion

Our approach to correcting salary compression and preventing its recurrence has spanned 5 contracts and 17 years. Initial salaries are now set in a transparent, objective, and justifiable fashion that reflects market forces. Nine years of increases in minimum salaries that were less than ATB or inflation has created a situation in which few faculty are hired at minimum salaries or promoted to minimum salaries. Furthermore, salary dispersion is maintained subsequent to promotion. When anomalies arise (i.e., salary inversions), they are identified and corrected in a consistent manner. Across the 11 years in which our salary inversion committee has been active, the average number of faculty who have had salary adjustments due to inversion has been 7.6 per year and the dollar amount added to base salaries has averaged $15,007 per year. Problems with effective function of the salary inversion committee at this point in the evolution of our contract are that 1) inversions are triggered only by promotion, so that they can exist for several years, or indefinitely at the rank of professor, without being detected, and 2) inversions exist only within the same CIP code, the assignment of which falls under management rights; hence, faculty are sometimes dissatisfied with their CIP code. A negative effect of this approach has been that our salary structure is quite rigid. When college deans negotiate hiring conditions, there is no room for salary negotiation; initial salaries are simply defined by the contract. This can repel some candidates who expect to dicker and win. Similarly, if excellent faculty are courted by other universities, matching external offers could trigger salary inversions. This quandary could result in loss of our some of best faculty. However, neither of these potential problems has seemed to become significant. Overall, the cause of our salary compression problems and their solutions have been unique.

Although most agree that salaries should be positively correlated with seniority, there is not agreement on the degree of salary dispersion that best promotes university effectiveness. Dispersion of faculty salaries in higher education is influenced by factors such as type of university, discipline, rank, collective bargaining, and year, so regression analysis is generally accepted as the best method for detecting compression. Additionally, regression can indicate the degree of correction appropriate for individual faculty. But there is not agreement on what predictor variables make the best models, and this is likely to differ between universities and even departments. Correction of salary compression takes money, but the real challenge is changing the factors that cause compression so that the process does not need to be repeated frequently. Our approach to changing the systemic causes of compression was gradual (over a 15 year period and 5 contracts) and strongly reliant on the shared governance process throughout. It used market adjustments, consistent correction of salary inversions, and defined initial salaries to

create a transparent and justifiable salary structure that precludes the worst forms of compression.

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