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**Paying paper by paper,
the wage system of Icelandic University teachers
explained²**

Abstract: Icelandic university teachers, the Ministry of Finance and the University of Iceland have been conducting an interesting experiment by changing the form of remuneration of university teachers in a fundamental way. This paper accounts for the development of university teachers salaries the last 20-30 years and gives the details of the remuneration system as well as its impact on wage development and wage dispersion within the university community. The effect of the changed system of remuneration on scholarly productivity is also discussed.

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I. Introduction

The University of Iceland enjoys considerable autonomy with respect to governance of its internal affairs. That autonomy does not extend to all matters of internal governance, however. Determining the remuneration of university employees, both academic and non-academic, is a case in point. Since 1986, the Ministry of Finance has had the formal authority to negotiate wage contracts and has exercised that authority with rigor. A growing number of university administrators and employees have perceived the remuneration system as a straitjacket that has hindered the production of quality research and teaching. To mitigate this problem, they started a movement that eventually revolutionized the system. The objective of this paper is to explain the current system and what preceded it, as well as to address the question as to whether the goal of increased scholarly productivity has been met.

II. Historical background

In 1942, the University Teachers Union (UTU) was inaugurated with the primary purpose and function of fostering social contacts among the UTU members and administering the few assets collectively held by the teachers at the University of Iceland.³ The UTU was reorganized and its by-laws rewritten in 1969 with a view to

³ For example the UTU managed the so-called “vacation-fund” for University teachers. Icelandic employers contribute a given (small) percentage of payroll to the union “vacation funds” of their employees. Many of these funds were used to buy summer houses for rental to union members at a subsidized price.

establishing the UTU as a representative body for its members and a labour union. Prior to 1986, Icelandic civil servants did have the right to unionise and to bargain wage-agreements with the Ministry of Finance and/or the municipalities. However, the important difference between the rights of civil service and private sector unions was that public employees did not have the right to strike. Negotiations involved a two-step process. First, the Alliance of public employees' unions and the Ministry of Finance would negotiate an agreement covering general issues, such as defining non-overtime hours and a general salary scale setting out the highest and the lowest admissible monthly pay levels. Secondly, the individual unions for public employees would negotiate an agreement on issues that were of specific concern to that union, such as the level of a given job in the general salary scale. In the event that negotiations failed, a special Salary Tribunal composed of members appointed by the negotiating parties and the Supreme Court of Iceland would be convened. The Salary Tribunal was to consider individual cases with reference to the relative progression of salaries in the country, ensuring that its decisions should not destabilize the Icelandic economy. Hence, the Ministry of Finance typically left the salary decision to the Salary Tribunal. The political implication of this process was that the Minister, who is a politician and a member of Alþingi (Icelandic Parliament), was not directly involved in salary decisions. By leaving contentious remuneration issues to the Salary Tribunal, the Minister of Finance could avoid making enemies amongst employees in both the public and private sectors. In practice, the institutional set-up was such that the UTU could only have an indirect influence on the evolution of its members' salaries. The Union collected detailed data on the salaries of its members, on salaries of colleagues in other countries, and on salaries of equally educated and qualified colleagues in the public and private sectors in Iceland. Those data would be presented

at sessions of the Salary Tribunal. The Ministry of Finance would present information on recent overall wage developments in Iceland, give an account of the alleged productivity growth and the economic leeway for wage increases, stressing the above-mentioned responsibility of the Salary Tribunal not to destabilize the Icelandic economy. The number of public employee man-years doubled between 1970 and 1985, increasing from 10,500 to 19,911 over that fifteen-year period. Their share in total employment increased from 12% to 16% during the same period. As civil servants became increasingly numerous, and as the Salary Tribunal produced more verdicts, the sentiment grew among public sector employees that the Salary Tribunal was more attentive to the arguments put forward by the Ministry of Finance and the spokespersons for the municipalities than to those put forward by the employees' unions. A growing perception amongst public sector employees was that the Salary Tribunal acted as an extended arm of the Ministry of Finance. Hence, civil service unions pressed hard for many years to gain the rights to bargain on an equal footing with ordinary unions. Finally, in 1986, many civil service unions, including the UTU, were granted the right to represent their members in salary-related matters and to make binding agreements on their behalf. Furthermore, along with other civil service unions, the UTU won the right to take its members out in a strike in order to force through a new wage agreement. Hence, the Union was able to signal its determination regarding wage claims. The Minister of Finance/University of Iceland and the UTU signed the first salary agreement in 1987.

The early agreements were rather simple by today's standards, characterized by a flat salary for each category of professor⁴, with pay increases by age bracket. These agreements afforded little scope for rewarding productive professors, as implementation was typically based on years of service rather than professional achievements.

Base salaries of public employees in Iceland decreased dramatically in real terms during the high-inflation years of the late 1970s and early 1980s, especially after the abolition of inflation indexing in 1983. Institutions that employed academics with marketable skills, such as engineers, architects, programmers and finance specialists, suffered from the effects of brain-drain and severe difficulties recruiting new employees. Managers of those and other state institutions responded to the shortage of supply of academics by increasing overtime payment. The term "unmeasured overtime" was invented and defined as payment for time spent on work-related tasks carried out from home. It was not unusual to add 20-30% to basic monthly wages in this way.

School managers at all levels were initially less inclined to pay "unmeasured overtime" for two reasons. For one thing, since schoolteachers traditionally have fewer marketable skills than engineers and architects, the brain drain was not as obvious and imminent a problem in the school system as in other institutions. Secondly, the teaching load was measured by the number of classroom hours and not by hours spent in an office or reading at home. However, as the custom of "unmeasured overtime" became more widespread and as the best teachers (or those

⁴ The categories are: Professors, Docents and Lecturers, respectively comparable to Full Professors, Associate Professors and Assistant Professors in US universities.

with the most marketable skills) vanished, decision makers had to implement similar methods to remunerate teachers. Therefore, in the primary and secondary schools, overtime was redefined to cover tasks that had previously been part of daytime duties.

At the university level, overtime payment for teaching was introduced in 1974.⁵ The University Council had and still has the right to define what constitutes a full-time job for a professor. The Council decided in November 1973 that a professor should, independent of rank, devote 10% of his or her working hours to internal administrative services, 50% to teaching and 40% to research⁶. Teaching was the only task subject to external measurement and control. Thus, preparing and conducting a 3/4-hour lecture is assumed to take up 4 hours of teacher time. Workshops and exercises are assumed to take up less. Furthermore, complicated rules govern the estimation of teacher time devoted to grading exams and quizzes. A 40-year old associate professor was expected to deliver 769 hours in teaching and class preparation each year. This requirement could be met by giving three courses and advising a few students working on their theses. Up to 576 hours of overtime could be claimed by a professor each year. The overtime ceiling was later raised to 600 hours a year. In order to fulfil this requirement, a professor would have to give three

⁵ Researchers working on externally funded projects were also allowed to claim overtime for research-related work. Overtime for internally funded research was not defined until 1989, when the so-called Research-contribution Fund (Vinnumatssjó ur) was established.

⁶ This was changed to 12% for administrative tasks, 48% for teaching and 40% for research in 1986, although the University Council did not formalize this decision until September 1988.

to four courses each semester and attract students as a thesis advisor. In this context, a professor could not accomplish much in terms of research.

Table 1: Salary development for UTU, university-educated public employees and blue collar workers in Iceland					
Year	Public employees	Fed. of state and municipal employees	Fed. of graduate Public Employees	Teachers' association	UTU
1967	82.6				
1968	75.4				
1969	68.8				
1970	76.9				
1971	92.1				
1972	104.4				
1973	107.3				138
1974	112.7				126
1975	88.7				124
1976	83.4				78
1977	100.4				95
1978	110.3				100
1979	109.0				124
1980	102.1				110
1981	98.9				98
1982	100.0	100.0	100.0	100.0	100
1983		91.2	92.2	91.1	101
1984		84.9	84.6	84.0	70
1985		80.8	78.0	80.0	83
1986		94.3	97.0	101.0	98
1987		108.3	107.9	113.6	102
1988		103.2	105.0	109.8	99
1989		98.1	96.5	102.6	104
1990		94.5	93.5	100.1	92
1991		95.1	94.3		88
1992		96.0	94.2		92
1993		95.1	92.6		93
1994		94.7	96.1		89
1995		97.5	94.1		88
1996		103.5	100.4		91
1997		106.4	103.2		95
1998		124.2	126.2		131
1999		130.7	134.2		136
2000			143.6		140
2001			149.6		150

2002					157
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Note to table 1: The figures are only indicative of the development of university teachers' wages as compared to wages of other workers. Administrators at the university have been members of the UTU since 1975. The weight of administrators in the total has increased over time. This may imply that the overall development of total wages for an average member of the UTU is somewhat different from the development of the average total wage for university teachers.

Sources: Hagskinna, p. 615 and table 6.9 in *Sögulegt yfirlit hagtalna*.

III. First verdict of the Salary Committee

In 1996, salary decisions for full professors at the University of Iceland were moved from the realm of collective bargaining to the so-called State Wage Terms Committee, which was established by Parliamentary Act 120/1992. The purpose of establishing the State Wage Terms Committee was similar to that of the earlier Salary Tribunal, i.e. to establish a channel of salary determination of government employees that is not too prone to disputes. The difference is that the State Wage Terms Committee has fewer "clients" than the Salary Tribunal. The State Wage Terms Committee decides the salaries of upper rank, but not the highest-ranking civil servants. The High Level Civil Service Commission decides the salary of the President, Members of Parliament, judges of the Supreme Court and permanent secretaries of the Ministries. A formal connection exists between the two bodies in that the High Level Civil Service Commission appoints one of the members of the State Wage Term Committee. Understandably, there are also informal connections, as decisions of the two bodies are based on similar data. In addition to setting the salaries of full professors, the State Wage Term Committee sets the salaries of priests serving the State Church, primary-care doctors, the police, prison-wardens, etc. Today the system for deciding the salaries of public sector employees in Iceland is

such that the salaries of the highest ranking officers are set by the High Level Civil Service Commission, the salaries of the next level of officers are set by the State Wage Term Committee and the salaries of the rank and file are subject to collective bargaining between almost 50 unions and the Ministry of Finance⁷.

The State Wage Term Committee has interpreted its mandate as that of setting the total wage paid to employees who are subject to its decisions. Hence, the Committee has developed a system of base categories of jobs, each commanding the same base salary with the possibility of additional payments calculated according to documented workloads.

The State Wage Term Committee had already developed its own wage-determination system when it was given the task of setting the salary of full professors. The Committee decided to adapt the system with as few alternations as possible for the professors.

In its first salary decision for professors, the State Wage Term Committee divided the group into five categories numbered on a progressive scale of ranking from I to V. The ranking was (and is) based on points awarded for publications, teaching years and years and type of service for the University. A minimum number of points is required for teaching and research for each salary rank. An English translation of the point scale is available on the web.⁸ Professors of category II and higher were allotted a fixed monthly salary plus additional payment equal for all persons in each category. The additional payment was obviously supplemented to

⁷ A list of salary scales in effect is given at:

<http://www.fjarsysla.is/rbh/rbh.nsf/pages/Leidbeiningar0008.html>

⁸ See <http://www.hi.is/Fel/FH/professorar/fp-matsreglurprofaensku.html>

imitate the overall model of the State Wage Term Committee, with the exception that the additional payment is not fixed in the same discretionary manner as for other of the Committees clients. The State Wage Term Committee was obviously not ready to deal with the controversy that such a differentiable decision would have created.

The State Wage Term Committee decision was well received by university professors with few exceptions (mainly limited to the fields of engineering, law, nursing, the humanities and business). Furthermore, some older professors who had devoted most of their time to developing facilities in their fields of study claimed that their contributions had not been acknowledged. Later revisions of the point system took their complaints into consideration.

Unions and employers negotiate until agreement is reached on a list of salary rates. The rates include pay for regular work, overtime, working on holidays, working under adverse conditions etc. Unions and employers do not fix or limit the total income accruable to employees. In contrast, the State Wage Term Committee has been keen on stressing that they not only set rates, but also an upper limit on total remuneration payable. In the case of professors, the State Wage Term Committee ruled that overtime for teaching, research and university services should be subject to an upper limit. The limit was (and is) inversely related to the salary category. Employees in lower categories can claim more overtime than those in higher categories.

Complaints directed at the ruling of the State Wage Term Committee are mostly related to the fact that the Committee sets the maximum salary that the university, university firms and university research institutes can pay to a professor. A professor with a somewhat higher than normal teaching load and supervision of two or three postgraduate students could risk not being paid for additional work, such as

the evaluation of candidates for a new position in his or her department. The example extends to other tasks of a similar nature. The State Wage Term Committee maintained that evaluations of new applicants, service on university committees etc. constitute part of the normal duties of a professor and as such, are supposed to be covered by the fixed pay. Professors argued that compensation would be paid for the evaluation of a colleague at a foreign institution and asked for an explanation of the difference. A further complication is that according to University Council decisions (that have now been partly reversed), the required base teaching load for professors over 55 and 60 years of age is dramatically lower than that of their younger colleagues. A professor over age 60 could theoretically fulfil requirements by teaching two courses and advising two to four postgraduate students. This fact made it hard to distribute teaching and supervision duties amongst faculty members, as younger faculty had to step in if the older faculty refused to teach above the payment ceiling.

The State Wage Term Committee decision of July 2nd 1998 implemented a 35% increase in average pay for professors.⁹ Assistant and associate professors (lecturers and senior lecturers) did not have an opening for new bargaining until 28 months later.¹⁰ University Teachers' Union members contacted the rector of the University and expressed the view that the pay differential between professors and

⁹ Before the State Wage Term Committee decision, the average salary for a professor was 145,000 krónur excluding overtime pay. Average salary including overtime pay was 255,000 krónur. After the decision had taken effect fully, average salary without overtime was 250,000 krónur and 341,000 krónur including overtime.

¹⁰ The signed agreement had October 31st 2000 as its termination date.

docents and lecturers did not reflect differences in the quality of teaching and research. This was problematic for the UTU for obvious reasons. The officers of the union were elected on the assumption that they would use all allowed means to keep the salary-development of members in line with the salary development of other similar groups of employees. The rector and the administration faced a different problem. With the pay differential, the advantages of promotion to a full professorship were immense. Applications for promotions began to pour in. If this trend continued, professors would dominate other categories of academic employees by a factor of 3 to 1, and the rector reasoned that such a situation would shake the credibility of the University promotion system. Two possible actions were open in order to keep the credibility of the system intact. One would be to make the criteria for promotion harder to fulfil, not a simple task in a university setting where promotion decisions are taken partly by colleagues and partly by independent committees. The other possibility was to make the promotion less attractive from a financial perspective. As the salary decision for full professors was relegated to the State Wage Term Committee, the only method would be to increase the wage levels of lecturers and docents.

The rector met with UTU academic board members in July 1999. The conclusion of that meeting was to subject all UTU academic members to an evaluation akin to the one prescribed by the State Wage Term Committee for full professors. Hence, the UTU board members accepted that salary changes could be based on new methods for wage-determination for academic jobs. On December 23, 1999, the University and the UTU signed an agreement that implemented a new system for salary decisions for UTU members, based on the total number of points earned for teaching, research and university service.

IV. Description of the system

The fundamental characteristic of the system is a numerically measured assessment of academic personal. Four areas of duties are defined: teaching, research, university administration/services and general services. Points are awarded for tasks belonging to each category.

Points are only implicitly defined. Ten points per year seem to be a focal point of sorts: one year's teaching experience yields ten teaching points and full professors receive pecuniary awards if they produce more than ten research points. The head of a department is awarded ten service points for each year of service in that position.¹¹

Ten points are awarded for each year of tenure in a teaching job at a university-level institution. Furthermore, points can be awarded for publications. Successful supervision of postgraduate students qualifies for up to ten teaching points. Lastly, a person who has been instrumental in founding a program or a field at the university can be awarded twenty-five points extra.

University service assessment is based on a list of duties. For example, acting as chair of a department is worth ten points a year, and acting as dean of a faculty is worth fifty points. Research assessment is based on publications. The most noteworthy exception is that fifteen points are awarded for a MA/MS thesis and thirty points for a Ph.D. thesis. Books that present new or original material may be awarded ten to sixty points, depending on the originality and amount of work. Single author

papers in peer-reviewed international journals command fifteen points. Points per author decline as the number of authors increases, but not in a linear decline. Single-author papers in non-reviewed journals command ten points, as do single-author edited proceedings at international conferences. Other activities may qualify for fewer points. A very minor publication does not receive any points.

In late March 2000, some 110 of approximately 180 lecturers and docents had submitted CV's and been evaluated. Average points for lecturers were 175 and average points for docents were 260. The distribution was skewed as expected, see figure 1.

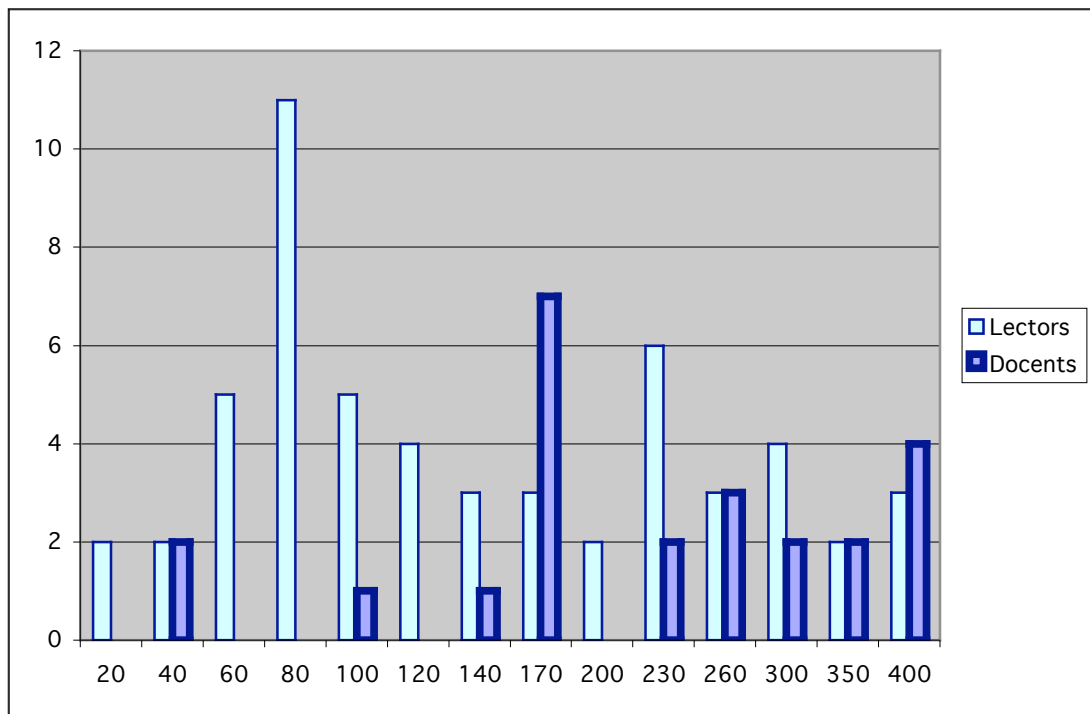


Figure 1: Distribution of points awarded to lecturers and docents, March 2000

In both categories, the average number of points was higher than expected. On March 30th 2000, the UTU and the University signed an agreement on how points would affect salaries of UTU members. According to the agreement, basic salary

would be directly affected by the total number of points awarded to each UTU member.

The fact that the source of points did not have any significance represents a major departure from the course taken by State Wage Term Committee, which kept professors with relatively few research or teaching points at lower pay-levels than professors with the same number of total points but more evenly distributed. One should keep in mind that the implementation of the point system differed considerably in the two cases. In the full professor case, a professor in a given category has to have earned a required minimum number of points in teaching and in research. Hence, considerable differences in salaries could be observed between two professors who had earned an equal number of points, but where one had primarily earned points in research, for example, while the other had points in all categories. In the UTU agreement, on the other hand, no distinction is made with regard to the origin of the points.

UTU board members were pleased to learn that lecturers and docents from the fields of the humanities, law, engineering and nursing were as likely to earn points as were their colleagues from other disciplines. As mentioned in the foregoing, professors in the above-listed fields had previously challenged the State Wage Term Committee decisions regarding full professors because they claimed that the point system was inherently biased in their disfavour. The UTU board members concluded from the above evidence that the use of points in the case of the UTU agreement demonstrated that this was not the case.

V. Agreement of the UTU, the University and Ministry of Finance, spring 2001

The UTU/Ministry of Finance wage agreement came up for renewal on November 1st, 2000, as did the agreements of most university-educated government employees. The Union of High School Teachers adopted a highly militant strategy at the outset, announcing a strike just ten days past the renewal date. The strike came into effect and lasted for ten weeks, effectively freezing all negotiating activity of other unions in the public sector until an agreement was signed in January 2001. The new high-school teachers' agreement implied an overall rethinking of the mechanisms guiding salary decisions in the secondary school system. Basic pay was increased by as much as 50% and some of the duties previously paid for separately were now covered by the basic salary. Young teachers stood to gain more from the agreement than older teachers, reflecting the demands employers, who felt that able young academics would not find their remuneration attractive enough if the established age-profile of pay in the teaching profession was to prevail.

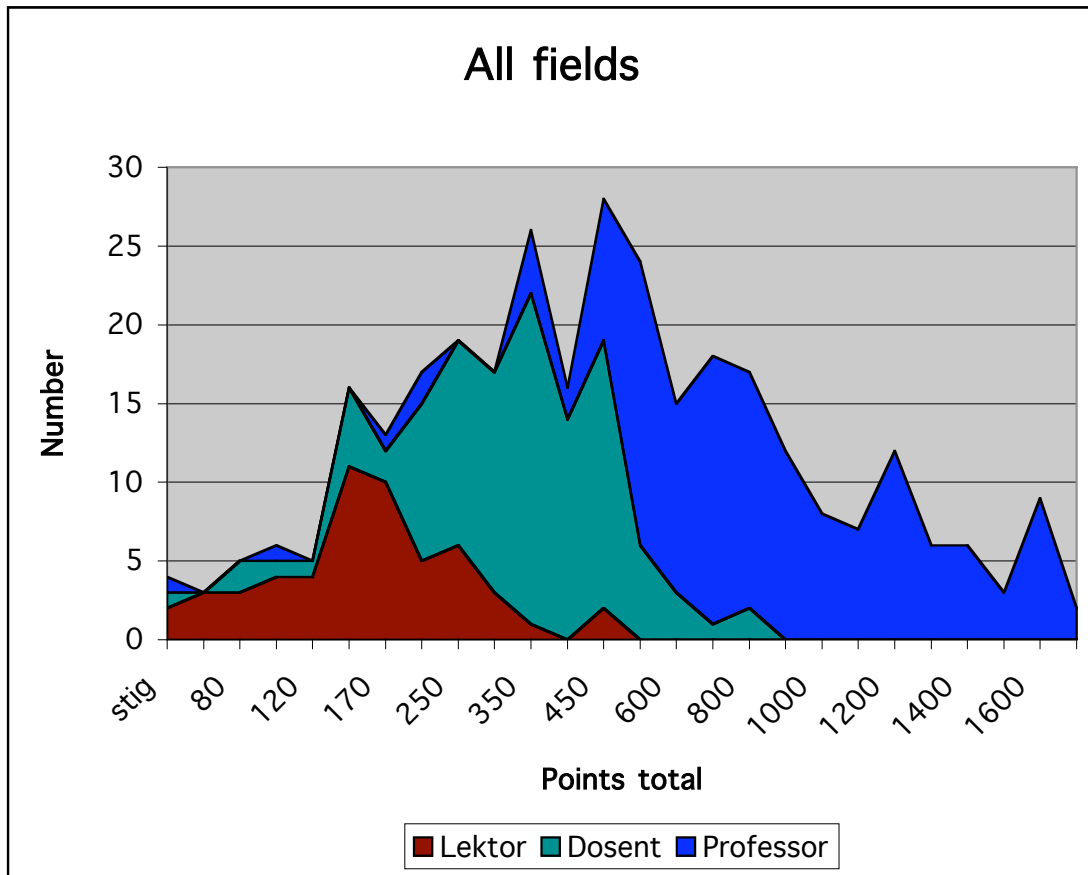
At the outset of negotiations, the strike and the new pay-profile of high-school teachers marked a starting point for the demands of the UTU. However, the negotiating team of the Ministry of Finance and the Ministry of Education were not ready to accept this position. They pointed out that the high-school teachers' pay increase was partly offset by an easing of the rules and by including in the basic duties of a high-school teacher a number of duties that had previously been paid for separately. After some dramatic events, the UTU managed to convince their negotiation partners that the point system was an adequate, efficient and productive way of remunerating university teachers.

Consequently, its implementation resulted in some flexibility. Older lecturers and docents were still more likely to be in the higher percentiles in the UTU income distribution, but nothing excluded the possibility that the highest paid UTU member could be one of its youngest members, since pay was strictly based on earned points and points earned by teaching service did not necessarily need to weigh heavily in the total. The one complaint the employers had was that new points did not have more weight than old points. There was (and is) no depreciation or loss of acquired points in the system. Finally, a common ground was reached (preventing an announced strike during the spring exam period).

The solution implied a multitude of changes. The respective weights of research, teaching and university service were changed from 40%, 48%, 12% to 43%, 51% and 6%. This change implies that a 35-year old UTU member would now be required to teach and prepare teaching for 817 hours a year, an increase of 38 hours, which effectively reduces overtime payment to all UTU members. Furthermore, pay for the research part of the job would vary. A bonus of as much as 20% can be paid if the average of research points over the previous three years is in excess of 40 points per year.

VI. Implementation of the system

Figure 2 shows the distribution of points awarded to lecturers, docents and professors. Professors have earned more points on average than have docents, who in turn have earned more points than lecturers, as expected.



The figure demonstrates that the median teacher at the University of Iceland has earned 500 to 600 points in total. It also shows that the distribution of points among assistant and associated professors (lecturers and docents) is much narrower than the distribution of points among full professors.

Table 2 gives the quartiles of the distribution of total points by field and by level of employment, as of early February 2002.

	1 st Quartile	Median	Mean	3 rd Quartile	3 rd to 1 st
Field					
Medicine	30	275	371.1	475	15.83
Humanities	325	475	604.3	850	2.62
Social sciences	115	400	508.8	750	6.52
Sciences	275	512.5	584.7	750	2.73
Professors					

Medicine	550	850	877.8	1250	2.27
Humanities	650	850	873.5	1100	1.69
Social sciences	493.8	750	835.7	1250	2.53
Sciences	550	750	806.7	1050	1.91
All	550	850	846.9	1150	2.09
Docents					
Medicine	136.3	275	279.5	375	2.75
Humanities	337.5	400	419.3	475	1.41
Social sciences	225	375	319.3	462.5	2.06
Sciences	190	375	324	425	2.24
All	225	325	317.2	425	1.89
Lecturers					
Medicine	30	50	101.8	177.5	5.92
Humanities	155	225	263	350	2.26
Social sciences	40	120	115	155	3.88
Sciences	30	185	150	185	6.17
All	30	130	141.4	185	6.17

Table 2 shows that 25% of all university teachers in the Humanities who had their work evaluated had accrued 325 points or less. Half of them had accumulated total points in the range of 325 to 850.

One way of evaluating the unevenness of the distribution of points is to consider the ratio of the third quartile to the first quartile. Note that the distribution of points among teachers in the field of medicine is the most uneven. With the exception of lecturers, it is obvious that the distribution of points among teachers of the same rank in medicine in particular is not more uneven than the distribution of points among teachers of similar rank in other fields. Hence, the uneven distribution of points in medicine is the result of a high percentage of teachers of the lowest rank (lecturers) in that field, and the fact that lecturers in medicine tend to have accumulated fewer points than their peers in other fields. This difference can largely be explained by institutional factors as well as a self-selection bias. A majority of lecturers and

docents in medicine are part-time teachers, even if they hold the title of full-time university employees.

Aside from the anomalies discussed in connection with the distribution of the points among teachers in the field of medicine, the finding is that the distribution of points is similar from field to field. Ignoring the field of medicine, one can state that the median professor has accumulated 800 points during tenure, whereas the median associate professor (docent) has accumulated 400 points. The picture is somewhat more diffuse for assistant professors (lecturers), as social science lecturers tend to have accumulated few points. The reason for this might be that the social sciences constitute a field that is both young and rapidly expanding over recent years. Hence, its employees are newly recruited.

VII. Conclusion.

The total number of research points awarded yields a method to measure the overall research activity at the University of Iceland. The number of points increased by 15% between 1999 and 2000 and by 10% between 2000 and 2001. It appears that fewer points were awarded in 2002 than in 2001 but it is still too early to conclude why that is the case.

The UTU adapted and developed the salary system initially established by the full professors and the State Wage Term Committee. The aims of the UTU were to bring the salaries of its members closer to the salaries of full professors and further, to develop a remuneration system that could serve as a platform for further bettering the salary situation of its members.

The aim of the University and the Ministry of Finance was to use the remuneration system to enhance the production of research at the University of Iceland. The overall growth of research points awarded indicates that the experiment

is a success. So far, the transformation of the remuneration system at the University of Iceland has delivered according to the hopes and expectations on both sides of the negotiation table. Time will tell if the negotiating parties can continue to develop the system further for their mutual benefit.

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