

Women in Higher Education: A Comparative Statistical Look

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The purpose of this paper is to analyse the educational data for five countries with the aim of finding out if there are any relative "sexual" distinctions apparent in their educational systems, especially at the higher educational level. The emphasis is on relativities since it is quite obvious that most societies do discriminate against women, hence what should be interesting is the different extents to which various countries practice such discrimination.

The analysis is not a sociological one, but simply one which tries to detect any sexual bias in higher education from the published statistics. Five countries are chosen for this purpose: France, West Germany, Japan, the UK and the USA. All are distinguished members of the OECD since they are regarded as the most advanced nations in the Western hemisphere. However, although they all enjoy high per capita incomes and living standards, they have different social structures. Hence it is a very interesting group to compare.

It would have been useful to contrast this group with a member of the advanced socialist bloc, e.g. the USSR, but such countries do not publish the detailed, and sometimes not even the basic, data. In spite of this, the paper does include some comparisons with such countries when the information is available. It should be stressed also, that not all the necessary detailed data are available for all the members of the basic group since France and the USA do not publish all the necessary statistics classified by sex.

Enrolment Ratios

Table 1 gives the enrolment ratios for the five countries for a selected number of years covering the period from 1970 to 1981. The information is also classified by the three levels of education but since the first two levels cover the ages between 6 and 17, these two levels have been grouped together: that age is roughly that for compulsory education. Note that there are differences relating to this age coverage for the countries under consideration.

In terms of the first/second level of education, considering each country separately, all five countries have consistently increased their enrolment ratios

Table 1 Enrolment

	1970			1975			1978		
	MF	M	F	MF	M	F	MF	M	F
FRANCE									
First and Second Levels (6-17)	92.0	90.0	93.0	93.0	—	—	95.0	93.0	97.0
Third Level (20-24)	19.5	—	—	24.0	25.1	23.8	24.2	24.6	23.8
W. GERMANY									
First and Second Levels (6-18)	78.0	78.0	78.0	80.0	77.0	82.0	79.0	78.0	80.0
Third Level (20-24)	13.4	19.2	7.4	24.5	29.8	19.0	25.7	30.0	21.1
JAPAN									
First and Second Levels (6-17)	92.0	93.0	92.0	95.0	95.0	95.0	96.0	96.0	97.0
Third Level (20-24)	17.0	24.5	9.6	24.6	33.0	16.0	29.3	38.9	19.5
UK									
First and Second Levels (5-17)	88.0	89.0	88.0	93.0	93.0	94.0	92.0	92.0	93.0
Third Level (20-24)	14.1	18.5	9.5	18.9	23.6	13.9	19.9	25.1	14.4
USA									
First and Second Levels (6-17)	100.0	99.0	101.0	101.0	100.0	102.0	99.0	98.0	99.0
Third Level (20-24)	49.4	57.7	41.1	58.2	63.5	52.7	55.6	56.4	54.8

Note: — = Not available.

Source: UNESCO, *Statistical Yearbook*, 1983.

for females and these ratios have been consistently higher than for their male counterpart. In comparative terms, the USA comes at the top of the league with the others in the following ranking order: Japan, France, the UK and West Germany. Indeed, West Germany seems to be in a league of its own since all the others have ratios in excess of 90% while West Germany's is below 80%, but this could be because compulsion ends at an earlier age in West Germany. Overall, what emerges here is that the result is not surprising given the UN

Ratios

1979			1980			1981		
MF	M	F	MF	M	F	MF	M	F
96.0	93.0	98.0	96.0	92.0	100.0	96.0	—	—
25.1	26.7	23.6	25.5	27.1	23.9	—	—	—
79.0	78.0	80.0	79.0	78.0	80.0	79.0	—	—
26.4	30.5	22.1	27.6	31.7	23.3	—	—	—
97.0	96.0	97.0	97.0	97.0	98.0	97.0	96.0	97.0
29.8	39.6	19.8	30.2	40.0	20.1	—	—	—
92.0	91.0	93.0	91.0	90.0	92.0	—	—	—
19.7	24.6	14.6	20.1	24.9	15.0	—	—	—
101.0	100.0	101.0	99.0	99.0	99.0	—	—	—
54.9	53.3	56.5	57.1	54.9	59.3	58.0	55.5	60.7

directive regarding compulsory education, but it should be emphasised that compulsion does not necessarily guarantee the desired outcome; indeed, a large number of countries do not comply with the directive.

The picture is different when one considers the third level of education—ages 20 to 24. Here, women score consistently below men, except in the USA between 1979 and 1981. Of course, it is well known that the USA deems education at this level to be almost compulsory and that a British first degree is

recognised, *on the average*, to be much higher in standard than an American one—this statement is consistent with the fact that some US universities have the highest standards in the whole world since *an average* must by definition incorporate the qualities of US universities at the other end of the scale; in short, British universities have similar standards while US universities have varying

Table 2 US Earned Degrees Conferred By Field of Study, Female %, 1980/81

	Bachelor's		Master's		Doctorates	
	1980	1981	1980	1981	1980	1981
Agriculture	30	31	23	24	11	12
Architecture	28	28	29	29	17	22
Area Studies	60	62	48	52	35	36
Biological Sciences	42	44	37	39	26	28
Business & Management	34	37	22	25	15	15
Communications	52	55	51	53	37	41
Computer & Info. Sc.	30	33	21	30	11	10
Education	74	75	70	72	44	47
Engineering	9	10	7	8	4	4
Fine & App. Art	63	64	53	53	37	40
Foreign Languages	76	76	70	67	57	53
Health Professions	82	84	72	74	45	44
Home Economics	95	95	91	90	76	68
Law (exc. 1st Pro.)	43	50	16	18	10	7
Letters	59	60	61	61	41	44
Library Sciences	88	88	81	83	52	56
Math. Subjects	42	43	36	34	14	16
Military Sciences	33	0	0	0	—	—
Physical Sciences	24	25	19	21	12	12
Psychology	63	65	57	58	42	43
Public Affairs & Services	55	58	52	55	35	40
Social Sciences	44	44	36	38	27	27
Theology	26	24	31	34	6	8
Interdisciplinary Subjects	50	51	42	40	29	39

Note:—means neither sex enrolls.

Source: calculated from basic statistics given in the *statistical Abstract of the United States*, 1982–83 and 1984.

ones, a fact which is reflected in the term "Ivy League" which is applied in the USA for certain high quality universities there (see the Appendix for salient features of British universities). Hence, these considerations, taken together, would seem to suggest that there is nothing unique about the USA since the equivalent data for comparison have to be, *on the average*, those at the American postgraduate level. Such data is not available but an approximation can be found in the statistics on "earned degrees conferred by field of study"—see Table 2. It should be clear from the table that US women are just on par with those in the European countries included in this sample.

This league of enrolment is slightly different when higher education generally rather than the third level of education is under consideration. This is portrayed very clearly in Chart 1 which covers a longer and inclusive period of time (1960–1981). Here West Germany was at the bottom of the league until 1977 when it vacated that position for the UK, otherwise the ranking is as in the previous situation. Although the chart does not show it, the male/female ratios are consistent with those in Table 1.

The above information reveals that at the compulsory level of education there does not seem to be any sex bias, and that if any exists it would seem to work in favour of women. But at the higher levels of education, women do experience such a bias against them in all the countries considered except for the USA. However, this exception should be viewed with a great deal of caution because, as stated earlier, higher education in the USA is more or less compulsory; once this is allowed for, US women become very similar to their European counterpart. Moreover, one should not deduce from the data anything about the quality of education since, apart from the fact that British universities are highly specialised (see the Appendix), there are indications that, for example, an engineering first degree in Japan will not pass as such in the other four countries.

Looking at the *extent* of bias against women in higher education produces a league with Japan (0.5) at the top followed by the UK (0.6), West Germany (0.7) and France (0.8). In other words, the Japanese are the most biased within this group while the USA seems to be somewhere between Japan and the UK.

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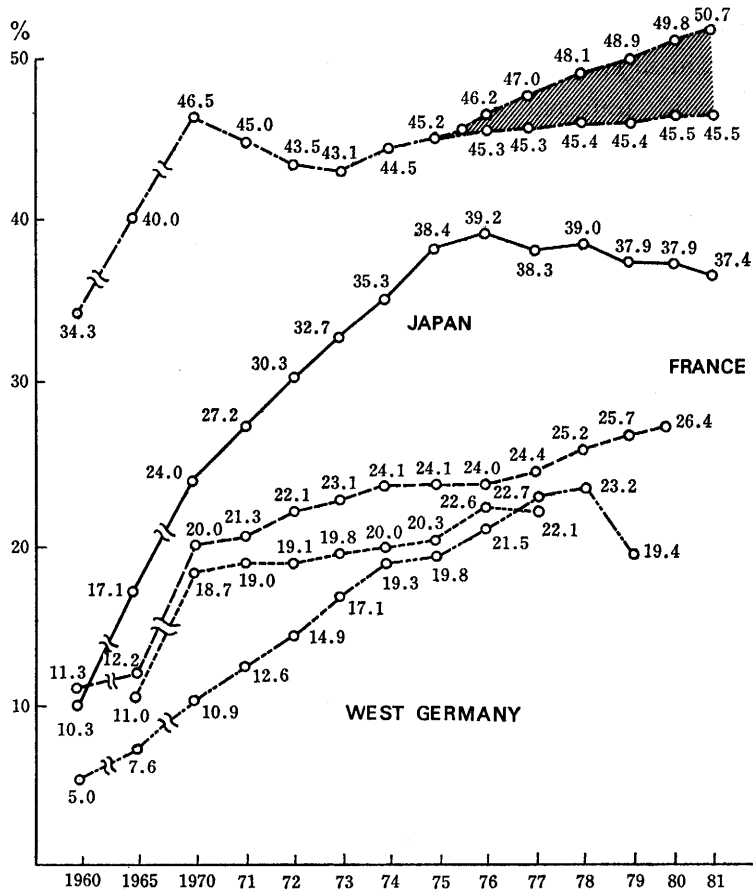


Chart 1: Higher Education Rates, 1960-81

Notes: (1) USA's figures after 1975 are estimates between upper and lower limits based on NCES (National Centre for Educational Statistics). (2) West Germany's relative decline in 1969 was due to changing the first term from April to August.

Source: Ali M. El-Agraa and Akira Ichii (1985, p. 4).

Subject Classification

Now consider the female/male ratios according to subject classification (field of study) for the years 1979 and 1980. These ratios are given in Table 3 for West Germany, Japan and the UK. Unfortunately, France does not record

Table 3 Ratio of Female Students Classified by Field Study, 1979 and 1980

Field of Study	W. Germany		Japan		UK	
	1979	1980	1979	1980	1979	1980
Education, Science and Teacher Training	68	68.8	73.5	72.2	62.3	61.1
Humanities, Religion and Theology	57.9	58.5	67.0	66.5	59.5	60.6
Fine and Applied Arts	50.4	50.1	70.9	71.0	57.2	58.1
Law	30.9	32.2	/	/	36.8	38.7
Social and Behavioural Science	36.2	37.1	11.0	11.2	44.4	46.0
Commercial and Business Administration	36.2	37.2	/	/	28.3	30.4
Mass Communication and Documentation	47.4	48.3	/	/	75.4	77.4
Home Economics (Domestic Science)	93.9	93.8	99.7	99.7	86.8	88.6
Service Trades	92.6	73.4	—	—	50.8	51.7
Natural Science	30.6	31.2	13.2	13.6	30.2	32.4
Mathematics and Computer Science	30.4	29.4	20.0	19.8	24.4	24.9
Medical and Health Related Science	62.3	62.7	36.7	36.4	47.5	48.6
Engineering	4.7	5.1	1.6	1.9	4.7	4.6
Architecture and Town Planning	30.3	31.8	/	/	17.8	18.6
Trade, Craft and Industrial Programmes	8.5	8.9	/	/	23.2	18.7
Transport and Communications	—	—	0.1	0.2	2.6	3.5
Agriculture, Forestry and Fishery	21.8	23.0	11.9	12.7	30.1	31.2
Other and Not Specified	42.1	42.2	24.1	24.6	43.2	44.6

Notes: 1. / = Data included elsewhere with another category. 2. — = $\cong 0.0\%$.

Source: UNESCO's, *Statistical Yearbook*, 1983.

such detailed information, or at least officially it does not. The USA has a less detailed classification; it is given in Table 4.

The table shows that in Japan women score significantly in the following subjects: (i) Education Science and Teacher Training ($\cong 73\%$) (ii) Humanities, Religion and Theology ($\cong 67\%$); (iii) Fine and Applied Arts ($\cong 71\%$); and (iv) Home Economics ($\cong 100\%$). Other scores worthy of attention are: (v) Mathematics and Computer Science ($\cong 20\%$); (vi) Medical and Health Related Science ($\cong 36\%$); and (vii) "Other" ($\cong 25\%$).

In the UK the respective scores were: (i) $\cong 61\%$; (ii) $\cong 61\%$; (iii) $\cong 58\%$; and (iv) $\cong 88\%$. Moreover, in the UK women score significantly in Mass Communication and Documentation ($\cong 75\%$) and Service Trades ($\cong 51\%$).

Table 4 US College Female Enrolment (%) By Major Field of Study, 1966-82

	1966	1974	1978	1982
Agriculture, Forestry	3	14	43*	57
Biological Sciences	{46	41	49	47
Health, Medical Profession	{	64	65	75
Business, Commerce	23	32	42	49
Education	68	73	77	74
Engineering	2	7	12	21
English, Journalism	{51	59	65	55
Other Humanities	{	48	56	53
Law	n.a.	23	32	43
Mathematics, Statistics	36	45	37	48
Physical Sciences	11	27	32	31
Social Sciences	38	44	51	54
Vocational Training	n.a.	n.a.	n.a.	30

Note: * includes Home Economics.

Source: calculated from crude data in the *Statistical Abstract of the United States*, 1982-83 and 1984.

Also, they almost break even with men in Medical and Health Related Science ($\cong 48.5\%$). In addition, they have a score of 25% or more in the following fields of study: Law ($\cong 39\%$); Social and Behavioural Science ($\cong 46\%$); Commercial and Business Administration ($\cong 30\%$); Natural Science ($\cong 32\%$); Mathematics and Computer Science ($\cong 25\%$); Agriculture, Forestry and Fishery ($\cong 31\%$); and "Other" ($\cong 45\%$). Indeed, British women score less than 10% in only Engineering and Transport and Communications.

The West German ratios are roughly similar to the UK's but there are some significant variations. For example, in the Service Trades German women score more than 75% ($\cong 93\%$ in 1979) and in Medical and Health Related Science almost two-thirds but in Mass Communication and Documentation the score is less than a half ($\cong 48\%$). Moreover, West German women score more than a quarter in Architecture and Town Planning ($\cong 31\%$). Finally, West German women score less than 10% in the same fields as the UK (Engineering $\cong 5\%$; Transport and Communications $\cong 0\%$) as well as in Trade, Craft and Industrial Programmes ($\cong 9\%$).

Since 1978, US women have not scored less than 10% in any field of study. However, the classification here is not as detailed as that for the other four nations. Given this qualification, US women score significantly in: Agriculture and Forestry (=57%); Health and Medical Profession (=75%); Education (=74%); English and Journalism (=55%); Other Humanities (=53%); and Social Sciences (=54%). In addition, they score reasonably well in: Biological Sciences (=47%); Business and Commerce (=49%); Law (=43%); Mathematics and Statistics (=48%); Physical Sciences (=31%); and Vocational Training (=30%). Indeed, in 1982, the lowest percentage recorded was in Engineering, but this was just over one fifth.

This information is very revealing indeed since it seems to suggest that women in Japan enrol (or that their social circumstances only allow them to enrol) in subjects related to domestic life, education and medical care. In West Germany, the UK and the USA, although women are poorly represented in general, they apparently enrol for subjects which hold a variety of occupational prospects, more so in the UK and the USA than in West Germany as evidenced in: Law; Mass Communication and Documentation; and Agriculture, Forestry and Fishery. Hence, crude as they are, the statistics seem to substantiate what one would expect: women in Japan generally receive education which is expected to make them good housewives, school teachers or nurses (all three reinforcing the role of a *good* housewife) and very little else. But the statistics also suggest that British and American women are generally more career orientated in their education than West German women; whether or not this should be expected on *a priori* grounds, it is difficult to say: "Catholic/Protestant Sentiments" seem to be equally prevalent in both the USA and West Germany, not so in the UK, but this will explain the position of the UK relative to both West Germany and the USA, without helping to clarify the relative position of the latter two.

Teaching

Let us now turn to a consideration of women as a percentage of all teachers during the period from 1970 to 1980. This information is given in Table 5.

Prior to the first level of education women dominate the teaching profes-

Table 5 Women as a percentage of Teaching Staff, Average 1970/80

	Prior to First Level	First Level	Second Level	Third Level
France	100	65	60	n.a.
W. Germany	n.a.	62	41	27
Japan	88	57	26	14
UK	n.a.	78	49	n.a.
USA	47	83*	47**	26

Notes: * Elementary level

** Secondary level

Sources: UNESCO, *Statistical Yearbook*, 1983, and calculations on basic data from *Statistical Abstract of the United States*, 1984.

sion in France (100%) and Japan (88%) but not in the USA (47%). Unfortunately, equivalent percentages are not available for West Germany and the UK but one would expect women to dominate in these countries, particularly in the UK where the percentage may be as high as 99%. Hence, on the whole, it would seem that women dominate the teaching profession at this level. Again, this should not be surprising since most societies would equate a good teacher at this level with a *good wife*.

At the first level of education women also dominate the field in France, West Germany, Japan, the UK and the USA. The highest score here is for the US women and the lowest is for the Japanese women who are just above the break-even point with their male counterpart.

The picture is different at the second level of education for West Germany (41%), Japan (26%), the UK (49%) and the USA (47%). In France women continue to dominate with 60%. Of the five countries considered Japanese women fare worst since they are reduced to about a quarter of the profession at a time when they actually dominated the field of study which is relevant to this occupation.

At the third level of education, the percentage of women teachers is very low indeed: 27% in West Germany; 14% in Japan; and 26% in the USA. It is a pity that France and the UK do not have such data, but the position of the UK can at least be clarified by examining such ratios at the university level.

Table 6 Ratios of Female/Male University Teachers, Selected Years

		Women as % of Men	
(i)	Japan (1983)		
	(a) University Academics		
	Professors	4.0	
	Associate Professors	6.8	
	Lecturers	10.4	
	Assistants	13.8	
	Total	8.4	
(ii)	UK (1978 and 1979)	(1978)	(1979)
	Professors	2.0	3.0
	Readers/Senior Lecturers	6.1	6.0
	Lecturers	13.3	13.0
	Other	28.8	—
	Total	11.5	10.0
(iii)	USA (1978/79)		
	Professors	6.0	
	Associate Professors	13.2	
	Assistant Professors	25.4	
	Instructors and Other	45.5	

Sources: Equal Opportunities Commission's *Women in Universities*, 1983; M.B. Sutherland's *Sex Bias in Education*, 1981 (Oxford: Basil Blackwell); and Prime Ministers' Office, 1983 *Statistical Handbook of Japan*, 1982 (Tokyo: Statistical Bureau).

This information is given in Table 6 where it is clearly shown that women as a percentage of university staff not only fare badly generally but also fare worse at the top of the professional scale: 4% as against an average 8.4% in Japan; 2–3% against 11.5–10% in the UK; and 6% against about 26% in the USA. Of course, in a cross-country comparison, these ratios are not equivalent since the British structure is very different from the similar American and Japanese structures (see Appendix). Given this qualification, the ratios show that women score, across the board, relatively better in the USA than they do in Japan and the UK. Also, that Japanese women score slightly better than British women at the level of professor and Associate professor but the reverse

is true at the level of Lecturer. This latter point is interesting since it implies that Japanese women who choose an academic career persevere with it; the average Japanese woman quits work at the age of 25.

The Communist Experience

It would have been illuminating to contrast the experience of these advanced Western nations with that of a particular member of the Communist bloc since such a country would subscribe to Sex equality both in educational terms and in job opportunities. This is not possible since no single country within the Communist bloc publishes information equivalent to that used in this article. However, one can make a few general statements; these are borrowed from Sutherland (1981):

(i) In the USSR, the percentage of women studying medicine and natural sciences in higher education is notably higher than in the European countries (p. 55).

(ii) In East Germany in 1974, 68% of medical students at first level of higher education were women and 44.6% of students in the Science faculties (p. 68).

(iii) In East Germany in 1974, 44% of industrial workers, 38% of other "productive" workers, 46% of doctors and 45% of dentists were women (p. 148).

It would therefore seem that women get a better deal in the countries of the Communist bloc than they do in the West.

IUJ's Position

Since this is *The Bulletin of the Graduate School of International Relations*,

Table 7 Academic Staff at IUJ: Total and Sex Distribution at the End of 1985

	Total	M	F	F as % of M
Professor	13	13	0	0.0
Associate Professor	4	3	1	25.0
Assistant Professor	8	7	1	12.5
Lecturer/Instructor	4	2	2	50.0

International University of Japan (IUJ), the reader may be interested to learn about the "sex" ratios for the Academic staff of such a "unique" Japanese academic institution. The figures are given in Table 7.

It would therefore seem that, at the full professorial level, IUJ fares worse than the whole of Japan. However, IUJ is, at the same time, less biased against women at the lower levels of the scale with the least level representing *equal* opportunities for both sexes. Given that promotion is the norm, it would seem that IUJ, as a whole, will in the near future become one of the leading Japanese academic institutions in terms offering equal opportunities for both sexes.

However, IUJ's position is appalling at the recruitment level since it has admitted only four Japanese women since its inception: this amounts to less than 3% of IUJ's total Japanese intake.

Conclusion

This paper utilised abstract data to detect Sex bias in education in five advanced nations who are members of the OECD. These were briefly contrasted with the experience of some countries of the Communist Bloc. The conclusion is that Japanese women seem to receive education which essentially prepares them to become good housewives while the British, West German and US women seem to get, with varying degrees, a wider education with wider professional prospects. Women in the Communist Bloc seem to get a better deal than British women who in turn get a better deal than West German women. The French case is not so certain due to lack of detailed information while the US women seem to occupy a place somewhere between the British and West German positions. However, there is an interesting twist to this general conclusion in that the Japanese women who do stay with the profession at the University level seem to get a less unfavourable treatment than British women.

The most interesting observation, however, is that, *on the whole*, the general educational pattern and its opportunities for women seems to point out towards Japan as the "black sheep of the family" within the OECD. Could this be one of the reasons why Japan has frictions, albeit trade frictions, with the rest of the OECD?

One should, of course, be extremely cautious about the appropriate inter-

pretation of the figures used in this paper: it could very well be the case that women fare so badly simply because society does not encourage them and that they fare worst at the top level simply because they do not stay in the professions long enough; it could equally well be argued that it is the discrimination against women that makes them leave the professions in the first place or that they leave to become housewives as a deliberate decision on their part. These, and other possibilities, would require a serious and extensive sociological research but one fact is certain: women fare badly relative to men in the third level of education in all the five countries considered in this paper.

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APPENDIX

The appendix concentrates on the "peculiarities" of British universities. However, it is stated, either explicitly or implicitly, that what is "peculiar" to a British university is more or less lacking in US or Japanese universities, particularly since the Japanese system is modelled largely on the US system. The French and West German systems are different from both the British and US/Japan systems, but, on the whole, they are nearer to the US than to the British system.

The British University System

It is impossible to adequately explain the British university system in such a limited space, so I shall confine myself, at the risk of oversimplification, to its most salient features.

Until recently (the change is due to the very high level of unemployment

and the severe cuts in the universities' budget), every academic and technical job was available only to the best of the most qualified candidates, irrespective of his/her country of origin. Even now, every "senior" position is open to international competition, but jobs at the lower end of the scale are not so open. However, one should hasten to add that there are not so many junior posts, hence the universities' concern regarding a missing generation of young academics, although the government has approved a small budget for "new blood" appointments. (Incidentally, it is the combination of severe cuts in education, high fees charged to overseas students and serious attempts by the government to discontinue the system of permanent tenure which has led Oxford University to decide not to award an honorary doctorate to Prime Minister Thatcher, a traditional gesture which Oxford University has extended to any of its graduates who has become a prime minister, except in the case of the late Bhutto of Pakistan due to certain of his political deeds in his country.) This policy of "open competition", has resulted in a very high proportion of foreign to domestic staff, and I am referring to *permanent* staff, not those on fixed-term contracts. It is no exaggeration to state that about a third of the "senior" staff is foreign, and this figure does not include foreigners who have become naturalised Britons.

A similar situation applies to the student population since each university recruits the best candidates irrespective of nationality. There is the fee differential which is heavily weighted against overseas students (and an English proficiency requirement) but this, in spite of its inequity, should not distract from the fact of true competitiveness within the UK. Students are admitted on the basis of their school reports, performance at the "A" level and interviews with the universities of their choice. The "A" level examinations are standardised in the sense that they are organised by a Board which is independent from the universities, and their academic standard is roughly equivalent to a third year undergraduate level at an average US university. School reports have, on the whole, to be corroborated by "A" level results, but in some cases they may be the main deciding factor particularly when they stress the candidates' technical competence and, most importantly, originality in work and discussion. Students stay at British universities for three years before they graduate after intensive academic studies in their field of specialisation. Hence, they are highly qualified by

the time they graduate. That is why a British M.A. takes between 9 months and one calendar year to achieve. A student's performance is assessed by his/her technical competence, original thought and constructive discussion of the most positive type, i.e. negative discussion is frowned upon. Those who hope to attain a first class degree must not only get their facts and technical methods right, they have to demonstrate a great deal of originality, hence personal study and thinking is of the utmost importance. These qualities are judged by performance at the tutorial, seminar and public discussion levels, in addition to examinations, not by attending lectures. Indeed, lectures are not compulsory, while tutorials are a must, and a good lecture is one which provokes thought and discussion.

Academic and technical staff are promoted on the basis of their contribution to research, teaching and administration at both the departmental and university levels. There is a strict quota of 40% "senior" staff, hence promotion (to senior lecturer/reader) does not simply depend on the candidate's achieving the necessary standards, rather on being ahead of the rest within the qualified group. Moreover, each department will have, usually, only one professor; some "schools" (these are effectively a grouping of several disciplines, like IUJ, or departments) have 3 or 4 and rarely 6 or 7, but some of these will be "personal" professorships. Let me explain this: a professorship is advertised in the manner indicated above, hence it is open to international competition, but some highly distinguished academics who choose to stay in the same university may be considered for "personal chairs", the assessment of their quality being made by an average of twelve *eminent* professors in the field from all over the globe. Hence, a professor in a British university is a *unique* animal who assumes the major task of *academic leadership*.

Research is judged in terms of publications in internationally recognised journals (those with both a distinguished editor and editorial board and whose publications are favourably refereed by at least two specialists in the field) and by their favourable citation by distinguished international academics. Hence, there is no place for journals which are published by departments for their own papers—some may give this impression, for example *Oxford Economic Papers*, but a glance at this distinguished Journal will show that the articles

from Oxford University are no more than one in fifty, that *all* papers are properly refereed, that it has a "permanent" editor and an outstanding editorial board.

Given this general background, it should not come as a surprise to learn that the average British-born professor does not possess a Ph. D. This is due to the highly specialised nature of British education and to the emphasis on the quality (not quantity) of research publications. Postgraduate degrees do not matter, since they are only indicators of "potential", when it is the actual output (research papers in distinguished academic journals), the end result, that does matter. Indeed, in certain subjects a Ph. D. is treated with suspicion since it implies that the candidate had to obtain one in order to compensate for a lower class "first" degree. In the US, the nature and quality of the average "first" degree inevitably leads to the requirement of a Ph. D. before anyone is to be considered as a serious candidate for an academic position. This difference between the US and British systems is so well recognised in the US that a large number of British educated outstanding professors there have no more than a "first" degree, and when it comes to Nobel Prizes, the British are, in per capita terms, at the top of the league.

Moreover, British universities are highly interdependent. This is because British academics are highly mobile (you can see from the above that one's chances of becoming a professor are greatly enhanced if one is prepared to move), and still are, despite the huge cuts in the universities' budget. The average academic will have taught at a minimum of 3 or 4 universities by the age of 40. Academics are, therefore, very well acquainted with most other British universities. A second factor which promotes this interdependence is that staff seminars (the equivalent of a colloquium at US universities) are normally devoted to papers given by academics from other universities, and the quality of discussion here makes or breaks a department and the individuals who belong to it. Moreover, the British depend heavily on a system of "external examinations": all degree examinations depend almost entirely on the judgement of examiners from "other" universities; for example, my own School of Economic Studies, University of Leeds, has about 12 external examiners coming from an equal number of British universities. Also, external examinations are normally for a period of four years and most professors (occasionally, other "senior" staff)

who do this job are usually employed by more than one university. Hence, there is a system of rotation which ensures that the quality of degrees is standardised. In the case of doctoral dissertations, the external examiner's word is final and the internal examiner is rarely the supervisor of the thesis: the candidate should defend his/her thesis and there is no place for the supervisor. Another point is that most subject groups have frequent and well organised meetings in which they discuss their latest research before it is seen in journals. The "International Economics Study Group" to which I belong meets, at the LSE, four times every term and has two conferences every year, and like all other fellow academics, I belong to more than one group. Also, each academic subject has its own annual conference. Note that in both of these, an academic's standing depends entirely on the quality of his/her papers, and, most importantly, on the quality of his/her positive contribution to other colleagues' papers. Hence, an academic takes his/her paper to a conference or "group" to benefit from the contributions of critical minds and to make use of their suggestions. Finally, it is important to add that all British universities, except Buckingham (Britain's only private university), get their funding and academic guidance from a body known as the UGC (Universities' Grant Committee) which acts as a buffer between the government and the universities: the UGC receives money from the government and allocates this between the universities for both staff salaries and equipment and furniture. The allocation is accompanied by strict supervision and guidance which ensures that the quality of the 40 or so UK universities is the same, since the UGC is composed mainly of distinguished academics and very few administrators. I should hasten to add that, provided standards are maintained, each university is free to do whatever it wishes. To conclude this section, I should reiterate the fact that interdependence is ensured by a common award granting body which sees to it that the standard of British universities is maintained across the board, and this is reinforced by the activities of the "external examiners".

If all these activities are meant to ensure that the quality of a university degree is standardised, why is it that some universities are considered to be more distinguished than others? The answer is simple since what differentiates universities is basically either "tradition" or a high concentration of "senior"

academics, for example, Oxford and Cambridge are distinguished simply because their "tradition" has ensured that they get a large concentration of the most able students, and the LSE is recognised as the most distinguished School of its type in the world simply because it has a large number of "top" academics, made possible by generous private grants. But, what is important for our purposes, is that British universities are truly international because of their emphasis on "open competition", discussion and high quality research. However, the most significant element is the "discussion" at the student level (see above) and the staff level in seminars, "group meetings", conferences, etc. Indeed, discussion is so vital that it used to be the case that distinguished academics published very little since they were so busy explaining their theories and ideas to and discussing them in meetings that they had no time to put pen to paper—this practice led to the term "oral tradition", where ideas circulated orally, which was very prevalent in Cambridge University.

However, what should be emphasised for the purposes of this paper is that a British "first" degree is a very different animal from the Japanese/US "first" degree and that the structure of the British academic profession is not comparable with that of Japan/USA since those designated as "Senior Lecturers"/"Readers" in the UK will readily pass as *full* and *well-established* professors in any *distinguished* Japan/US university.