

CHAPTER I

INTRODUCTION

1. The object

The object of the survey has been outlined by the Chairman of the Appointments Board's in the foreword to this report. The Board asked us to enquire into the present occupation of Cambridge graduates of 1952 and 1953, the levels of responsibility and the salaries they have attained, the satisfaction they derive from their occupations, and how they have progressed to their present positions. The Women's Appointments Board were also interested in the availability of married women graduates for work, in particular those who might be willing and able to return to work after a period occupied with domestic responsibilities. Questionnaires were sent out during July and August 1961, so that our information about the "present" relates mainly to the later part of 1961.

2. The sample

The Board had given careful thought to the question of the age of the graduates to be included in the survey. They wished them to have had sufficient time to become established in their work, to find out for themselves what was entailed by work in various fields, and to rectify if necessary any false starts. On the other hand they should be young enough to give the present generation of undergraduates some idea of what prospects lay ahead, in the not too distant future, in the various fields of work. Graduates of 1952 and 1953 seemed to be a good choice. Most of them would have done National Service either before or after graduation, but there would be few, if any, older men with war service. They would now mostly be in their early thirties, and would have started work long enough after the end of the war for conditions of employment to be fairly normal. Many of them would have had 8 or 9 years at work; long enough to become established in their careers, but not too long to remember the main events of their working lives.

The women graduates chosen were those of the same two years and also those of 1937 and 1938. The latter were included with the particular object of investigating the position of married women in their forties who might be available for work after the most pressing demands of young children were relaxed. In both groups, graduates of two successive years were chosen in order to obtain a reasonably large sample, fairly homogeneous in respect of age.

Completed questionnaires were received from 2630 men and 494 women. This represents 70% of all the men and 80% of all the women graduates on the College lists for the appropriate years; it is 83% and 90% respectively of those whose addresses we could trace. (Up-to-date addresses were not available for a number of graduates.) The questionnaire, response, and the reliability of the information are discussed in some detail in Appendix I.

3. Presentation of the results

The members of the sample have one characteristic in common; they are all Cambridge graduates. Otherwise there are fundamental differences in the sample which are relevant

THE EMPLOYMENT OF CAMBRIDGE GRADUATES

to the kind of work they were doing, and which have determined the way in which we have presented the results of the enquiry. These are sex, country of origin and place of work. 84 of the women, mainly nationals of the United Kingdom, were married, and living overseas by virtue of their husband's jobs. There were 434 men living overseas; the majority of these were British nationals, but they included 85 Commonwealth and foreign nationals who came to the United Kingdom for their University education and then returned to their own countries to work.

Nothing is said in Chapter II about the 85 men of Commonwealth and foreign nationality who have returned to their country of origin. These were excluded because their general background was so different from that of the United Kingdom nationals and could not be discussed in the same terms. On the other hand, they were too heterogeneous a group to be considered separately.

At the beginning of Chapters III and IV, the current employment status of the women and their overall earnings are given in order to show how they compare with the men. The rest of the material reviewing the experience of the women after leaving Cambridge has, however, been presented separately in Chapter VII. The two questionnaires did not cover quite the same ground, and much of the information we asked for from the women did not apply to the men.

Most of the results given for the men relate to those working in the United Kingdom at the time of the survey. The men working outside the United Kingdom had been overseas for very varying lengths of time, employed in a variety of ways, and it was not always possible to distinguish those who were permanently overseas from those who intended to return to the United Kingdom at some time in the future, nor those employed by firms or organisations in the United Kingdom from those in professions or businesses with no direct connection with the United Kingdom. We therefore decided to present the information relating to the men in the United Kingdom independently, and outline in a separate chapter the main differences in overseas working conditions.

The following summary shows which graduates are discussed in each chapter.

- Chapter II. The graduates' background. All women and men except the 85 men of Commonwealth and foreign nationality who have returned to their country of origin.
- Chapter III. Current employment. The general position is shown for both men and women graduates. The employment of the men working in the United Kingdom is then discussed in some detail.
- Chapter IV. Earnings and satisfaction of men working in the United Kingdom. Earnings of women working full-time in the United Kingdom are also shown for comparison, but are given in more detail in Chapter VII.
- Chapter V. The past and the future. Men working in the United Kingdom. First appointments, changes of employer, and expectations for the future.
- Chapter VI. Men working overseas. A brief review of the kind of employment and of earnings.
- Chapter VII. The women graduates. Current employment position and the availability for work of those not working in paid employment at the time of the survey.
- Chapter VIII. Summary.

INTRODUCTION

4. Some definitions

Career is used as a convenient term to describe a way of making a livelihood, not necessarily progress up a particular ladder or within a particular occupation.

Progress is used to describe a succession of events in the graduate's working life, and does not necessarily imply a series of stages of promotion.

Several men objected to both these terms, on the grounds that they implied an assumption that all men had, or should have, a specific occupation with recognisable stages of promotion. We wish to emphasise that we make no such assumption.

Unemployed is used to describe those not working in *paid* employment. Some of the 'unemployed' men were engaged in full-time study, and most of the 'unemployed' women were fully occupied with domestic and voluntary work.

Employment group. This refers to the employer, or the business or practice in which the graduate was working, and the heading does not always indicate the type of work. For example, a lawyer working in a private solicitor's practice as a partner or a salaried employee is classified under the heading 'Private legal practice'; a solicitor working as a legal advisor to a manufacturing company is classified under 'Industry', and one employed as town clerk to a local authority is classified under 'Local government'. (Table 15 in Chapter III shows the type of work within the various employment groups for all United Kingdom men.)

The employment groups are based on the Standard Industrial Classification (Central Statistical Office, 1958) with slight modifications in the grouping of individual types of employment under main headings. The content of the groups used in this report is as follows:

Agriculture

Farming, estate management, forestry and horticulture.

Industry

- (a) Mining and quarrying
- (b) Manufacturing industry
- (c) Construction, including civil engineering contractors
- (d) Public utilities (gas, electricity and water)
- (e) Transport and communications

Commerce

- (a) Distributive trades
- (b) Insurance, banking and finance

Private professional practices

- (a) Accountancy
- (b) Law (barristers and solicitors)
- (c) Other private practices and services
 - (i) Civil and other engineering consultants
 - (ii) Architects
 - (iii) Estate agents and surveyors
 - (iv) Advertising agents
 - (v) Management consultants
 - (vi) Other

THE EMPLOYMENT OF CAMBRIDGE GRADUATES

Medicine

- (a) General practice; private and National Health Service
- (b) Hospitals, hospital boards and management committees

Education

- (a) Schools
- (b) Universities, technical colleges and institutes, teacher training colleges, theological colleges

Research establishments

- (a) Industrial research associations and independent establishments whose activities are mainly or wholly research and development. Research and planning departments which form part of manufacturing concerns are classified under 'Industry'.
- (b) Government and Government sponsored research establishments and institutes. These include units administered by the D.S.I.R., the Medical Research Council, and the Agricultural Research Council
- (c) The United Kingdom Atomic Energy Authority

Government service

- (a) The Civil Service. All members of the administrative civil service and the Foreign Service. Technical, professional, scientific and specialist civil servants, other than those classified under Government research institutes
- (b) Local government. All local authority posts other than those in schools and further education.

Journalism, arts and entertainment

Newspapers and publishers (free-lance journalists and authors are included), theatre, films, radio, television, musicians and artists, etc.

The Church

Ministers of religion of all denominations, excluding those employed in, and classified under, schools, universities or one of the armed forces

The Forces

All members of the Royal Navy, Royal Air Force and the Army, including chaplains and doctors. National Servicemen are included.

Miscellaneous

All types of employment not elsewhere specified; including catering, trade associations and business services, political organisations, welfare and charitable organisations, and the head offices of enterprises operating abroad.

Earnings. We use the term 'basic earnings' to refer to annual salary or earnings excluding the value of any allowances or fringe benefits, and 'total earnings' to refer to salary plus the value of any additional emoluments. These are explained in more detail in Chapter IV.

Median and quartile earnings. When the earnings of a group of people are listed in order of magnitude, the median is the middle value, with as many above as below. It is unaffected by extreme values at either end of the distribution, whereas the arithmetic average may be considerably affected by a few extreme values. In this group of Cambridge graduates some occupation groups contained a small number of people earning very much more than the rest, so that the median values are generally more typical than the averages. The lower quartile is a figure of annual earnings such that one-quarter of the group earn less than this amount; the upper quartile gives the figure which is exceeded by one-quarter. The differences

INTRODUCTION

between the lower and the upper quartiles (the inter-quartile range) shows the range of earnings of the central half of the group.

We review the graduates' current earnings in Chapter IV, where we give tables showing the average, median and quartile earnings in various groups. We use this form of presentation as a convenient summary of the central tendency and spread of earnings in each group. Distribution tables are also used to give greater detail of the whole range. Figures for average, median and quartile earnings should be treated with caution when dealing with very small groups, when a few atypical figures may considerably affect the results, and it is in any case difficult to decide what is 'typical'. No average or median values have been calculated for less than 20 graduates.

5. The tables

The number of graduates answering each question was not always the same, so that the totals may differ from table to table. When the figures are given in percentages, these are usually percentages of the known total, i.e. of the number of graduates answering that question. In cases where we have included the unknown values in the total, these are shown in the tables. The percentages have been rounded to the nearest whole number, and significance should not be attached to small percentage differences, particularly in small groups. A group which contains some graduates, but less than 1% of the total, is indicated by the symbol \emptyset .

CHAPTER II

THE GRADUATES' BACKGROUND

It is perhaps obvious that no survey of this kind can show how far people and events are influenced by differences in personality and temperament, but it is worth emphasising that these intangible factors are sometimes as important in determining the course of a graduate's career as his qualifications. It is, however, largely his educational background and academic qualifications that determine which fields of employment are open to him. This chapter reviews the graduates' background and qualifications; subsequent chapters compare progress and opportunities in various fields.

The data given in this chapter refers to all the graduates except the 85 men of foreign and Commonwealth nationality who returned to their country of origin after completing their studies. The other graduates now resident overseas are included here, since for most of them the decision to leave the United Kingdom was taken after they had finished their education.

i. The general background

Most of the 1952/53 graduates were born between 1928 and 1932, and much of their time at school was during the Second World War. They left school between 1945 and 1950,

TABLE I. *Age Distribution*
 (Percentage of each group)

Age	1952/1953		1937/1938	
	Men	Women	Age	Women
27-29	6	18		
30	16	44	44	12
31	28	28	45	38
32	30	4	46	32
33	14	3	47	15
34-39	5	2	48 and over	3
40 and over	1	1		
Total percentage	100	100		100
Total number of graduates	2630	284		210

just after the Education Acts of 1944 and 1945, and came up to Cambridge in 1949 and 1950. The men were liable for National Service, which most of them did before coming up, although a number were deferred until after graduation. A small number of older men had some war service, and came up to Cambridge when they were in their thirties.

Most of the 1937/38 women graduates were born during the First World War, between 1914 and 1917; they left school in the early thirties and came up to Cambridge in 1934

THE GRADUATES' BACKGROUND

and 1935, graduating a year or two before the outbreak of the Second World War. Many of them therefore spent their early working years in war-time conditions.

At the time of the survey 94% of the 1952/53 graduates were aged between 29 and 33. There were 89 men over 35, most of whom had either taken a degree at another University or been in the Forces before coming up to Cambridge. The women graduates of 1952/53 had a slightly lower average age than the men, since most of them had come direct from school to university, whereas the majority of the men had gone from school to National Service. Most of the 1937/38 women graduates were in their forties at the time of the survey.

2. Home background

Home background is indicated in very general terms by grouping father's occupation into Social Class Categories.* These are very broad groups, whose main value in this context is in distinguishing Social Class I (occupations requiring professional qualifications) and Social Class III or below (manual and lower grade non-manual occupations). Social Class II covers a very wide range of mainly non-manual occupations, appropriately described as 'Intermediate', and would include most of the people who might describe themselves as middle middle class. Members of the Armed Forces are excluded from this classification and are shown separately in Table 2.

TABLE 2. *Father's Occupation*

(Percentage of each group)

	Social Class Category	1952/1953		1937/1938
		Men	Women	Women
I	Professionally qualified	28	28	42
	Armed Forces: Commissioned ranks	5	5	4
II	Intermediate: Managerial, executive, higher grade non-manual	50	52	45
III	Skilled manual and lower grade non-manual	14	14	8
IV & V	Semi-skilled and unskilled manual	2	1	1
	Not known	1	—	—
Total percentage		100	100	100
Total number of graduates		2545	284	210

This shows the predominance of the middle classes, with over a quarter of all the graduates of both sexes from homes in the professionally qualified classes, less than a fifth from Social Class III or below. More of the pre-war graduates came from the professional classes, under a tenth from Social Class III and IV.

3. Type of school

Two-thirds of the men came from independent schools. These have not been further categorised, but almost all were independent schools belonging to the Head Masters' Conference. It is interesting to compare the lower proportion of women from independent

* General Register Office, Classification of Occupations 1960. H.M.S.O.

THE EMPLOYMENT OF CAMBRIDGE GRADUATES

schools in both age groups. There is probably more than one reason for this difference. One might be the view, common in many families, that a 'good' education is less of a necessity for girls than boys, and if there is a choice between the children, the boys should be given priority. This would result in fewer of the potential women undergraduates going to a public school in the first place. It is also probable that girls at public schools used to

TABLE 3. *Type of Secondary School*

	1952/1953				1937/1938	
	Men		Women		Women	
	Number	Per cent	Number	Per cent	Number	Per cent
Independent school	1557	61	119	42	112	54
Direct grant grammar school	298	12	49	18	47	22
L.E.A. grammar school	597	24	91	32	42	20
Foreign school	39	1	12	4	9	4
Not known	54	2	13	4	—	—
Total	2545	100	284	100	210	100

be less university minded than their brothers, fewer of them thinking of a university education as an essential preliminary to a career. The legend of the unfeminine university bluestocking dies hard, and is perhaps still not entirely dead.

After leaving school most of the women went straight to university, but nearly three-quarters of the men had a gap of over a year.

TABLE 4. *Time between leaving School and coming up to Cambridge: Men*

	Number	Per cent
Under 3 months	431	17
3 months—1 year	258	10
Over 1 year up to 2 years	1346	53
Over 2 years up to 3 years	337	13
Over 3 years	157	6
Not known	16	1
Total	2545	100

The majority—66%—spent the time in National Service, and a few (63 men) had 3 or more years in National Service or War Service. 60 men had spent 2 or more years at another university, 73 did shorter periods of study, mostly working for scholarship examinations. 250 spent some time in paid employment, mostly for a year or less, but a few for a longer period.

4. National Service

We were interested to see if the men felt that the time they spent in National Service had had any bearing on their subsequent careers. There was no evidence that it made any difference to their choice of subject when they came up to Cambridge. Excluding those who

THE GRADUATES' BACKGROUND

intended to study medicine, 32% of the National Servicemen read engineering, science or mathematics, and 68% other subjects, as against 33% and 67% of those who had a time gap not due to National Service, and 34% and 66% of those who went straight to Cambridge from school. Those who came up to read medicine (194 men) had nearly all made their choice before or shortly after leaving school, and less than a third of them did National Service before coming to Cambridge.

TABLE 5. *Scholarships and other Awards*

(Percentage of each group)

	1952/1953		1937/1938
	Men	Women	Women
School open scholarship	3	1	5
College entrance open scholarship	18	14	20
State scholarship	6	20	8
State plus college entrance scholarship	7	7	10
Other open university scholarship	1	1	1
Closed scholarships (school and university)	3	2	6
L.E.A. award	18	27	3
F.E.T.S. award	12	—	—
Other awards	4	2	2
No award	28	22	45
Not known	—	4	—
Total percentage	100	100	100
Total number of graduates	2545	284	210

Question 10 asked the men to say what they did in any gap between leaving school and coming up to Cambridge, and then asked 'What, if any, bearing did this have on your subsequent career?' In answering this question, most of the National Servicemen said that their time in the Forces had no direct bearing on their subsequent choice of career. There were a few who said that their experience made them resolve not to go into the Forces after graduation and also a small number who were sufficiently attracted by Service life to return to the Forces after graduation, or, in the case of a few whose National Service was deferred until after graduation, to transfer to a short service or permanent commission. Many felt, however, that their service had matured them and made them more able to benefit from university life, and given them experience of mixing with different kinds of people which was valuable later on. On the other hand there were also quite a number who felt they suffered a set-back through the break in their studies, and found university work harder in consequence.

5. Scholarships and awards

About three-quarters of the 1952/53 graduates, both men and women, came up to Cambridge with some kind of scholarship or grant, but only just over half the 1937/38 women, the difference being due to the smaller number of State and L.E.A. awards given before the war. The main types of award are shown below (Table 5). Several graduates

THE EMPLOYMENT OF CAMBRIDGE GRADUATES

had more than one award; those who gained both a state and an open college or university scholarship are shown separately in Table 5; in other cases only one award has been recorded, open scholarships being coded in preference to closed scholarships, L.E.A. grants or grants given under the 'Further Education and Training Scheme' for ex-Servicemen.

TABLE 6. *Scholarships and other Awards, by Type of School: Men*

(Percentage in each type of school)

School	All open and State scholarships	All closed scholarships	L.E.A. awards	F.E.T.S. awards	Other awards	No award	Total
Independent	29	3	14	11	3	40	100
Direct grant	54	3	25	9	3	6	100
L.E.A.	53	1	29	7	4	6	100

A higher proportion of boys from non-independent schools gained scholarships. This is not unexpected, since most of the grammar school boys would not have been able to afford to come to Cambridge without an award of some sort.

Looking ahead to the Cambridge degree examinations, there is also evidence that more graduates from non-independent schools reached a higher academic standard.

TABLE 7. *Class of Degree by Type of School: Men*

(Percentage in each type of school)

School	Degree Class				Total
	1st	2nd	3rd	Ordinary	
Independent	7	55	31	7	100
Direct grant	11	67	21	1	100
L.E.A.	12	66	18	4	100

6. University subjects

Rather more than half the men read for an arts degree, about a third for a degree in science or mathematics, and the remainder for a degree in engineering, agriculture, estate management or architecture. A rather higher proportion of the women read arts subjects, and very few read engineering, agriculture, estate management or architecture.

This gives the general picture, but there are differences within the subjects shown in Table 8 which need some explanation. First, there are differences in the level of specialisation in the science, mathematics and engineering subjects. For example, science includes three groups, (a) those who spent three years on part I of the natural sciences tripos, (b) those who passed part I in two years and spent a third year on a different subject, and (c) the more specialised scientists who passed part I in two years and went on to specialise