Signs of Disintegration:
A Report on UK Economics PhDs and ESRC Studentship Demand

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Summary

Few British people want to be academic economists. Neither the London School of Economics nor Nuffield College (Oxford), for example, had any British person in their incoming October 1998 PhD programmes. We conclude that low pay is probably the main explanation. Although our data are imperfect, over the last ten years the earnings of academic economists appear to have fallen behind those of private-sector economists by approximately 20-30%. It is also widely believed that working conditions have worsened in our universities. Remarkably, only 6% of the UK students on current economics masters courses say they want a university job. Raising the grants to PhD study in economics would help a little, but cannot solve the underlying problem. Demand from EU students is fairly strong because UK universities still have prestige and because it is cheaper to learn here than in the United States. We are not optimistic about the near future, but expect that, in the long run, a class of very highly paid academic economists will emerge. How quickly this happens depends partly on the country's Vice Chancellors. It may take decades. In the short-run we expect the quality of UK academic economics to fall.

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Final Report: February 10 1999

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I. Introduction

In recent years there has been a fall in the numbers of UK students entering PhD programmes in Economics. This report tries to establish the reasons. It examines pay structures, the employment destinations of young economists, and universities' problems of recruitment. This report considers what might be done. It also discusses Masters degrees. The report reflects on what these developments mean for the future of economics, as an academic discipline, in the UK.

It is useful to begin with some illustrative facts.

- The London School of Economics is one of Europe's most famous centres of research and training in economics and related disciplines. It is also one of the largest. In October 1998, LSE welcomed a new class of Economics PhD students. There was no Briton among them.
- Nuffield College in Oxford is, similarly, one of the most influential centres for social science research in Europe. It has trained some of the best-known economists holding chairs in current British departments. In October 1998, Nuffield also had no Briton starting on its doctoral programme in Economics.
- The University of Warwick admits some of the cleverest economics undergraduates in the country (this year the least-qualified entrant had 2As and a B). In 1998, the proportion going on to graduate work in economics reached the lowest level since records began. In the 1980s, 8 out of 10 of those with Warwick Firsts in economics proceeded to higher education somewhere in Europe or North America. This year the figure was 3 out of 10.
- The Economic and Social Research Council is the prime provider of funds to those wishing to do economics postgraduate work in the United Kingdom. Recently it has had difficulty finding enough strong students who wished to have economics studentship grants.[1] By

[1] In 1997 only 84 people applied for research studentships in economics (41 offers were made, of which 33 were taken up). This compares to 207 (40 offers, 38 taken up) in politics and international relations, 180 (41, 40) in psychology and 152 (36, 34) in sociology.

contrast, in the days when the writers of this report were young, these grants were allocated in an extraordinarily competitive way (this still remains true in other social science disciplines like sociology and politics).

British economics training therefore does not seem to be in an encouraging position. Moreover, although there has been some decline in demand for economics in other nations' universities, the position in this country is not entirely mimicking global trends. The chairman of the economics department at Stanford University in the US, for example, informed us that slightly more than half of the entering '98 PhD class are Americans.[2]

Journalists have taken an interest in the matter. An early article noting the problem appeared in The Guardian on March 17 1998. On May 9 1998 The Economist magazine ran a story on "The Dearth of Economists" in which it blamed the poor pay prospects in academic economics. It also summarised statements from Simon Gaysford of London Economics and Dieter Helm of Oxford Economic Research Associates (and from Andrew Oswald). The gist of the article was that the UK would not be able to educate the future generation of economists: there would be nobody left to do it. Gaysford argued that privatisation had increased the demand for consultant economists, bid up wages in that sector, and caused people to switch from academia. Helm was quoted as saying that academia was now less attractive than it used to be: he blamed paperwork, lack of research funds, and the absence of secured tenure.

The aim of this project has been to understand what is happening to UK postgraduate education in economics. A subsidiary aim has been to make suggestions about policy. We do not believe British economics is in crisis. But we do recognise that there are difficulties – perhaps quite severe ones – that are being stored up for the future.

Data on these issues are limited so our approach has been to blend different kinds of evidence. First, the report describes what people said to us in interviews. We spoke to researchers, teachers, students, career officers, economics consultants in the private sector, personnel officers, government officials and others. There is a consistent thread, and the most commonly mentioned problem is low salaries in academic economics jobs. Second, data of various kinds were gathered on pay and benefits since the 1980s. Relative pay compared to the private sector has declined. Other information, on the attractiveness of academic work, was collected. Third, we looked at formal statistical sources, including survey 'micro' data.

II. Interviews

The Number of New British PhD Students

One of us conducted a small 1996 survey of Britons beginning Economics PhDs in the top-ten departments. The survey showed that these departments were taking in about 1.3 Britons per year on average. This survey has been re-done for our report. The results are:

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[2] The Wall Street Journal recently reported that economics is now the most popular undergraduate major in the ivy league universities of the US. This in itself appears evidence against one argument we heard from non-economists – that economics may have had its day as an academic discipline.

Number of British students beginning PhDs in Economics in October 1998:

Bristol	2
Cambridge	3
Essex	2
LSE	0
Oxford	Not available, but zero for Nuffield
Southampton	1
Warwick	3
UCL	3
York	1
Nottingham	2

Thus it appears that top departments are continuing to average less than two new British PhD students per year. This will clearly be unable to replenish the country's stock of academic economists.

Trends in ESRC Economics Studentships

The ESRC's own data on applications for research studentships highlight the decline in interest from UK students in economics research. Figure 1 shows applications from the UK and EU for ESRC research studentships for economics alone, and the mean across all subject groups from 1991 to 1997. The graph shows the numbers of applicants relative to 1991. The application rate from economics remained fairly stable over the years to 1995, whilst applications in other subject areas grew quite considerably from 1992-94. Since 1995, applications to economics have declined, along with other subject areas, by around 15%. The relative position of economics in terms of applications from EU and UK students combined has fallen from 7.9% of total applications in 1991 to 6.7% in 1997.

However, this apparent parity with other areas of postgraduate social science research masks a decline in the number of UK economics applicants. In 1995, UK applicants for fees and maintenance awards represented 58% of the 100 total applications. By 1997 there were 84 applications of which only 38% were for maintenance and fees, that is 32 UK applicants. There were only 26 applications from UK nationals in 1998. Over the corresponding years, the share of UK students for all subject groups combined fell from 88% to 83%.

Table 1 and Table 2 give the figures for the years for which data are available. UK economics represented 4.4% of all UK applicants in 1995, but only 3.3% in 1997. Furthermore, for comparisons across social science disciplines the share of UK studentships is much lower in economics than in the other subjects, where the majority of awards are given to UK students.

Interviewing Those Involved

Detailed interviews were done with 21 well-informed individuals of different sorts (it became apparent that almost all said the same general things, so there seemed little point in going beyond this number – for background information on those we interviewed, see Appendix A). A questionnaire also went to UK departments. These results are discussed later in the report.

In the interviews, which were mostly face-to-face, we began from the same set of questions each time, and allowed the interviews to become more discursive as they progressed.

Here are some of the things we heard. The aim has been to be representative in a choice of quotes. We deliberately do not challenge them here: the purpose is to try to report what others think.

Question: The ESRC has realised that the flow of British people in to the country's Economics PhD programmes is now fairly close to zero. Do you have any information or views that would help us understand why?

> "Money. Morgan Grenfell offered a new graduate I know £28,000 plus car at age 21. It is not the pressure of life in universities that is putting people off; it is the lack of financial rewards."

> "It's not seen as rewarding. Pay is too low, relatively. A PhD is not viewed as a commercial prospect for those not going in to academia. But I think a PhD does much more good than many students realise; there are misperceptions. Also the internal environment has changed in the last few years – because of the Research Assessment Exercise. There has been a large fall in applied economists who can supervise students. The reason is that the RAE stresses 'big' journals, and that in turn means theory papers are emphasised. It is almost impossible to get UK applied work in the top journals. This fact drives students away from economics."

> "The fall in the numbers of economics undergraduates is the root cause. Economics is around the bottom of its cycle. It is seen as too difficult and divorced from reality."

> "Financial opportunities outside academia. Also we have lost control of our working environment compared to when I was a young lecturer – because of RAE and other pressures."

> "My view is different from the picture you paint. Our department finds that European MSc students are actually better than British ones, so I am not sure it is a huge problem, though there is certainly some difficulty for this country. The worry is that European students will simply go back home and build up their own programmes. Our country's problems are symptomatic of an inability to compete internationally."

> "Academic life simply is not attractive: the stress of the RAE especially. Students see that academics are very pressed for time. They see that there are better opportunities in the City for UK individuals."

> "Money. The status of teaching, also, has fallen in universities and more broadly in this country. The worst thing is that soon there may be pressure for us all to do teaching certificates. That will finish it! People will never enter the job then."

"Nationality is irrelevant at the end of the day. Being internationally competitive, in the academic sphere, is the key."

Question: Is it a problem and what should UK academic economics do? [almost everyone spoken to said it was a problem, so on this mainly dissenters' views on the first part of the question are included below]

"Raise pay. One of our young lecturers has just left to go to a job in the property sector down in London; he has doubled his salary and we can't compete. Maybe this doesn't happen to you at Warwick but at a university like this it does."

"In this firm we employ MScs and offer them interesting and well-paid jobs; the company doesn't attach much importance to a PhD in itself. Very good early to mid-30 year olds might earn £70,000 a year here. Academic salaries are too low to attract bright people. Universities are seen as offering a depressed and depressing environment. Look: there are nice offices here and colleagues are happy (…laughter)."

"Improve non-monetary rewards: it is now as stressed as life in the private sector. Things are actually going to get worse soon, because of increased debt levels among future undergraduate students."

"It hasn't been too big a problem here until recently, because we have been able to recruit a lot of good Italian students. In the long run it might be."

"Privatise universities! (laughs) Then money would follow students, so market pressure would count."

"This isn't a problem for us because we haven't been allowed to hire a lecturer for years! I've no idea what we should do. I am an economic historian and we saw the same downward trend about 15 years ago. Also it is worth noting that US undergraduate economics is similarly in decline, so it is not merely a UK phenomenon."

"It's a severe problem here. Perhaps at your university it's not such an issue but at a low-ranking new university like ours we are facing a smaller and smaller pool for us to trawl through for lecturers. An understanding of the culture of Britain is important for our teaching; that is why we need British lecturers in the economics department."

"Free up academic life; salaries are not really the problem. We meet the market rates in this university. The problem is really the East European style of quantity constraints being imposed in Britain now. We should switch taxpayers' money from undergraduates towards postgraduates."

"Institutions like the Bank of England don't really want PhDs: they damage us by seducing away MSc students. They are not aware, because they haven't done a PhD themselves, of the value of a PhD training. Maybe the Treasury and the Bank of England should be sponsoring PhD students. I think this is a concern for Britain."

[This statement is quite untrue, reports the Chief Economist at the Bank, John Vickers. The Bank, including the Monetary Policy Committee, values PhD economists highly. The Bank

has actively recruited twenty in the past four years alone, and is very keen to recruit more.[3] The Bank has also sponsored PhD study.]

"It is something to do with the way Business Studies has grown. This parallel is worth thinking about."

"In this consulting firm we want people who have the intellectual horsepower to have been able to have done a PhD if they had wanted. But we don't usually pay any more to someone who actually has one."

"I read Physics and am now an economics consultant. I find, though I left university life a long time ago, that people with economics PhDs, rather than Masters, are often the less interesting and less clever ones."

"We have to lobby for higher pay and status, and break away from national pay scales."

"An MSc in Economics is only as marketable as other types of Masters. Plus not all firms value post-graduate degrees in the first place."

Question: Is interest in Economics careers waning among undergraduates? (question to a senior Careers Officer)

"Somewhat. There is strong interest in things related to finance and business, though. Jobs as professional economists appear to me to be dwindling."

Question (to a university senior personnel officer): Has the removal of 'tenure' made a difference?

"At face value, people can be dismissed now. But in practice that isn't so. Senior academics have the power in a university and are very influenced by fairness etc. I can't think of a single case of an academic being dismissed in this university. There is a difference between form and substance. Academics have de facto tenure."

Question: The ESRC is considering a 'bounty' to those on PhD courses in the subject of economics per se. Do you think this would be effective and valuable?

"Worth a try. They would feel more valued. But you would have to go up to £10,000 a year to make a real difference."

"I think this would have minimal effect. I would scrap the Teaching Quality Assessments."

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[3] Interested students are encouraged to write to John Vickers, Bank of England, Threadneedle Street, London EC2R 8AH. The Bank's website is at www.bankofengland.co.uk

"Can't do any harm. But it would be a narrow and unpersuasive response, even though better than nothing."

"Yes it would."

"I suppose any incentive is bound to have some beneficial effect, but I doubt it would be strong."

"Marginal."

"It would have a marginal effect. It would simply raise the number of PhDs in consulting companies in three years' time."

"Yes: welcome. The only thing to be said against is that it would have a knock-on effect on us, at a university of our sort, because our students aren't good enough to get ESRC awards but we are obliged to match the rate paid. Even so, I think it would be worth it for the ESRC to do this."

Question: Are there any other things you would like to say?

"Actually Business Schools and MBA courses might, paradoxically, turn out to be the saviours of economics. They may save the subject by bidding up salaries. Business schools have a long term potential for employing economists; but it's possible the UK situation may now never be retrievable."

"Publicising the interest and opportunities open to PhDs and MScs would be more useful than anything else. The ESRC could sponsor talks by past post-graduates to undergraduates. There hasn't been much promotion of the economics profession itself. That would be cheap to do. You could try to get across the analytical skills developed by post-graduate economics courses."

"Part of the problem is with the economics profession – not interesting young people in a picture of big problems. Too technical. Boring. RAE is driving us toward pure theory."

"We ought to remember that the numbers of people applying to undergraduate economics courses is heavily down compared to say five or ten years ago. This is worrying and is the real issue."

"The reason I am taking a non-academic job after my PhD degree is because it takes too long to influence policy as an academic publishing things. Salary, terms and conditions are not attractive. I am also pessimistic about the long-run terms and conditions. I am starting on a Reader's salary in October in my new London job, and I'm 29."

"Yes: this is a worrying trend. I think Business Studies at A level is creaming off our potential students."

"Do our good young people go to the US, perhaps? The whole situation seems to me very serious in the long run."

"I didn't get put off by RAE/teaching-quality pressure, but teaching assessments might not be a good idea."

"We need better-resourced universities. Improve staff-student ratios."

III. Is the Decline Because of Pay?

Academic Salaries

Table 3 reports information on the annual salary scales for UK academics. The numbers are expressed in 1998 prices and show very little change in real salary levels between the 1989/90 and 1998/99 academic years. Real wage growth of other kinds of workers has been considerably higher than this and these numbers demonstrate that academics are clearly falling behind other types of workers in terms of salary.[4]

Relative Salary Levels

We found evidence of a decline in the pay of academic economists relative to economists in the private sector.

A natural comparison is to look at standard academic salary scales compared to figures outside universities. For the latter, a useful source is the annual survey of the Society of Business Economists. Mr Jim Hirst of the Society generously provided help and data. In 1988, the sample size was 157 private-sector economists; in 1998, the size was 176. The median age in 1988 was 38, and in 1998 was 41.

Numbers were collected from the 1988 and 1998 Business Economist. The reason was arithmetical; no attempt was made to choose these years because they show a particular decline. It is possible that other years would suggest a larger or smaller fall in relative academic pay, but a casual check on some other years suggests not. In 1988, the median salary plus median benefits of the economists surveyed by the Society of Business Economists was £29,800. This consisted of fringe benefits (mainly company cars) of £3000 and salary £26,800. In 1998, the total package for the median economist was £53,000, of which £6000 was fringe benefits. This is a rise in the remuneration of private sector economists from 1988 to 1998 of 78%.

Table 4 provides data on the salaries and benefits of economists covered by the Society of Business Economists survey. In both eras, the large spread of pay and benefits is noticeable. It is clear that the academic economists in the sample (4% of responses in 1988, and 10% in 1998) pull down the wage figures. In 1988, the highest paid academic earned £32,000; in 1998, the highest paid academic (who may or may not have been the same person – there is no way of knowing) earned £49,800. In each of these two years, this was the lowest figure out of the

[4] Time series comparisons of real earnings through time can be influenced by a suitable choice of comparison dates – but in a relative sense, starting professorial salaries have clearly lagged behind the earnings of others; in an absolute sense, the choice of a baseline price indexes can matter (for example, professors are now better off than they were in 1979 but worse off than in 1970 or 1972).

various sectors: banking, other financial, consulting, services, government, etc. In 1988, banking, 'other financial' and private industry returned the highest salaries. By 1998, banking, consulting and other financial were top, with industry not especially highly represented. Government enters low down the salary league in each of the two years.

Men are better paid than women in both 1998 and 1988. The pay differential is approximately one third. Wages rise with age, as in other walks of life.

Fringe benefits are of interest. In 1988 they were, for the person getting the largest sums, £58,000 in banking and £120,000 in other financial. These also paid the most generous minima (though not a great deal). Qualitatively the same picture emerges in 1998.

The maxima catch the eye. By 1998, four sectors (banking, other financial, consulting, other services) all paid out in that year more than one hundred thousand pounds in fringe benefits to the individual getting the highest benefit. The number of economists in each of the sectors has not changed dramatically, in percentage terms, over the decade.

There are two slight logical flaws in proceeding in this way. First, the person receiving the median salary is not necessarily receiving the median fringe benefits; but we felt the bias was likely to be small, and nothing else could be done without access to the original micro data. Second, a small proportion of the members of the Society of Business Economists are academic economists. Hence their reported pay levels artificially pull down the average of private sector pay.

For academic salary scales, it is less clear what the right comparison point is, but a natural one seems the top point on the Senior Lecturer scale. That, in 1988, was £22,900. By 1998, ignoring so-called discretionary increments, the top point for Senior Lecturers had become £33,900. This is a rise of 48%. If discretionary increments are taken into account, the greatest amount that a Senior Lecturer can earn has gone up to £36,600 in 1998. This is a rise of 60% between 1998 and 1988. It is probably misleading to do the calculation in this way – one university we know well, for example, does not use discretionary points for SLs – but it may be necessary as a check.

Noting the 78% rise in remuneration in the Society of Business Economists data, these figures thus show a fairly marked decline in the relative wages of academics compared to the private-sector pay available to professional economists. Over ten years, academic pay has fallen behind the remuneration packages of economists working in the private sector by approximately 20%-30% (depending exactly which comparison is used).

It is certainly possible to argue that the market mechanism means this comparison is potentially misleading. It may be that economists in the late 1990s are promoted more quickly to Senior Lecturers than they were in the late 1980s. Hence it could be that the top point on the SL scale is not the ideal measure. To do more than this was beyond our study. However, our anecdotal information is that this could not counteract the full drop in relative pay. One piece of extra evidence is the following. In 1988, the average pay of professors was £29,000. To have kept pace with a private-sector pay increase of 78%, the average British university professor in 1998 would have had to be earning over £50,000. From what we know – there are no official figures but particular universities make their figures semi-public – universities are currently paying their average economics professor at least 10% or 20% below that.

It might be thought that the choice of top-point on the Senior Lecturer scale is not the best one. However, the top point of the lecturer scale and minimum point on the professorial scale have both also moved up by 48% over the period from 1988 to 1998. Hence the exact choice of comparison grade in academia probably does not matter.[5]

Pay Inequalities

Another issue concerns the dispersion of pay. In August 1998, for example, as we began to research this topic, an advert appeared in the Financial Times seeking an emerging markets economist. "Educated to Masters level in economics…at least three years' experience… first class presentations skills… circa £100,000 package". We believe that students are aware that the possibility of this is negligible in academic economics. If a small probability of large prizes attracts people disproportionately, then the lack of pay dispersion among academic economists may not be beneficial.

An interview with a former member of an economics consultancy led to the following remarks. "The distribution of earnings is highly skewed. Good consultants can expect to earn £40,000+ in their early 30s and would move on if this were not achieved. Median earnings excluding very high flyers is about £50,000. High flyers might pick up £100,000 a year. I have come across perhaps fifty such cases in my career. We recently recruited a very good 28 year old who had earned £70,000 in previous employment. At the other end, earlier in the week we recruited a new MSc graduate at a cost to the firm of around £30,000 including national insurance. We like a Masters degree but someone with an undergraduate degree would be taken on if they had exceptional potential."

It is interesting to note the dramatic degree of inequality in remuneration. In 1998, the highest-earning person in the Society of Business Economists had a basic salary of £170,00. The lowest-earning economist (an academic) was paid £10,000. The highest amount of annual fringe benefits in the sample was £360,000. The lowest was zero.

The prosperity of the financial services industry is part of the explanation for the increase in the earnings of private sector economists. According to the SBE Survey, the median basic salary in the 'Other Financial' sector, which omits banking, was in 1998 £74,000. In 1988, the median was £31,000. Sample sizes here are small. Nevertheless, in both years, nearly one in five of the sample worked in this sector.

Many people with an economics training can enter the Finance sector in non-economist jobs. Pay levels are high. The Financial Times of May 13 carried the following information.

Upper Quartile Salaries (and Average Bonuses) in City of London finance:

Capital markets head	£218,000 (+ 69% of salary as bonus)
Equity trading head	£138,000 (+ 109%)

[5] For other points on the academic pay scales, (evaluated at 1998 prices) refer to Table 3.

Head of research	£105,000 (+64%)
Fund management director	£148,000 (+44%)

It is sometimes guessed that the highest paid academic economics professor in the UK might make close to £80,000 currently, and a few perhaps earn up to £50,000 in extra consulting income a year. But our anecdotal information is that only a tiny number of academic economists achieve anything like these earning levels. Our guess is that median earnings among academic economists (of all ages) with a First Class Honours degree is probably around £30,000.

One question that caught our interest is that of whether there has been a rise in economists' pay inequality in the private sector over the decade. This is hard to test using the data available to us. However, banking economists and consulting economists are two of the most populous sub-samples in the SBE data set. Looking at the banking sector, the ratio of maximum pay to median pay was 2.7 in 1988; by 1998 it was 2.5. In the consulting sector, the ratio of maximum pay to median was 2.2; by 1998 it was 2.3. On such measures, there has not been a clear change.

Academic Salaries in the US and UK

United States academic salaries are higher than in the United Kingdom. The April 8 1998 New York Times carried a long article about the wage offer by Columbia University of $300,000 as a 9-month salary to economist Professor Robert Barro of Harvard. Barro declined. While this kind of salary offer is exceptional, top economics professors in the US earn around $200,000.

US lecturers (known as assistant professors) and Professors (known as full professors) are paid different amounts depending on their academic discipline. This tends to allow the subjects like economics – where there is strong outside wage pressure – to compete better. Table 8 provides data on the six highest-paying disciplines and the six lowest-paying. The numbers in the table cover 9-month salaries and are for a complete cross-section of universities in the USA. For the large research universities, pay levels are much higher than shown. What is interesting about the table is that those disciplines near the top (computing, economics, chemistry) are paying their staff nearly fifty per cent more than the disciplines at the bottom of the league table. This is hard on those in the humanities in the United States, but such dispersion of remuneration assists universities to attract those people with high outside earnings opportunities. What is saved at the bottom end can be spent at the top end. Although salaries are confidential for UK professors, and there may be more grade drift among junior university economists than among junior English lecturers, it appears that the UK does not yet pay economists very much more than those in other subjects.

Other Related Salary Levels

Civil Service salaries are also reported, in Table 9. Grade 7 Economic Advisor stretches to £42,000, which may be close to the current median earnings of UK economics professors.

We did a little research into how well UK economics professors are paid relative to those in some other European countries. The United Kingdom appears to be in the middle of the ordering. Sweden is outstandingly low: professors earn at the median around £35,000. Switzerland is remarkably high: professors are paid over £100,000. Belgium's professorial salaries are close to

UK ones. German pay is slightly greater than in this country. It appears hard to generalise about Italy, because region and the type of university matter a great deal.

IV. Destinations of Graduates

Firsts from Warwick

Some time was spent working in Warwick's library on old records of degree class. We were helped enormously by the university's librarians. The figures produce evidence of a secular decline in the proportion of those with Economics Firsts who go on to academic study. The data show, for example, the following.

Proportions of Economics Firsts going on to higher education

1983-85	80%
1986-88	56%
1989-91	41%
1992-94	38%
1995-97	33%

Hence, in the early 1980s the great majority of Warwick's Firsts went to academia (a few are now well-known professors). Currently only one third do so. It should be borne in mind that sample size is tiny early on (5 Firsts were given in 1983-5, compared to 30 Firsts in 1995-7), but there is a clear trend in the data.

It has proved hard to find this information for other universities. However, there seems no reason to believe the trends are different elsewhere, and conversations with academics from different departments suggest it holds true quite generally.

National Statistics on First Destinations

The University Statistical Record (USR) collected national statistics on the destinations of students from University Funding Council-funded universities until 1993/94. Since then the Higher Education Statistics Agency (HESA) has collected similar data, for all higher education institutions. An attempt has been made to provide a comparable series showing the first destinations of economics graduates and postgraduates from 1985/86 to 1996/97 using these sources. Here, the subject category of 'economics' excludes joint degrees in economics, and other subjects for which no data are available.

Since the decline in employment in economists in the commercial and industrial sectors over the 1980s, the biggest takers of new economics postgraduates have been higher education, the banking and financial services sector, and public administration (principally the Civil Service). In total, these sectors have absorbed between 59% (in 1985/86) to 75% (in 1992) of all newly

qualified graduates of higher degrees in economics. However, the relative shares of each sector have shifted dramatically.

Figure 2 (a) illustrates the trends for these three main sectors and the residual share, from 1986 to 1997. The steep growth in flows into the financial services and banking sectors since 1993 and the corresponding decline in flows into higher education are obvious. By 1997 the shares were 41% to financial services, 19% to higher education and around 9% to public administration. In 1986 the proportions were roughly equal at around 20%.

From Figure 2 (b) we can see that these changes are not primarily part of a general trend across all subject areas. Dividing the sector share for economics postgraduates by the sector shares for postgraduates from all subjects allows us to see how the flows of economics qualifiers have changed relative to postgraduates in general. In 1986, students of economics were roughly six times more likely to enter a job in the financial/banking sector than students from other subjects. By the end of the 1990s, they were around ten times more likely to start their careers in these jobs. At the same time, the proportion from economics getting jobs in the higher education sector has remained relatively stable – economics postgraduates are about 1.6 times more likely than others to enter higher education employment and this has not changed dramatically over the decade. A steady decline in numbers from economics entering public administration jobs, relative to flows from other disciplines, is evident from the graph. Due to difficulties in matching up the sectoral definitions for the public administration category after the hand-over to HESA in 1995, some caution should be exercised in interpretation.

For comparison purposes, Figure 3 shows the destinations for first-degree graduates in economics, as a proportion of the total of known destination. The figure suggests a decline in the employment of new first-degree graduates in the financial sector and a steady growth in enrolment on higher degrees (mostly taught Masters courses). More and more students are apparently finding that Masters courses are a preferred qualification for City jobs.

A drawback of the USR data is that the numbers do not distinguish between Masters, Doctorates and other postgraduate qualifications for separate disciplines. Nor do they provide the breakdown of destinations by class of first degree. From 1995 onwards, HESA does provide this information. Bar-charts in Figure 4 show first destinations for UK nationals completing Masters and Doctorate programmes in economics in 1995, 1996, and 1997. A compression of the share of Masters students continuing to Doctorate programmes is evident, falling from 14.5% in 1995 to a mere 6.4% in 1997. This is in line with the proportion of Masters students expressing an intention to pursue an academic career from our own survey information for 1998/99. Flows of UK economics Masters into the financial sector have expanded rapidly, from 23.4% in 1995 to 40.2% in 1997.

The higher education sector remains, unsurprisingly, a main employer of PhD and DPhils, taking 48% in 1995, 78% in 1996 and 65% in 1997.

The breakdown of destinations for UK-domicile first degree graduates in economics is shown in Figure 5. The proportions of Firsts (around 25%) and II.1s (around 13%) continuing to higher degrees has remained fairly stable since 1995, despite some growth in financial sector employment.

Destinations of ESRC Studentship Holders

The current employment status of ESRC research studentship recipients, for 1991 and 1995, is given in Figure 6. These data do not include Masters students. This shows the importance of the academic sector to this class of person. Of the 1991 holders, 42% are still in the academic sector. They are presumably almost all now university academics or researchers. The 1995 intake are in many cases now still completing their PhDs, but setting these aside, 68% of those of known destination are in the academic sector. This is in line with the 66% indicated by the national first destinations data from HESA. The consulting sector – companies such as London Economics, NERA and Lexecon – accounted for a quarter of the 1991 people. This is interesting, because it may not be widely recognised that quantitatively the consulting industry is now a large-scale employer of highly trained economists. The government eventually hires approximately one in seven of ESRC students.

University of London Careers Office First Destinations

The University of London Careers Office First Destinations Survey is a valuable source of information. It provides data on the jobs into which newly graduating postgraduates flow. Two things stand out (see Figure 7). First, 37% of London economics graduate students of 1995-7 ended up going into work as a financial or private sector economist. Public administration claimed 15%, and education another 24%. A similar breakdown is available for those emerging with undergraduate degrees. Of those with Firsts, more than half go into a higher degree (quite markedly higher than the 30% found in Warwick data). The financial sector accounts for a further 22%. Of those with an Upper Second, 38% enter higher education to do another degree, while 29% take a job in the finance sector.

V. Student Questionnaires

As part of the project, we designed a survey of student views. The questionnaire structure is reported in an Appendix.

Table 11 begins with pie charts detailing the breakdown of intended careers by All Masters students and UK Masters students (that is, those with first degrees from the United Kingdom). There is an interesting contrast. Among those from the UK, only 6% of economics Masters students say their intention is to work in a university. The sample size here is 33 individuals, of whom just 2 said they intended an academic career (to be precise: answered ‘academic’ to the question “What is the main career you are considering (or already pursuing)?” where possible answers were academic/banking/industrial/international-organization/government/private-sector. Of the various patterns we found in the data in the project, this was one of the most striking. It suggests a deep antipathy to university life.

As can be seen from the data, the great bulk of people doing Masters degrees in economics in this country believe they will find work in either the Government/International organisation sector or in Finance/Private sector. The latter is especially the perceived destination of those from the United Kingdom. As these are the high-paying areas, this paints a picture of UK students as especially interested in making money with their postgraduate training.

Another natural question is: do people doing postgraduate economics have an accurate idea of the salaries paid in Britain's universities? Are people well-informed? The answer – in Table 12 and Table 13 – appears to be that they are. We asked what students thought a 50-year old economics professor at a university in the UK was earning. The median salary given by most groups of students was £40,000. This is probably fairly accurate. It is not easy to be certain as data are not released nationally. The median salary expectation was different among those doing a UK PhD. In that sub-sample, the median estimated pay of a 50-year old was £45,000. This is probably too high. Perhaps those signing up to a PhD from the UK are overly optimistic about their likely earnings.

The motivation for studying economics at the Masters degree level varied a great deal (see Table 14). We found the dominant answer was 'to enhance career prospects', which is consistent with the intended career paths data. Of all students, 52% said this. Of UK-only people, 67% did so. The other large category was 'requirement for further study'. 21% of students said this. Among All Students, as the table shows, 'intellectual curiosity in economics' drove a further 17%.

A somewhat similar picture emerges from the data for those PhD students asked about their motivation (see Table 15). The largest category of answer is 'to follow an academic career', as would be expected, but beyond that the same stress on enhancement of career is stressed. Among the small number of UK students on doctoral programmes, more than in the Masters case said they were concerned abut intellectual aims.

We also asked about the perceived advantages of an academic career. The students cited intellectual stimulation, flexibility of hours, contact with students, and independence. There were not wide differences in the structure of answers between Masters and PhD students, nor between those students from the UK compared to elsewhere. The distribution of responses is given in Table 16.

Disadvantages were also recorded – in Table 17. The students in our sample (107 Masters, 60 PhDs) put 'low pay' as the single most important disadvantage. 'Slow career progression', a 'solitary environment' and 'pressure to publish' were also mentioned in large numbers.

It could be that those responding to our survey anticipated that we wished them to answer 'low pay'. There had been some publicity in the papers and The Economist in the months preceding the survey. Nevertheless, it seems sensible to assume that most of those answering genuinely felt that poor remuneration was a factor in making academia unattractive.

If they do not want academia, what do they look for in a job? The answers are contained in Table 18, Table 19 and Table 20: 'challenge', 'ability development', 'social life', and 'financial rewards'. Good working conditions and promotion are also prominently mentioned by some. Similar reasons are put forward among those Masters students considering a PhD/academic post.

Less formally, we approached some overseas students to ask what the attractions were of coming to university in the UK to do graduate work in economics. This was to attempt to discover why EU student demand appears still strong. Three main answers were given to us. First, it is extremely useful to learn English in a technical economics setting, and going to the US would be much more expensive. Second, UK university degrees carry prestige. Third, UK economics departments have high levels of expertise.

More than half the student sample said, in response to a survey question, that a 25% higher level of pay would make an academic career in economics more attractive to them personally. Slightly less than half the sample said it would make little or no difference to them.

VI. Department Questionnaires

UK Economics Departments

In an effort to get the university academics' point of view, we contacted UK departments of economics. We are grateful to those who helped us.

Here 44 institutions sent in answers to our questionnaire. Table 21 to Table 27 have the information. We were told that in the past 5 years these departments had in total made 112 new appointments at entry level. There had been a slight fall (by 11) in the stock of posts in economics. The recorded stock of PhD students totals 65, although there is ambiguity about this number, especially at Oxford. The stock of UK masters students is 177.

The appendix includes a summary of answers. To ensure anonymity, any names and identifying remarks have been removed. While it is difficult to generalise, our sense from the answers is that many economics departments view themselves as having underlying difficulties with recruitment. They mirror the information provided in the interviews discussed above.

Research Assessment Exercise Data

To give some idea of the size of the graduate population in economics Table 28 to 30 give background data from the Research Assessment Exercise (RAE) of 1996. Usefully, this records the source of support for postgraduate studentships in economics and econometrics. Out of 292 in the year 1995, 60 are funded by Research Councils, 18 by charities, 51 by the UK government or ODA or British Council, 85 by the university concerned (perhaps as teaching assistantships), and 61 by overseas sources. Some caution should, however, be expressed here as these numbers are, in some cases, a little different to a recent survey of economics departments undertaken by Karen Mumford for the RES Women's Committee.[6] More accurate data compilation and recording clearly needs to be done here to reconcile such possible differences.

VII. Conclusions

This report has tried to understand why few UK students are pursuing PhD training in economics. It has looked also at Masters students, and at the likely future of academic economics in the United Kingdom.

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[6] See the piece by Mumford in the January 1999 RES Newsletter. Some of the potential conflict may be that the RAE database does not have good figures for current students. Secondly, in comparison with our own survey, Mumford's 92 percent response rate is much better than ours. Thirdly, the academic destination figures are different because we report the percent of UK students entering UK universities, which is lower than the percent of all EU students entering UK universities (which from what we can gather is reported in Mumford's analysis).

The evidence suggests that low pay is an important part of the explanation for the lack of PhD applications. We focus on this for three reasons. First, this was the single most commonly mentioned factor in our interview work, and in the departmental questionnaires. Second, the data, although imperfect, apparently suggest that since 1988 the pay of academic economists has fallen behind what is available in the private sector. In the last decade, according to our estimates, relative pay has lagged by about 20-30%. Third, to explain a change in PhD applications it is presumably necessary to find a factor that has changed. Some have put to us the point that we should say more about the non-pecuniary attractions of academic life (like the ability to choose one's own research and the ability to start work late in the morning if one wishes). While recognising there are many, we have failed to find evidence that these have altered sufficiently to explain the trends in the economics data.

The median remuneration of private-sector economists exceeds £53,000 per annum. The top point on the standard university Senior Lecturer scale – perhaps the most natural comparison – is £34,000. Senior university salaries are confidential. We doubt, however, that more than one or two academic economists in the country earn £100,000 per annum in salary plus consulting earnings. Yet such numbers are not at all uncommon in the private sector. Most academic economists are very poorly remunerated by outside standards. Our guess is that only twenty or thirty economics professors in the country earn salaries of more than £50,000, and that all but a few dozen UK academic economists have consulting incomes close to zero.

Pay dispersion in the private sector may act as an incentive to entrants. Although not representative, one of the private-sector economists in our (Society of Business Economists) sample earned a bonus of £360,000 in 1998.

Many academics spoke to us about the stress created by the Research Assessment Exercise. However, postgraduate students did not. As far as we can tell, no-one is explicitly dissuaded from entering academia because of the government's RAEs. Retention may be a different matter: the flow of young academics into the private sector from the university sector could be related in part to the stress of being constantly assessed. That appears to warrant a study in its own right. Certainly we encountered some examples of worryingly low morale in our country's universities. More than one person we spoke to said that as pressures in universities were now like those in a management consultancy it will eventually be necessary to pay consultant-level salaries.

One interesting finding is that, of those currently on Masters programmes in economics, only 6% of the UK students said they intended a career in academia. An MSc in economics has become a professional qualification – like that required to be a Chartered Accountant. Both are done by people who are trying to raise their later incomes. Yet the taxpayer does not provide large subsidies to training in chartered accountancy.

It is less easy to know why there is a strong supply of non-UK EU applicants. However, it seems that students know they need to master English in a technical setting, that going to the USA is viewed as relatively expensive, and that academic economics in the United Kingdom still has a powerful reputation. It may also be that it is now possible to get into top UK programmes (partly because home demand for places is weaker).

There is some support, among academics, for the idea that the ESRC should give higher grants to economics students. Even so, most interviewees thought the effect would be small.

Our recommendations are the following:

- It should perhaps be made clear to parents that, within the foreseeable future, their children and grandchildren will not be taught at university by British economists. If this causes no concern, then the current point may be an equilibrium.

- We think the main problem with such an outcome is not that foreign-born economists will do a bad job teaching in the universities of the future. It is that the unwillingness of British people to do the job may be a symptom that the job is not one that most talented people – of any nationality – would want[7].

- The ESRC can do little about this. However, offering a higher grant or bounty (perhaps a considerable one) to Economics PhD students would probably help. Such a step cannot make a large difference; the underlying problem seems to be the lack of attractive jobs in this country's universities.

- We recommend that the ESRC engage in an internal debate about its appropriate role in a world in which only 6% of UK economics masters-degree students say they want to go into university life.[8] If taxpayers' money is supposed to subsidise activities with high social benefits, perhaps more money ought to be targeted on PhD education. It is academic researchers who discover how the economy works: they create a kind of public good. Private-sector economists draw upon ideas that were discovered in university corridors.

- The Vice Chancellors of the United Kingdom are probably going to have to pay their young economists substantially more. If they do not, British economics will largely wither away. If necessary, VCs may have to follow the example of United States universities, and pay relatively less to scholars in other disciplines.

- One practical step would be if Vice Chancellors were currently more open about the fact they are beginning to pay some economics professors moderately well. We believe economists earn more than most other kinds of professors. But there is no hard information. The odd newspaper headline saying University Economist Earns £70,000, which we suspect two or three Vice Chancellors could truthfully say, would help – just as Beckham's salary inspires millions of boys who may not bear in mind the negligible chance of being a star footballer.

- We think the ESRC could run a more effective publicity campaign in favour of research. The private firms and government organisations that currently employ MSc economists, and think that PhD training is of no relevance to them, may overlook an important fact. PhD-trained researchers are needed to educate the Masters students on which they depend. Without master craftsmen, there can be no apprentices.

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[7] We note in passing that it seems to us highly desirable that there are some foreign-born economists teaching in UK universities.

[8] Of course it may be that what is happening is that the best and brightest of UK graduates go to the USA for their PhDs, while some of the best and brightest in Europe come to the UK. If this is indeed so (our estimate is actually that the numbers going to the US are too small to make a difference), then perception of the "problem" would be different from the one the report paints. The scale of change is so marked that we think this could at most only be part of what is going on.

Historical perspective is useful. Some of the current trend is the result of the recent boom in the economy. In a boom, it is always harder to fill public-sector posts and positions in higher education, because the private sector raises its remuneration to suck in the extra workers it needs. However, we think there is a deeper structural problem in the United Kingdom, so that an economic downturn will not solve the difficulties documented in the report.

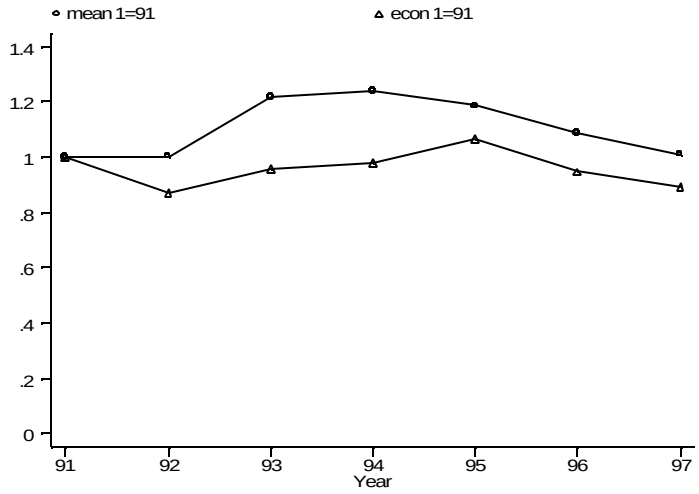
In the long run, market pressures are likely to change what is happening. Universities will, it seems, have to charge high fees; it has become apparent that the UK taxpayer no longer wishes to pay fully for higher education. The demand for economics degrees is unlikely to disappear, and economics students will go on to be well paid in private sector jobs. The cleverest students will then demand to be taught by the cleverest teachers. Slowly, parents may start to complain to Vice Chancellors that their sons and daughters are being taught by people who do not have first-class qualifications. Companies who need trained economists may protest that the country's universities have not got the intellectual firepower to provide them.

When combined, these forces may lead eventually to a class of very highly paid academic economists. This in turn will probably rekindle interest among the young in doing a PhD in economics. However, these pressures may not feed through fully in our working lifetimes. It is possible that the quality of academic economics in this country will go down before it begins to come back up.

VIII. Tables and Figures

ESRC Research Studentship Applications

Figure 1: Applications for ESRC Studentships 1991-1997, by Subject Group (Normalised to 1991=1):



Source: ESRC Reports

Table 1: Applications for Research Studentships by Subject Group 1991-98

Year	*Economics*		*All Subject Groups*	
	Number	*UK Share*	*Number*	*UK Share*
1991	94	NA	1194	.95
1992	82	NA	1200	.95
1993	90	NA	1545	.93
1994	92	NA	1559	.91
1995	100	.58	1308	.88
1996	89	.46	1199	.87
1997	84	.38	1042	.83
1998	66	.39	NA	NA

Source: ESRC Reports

Table 2: Applications by Subject Group and Fee Status, as Shares of Total Applications in All Subject Groups

Year	*Econ All*	*Econ UK*	*Socio/Pol All*	*Socio/Pol UK*	*Psych All*	*Psych UK*
1991	0.079	NA	0.084	NA	0.084	NA
1992	0.068	NA	0.183	NA	0.183	NA
1993	0.058	NA	0.165	NA	0.140	NA
1994	0.059	NA	0.160	NA	0.135	NA
1995	0.067	.044	0.210	0.199	0.174	0.186
1996	0.065	.034	0.186	0.178	0.123	0.122
1997	0.067	.031	0.212	0.189	0.173	0.155

Source: ESRC Reports

Econ: Economics; Socio/Pol: Sociology and Social Policy; Psych: Psychology
UK: Fees and Maintenance Applications

Table 3: AUT and NATHFE (former polytechnics and similar institutions) Covered Academic Pay Scales 89-98 (at 1998 prices)

Year	*Research Minimum with PhD*	*Lecturer B Minimum*	*Professor Minimum*
1989/1990	£14488	£22184	£34301
1990/1991	£14940	£22877	£35405
1991/1992	£14849	£21824	£35184
1992/1993	£14466	£21262	£34280
1993/1994	£14361	£21989	£34031
1994/1995	£15207	£21961	£33988
1995/1996	£15243	£22013	£34068
1996/1997	£15270	£22055	£34102
1997/1998	£15385	£22220	£34387
1998/1999	£15735	£22726	£35170

Year	*Lecturer Minimum*	*Senior Lecturer Minimum*	*Principal Lecturer Maximum*
1989/1990	£12630	£22101	£33942
1990/1991	£13058	£22919	£36013[ii.]
1991/1992	£12847	£22477	£35320
1992/1993	£12479	£21836	£34311
1993/1994	£12390	£21676	£34062
1994/1995	£13914[i]	£21647	£34020
1995/1996	£13947	£21699	£34100
1996/1997	£13973	£21738	£34164
1997/1998	£14078	£21902	£34421
1998/1999	£14148	£22012	£34593

Source: AUT/NATFHE

i. Scale points 1 and 2 deleted in 1994

ii. Scale point 9 added in 1990

These points have been chosen to illustrate minimum, maximum and mid-range point points on the published academic pay scale

Table 4: Distribution of Basic Annual Salaries and Other Benefits, 1987/1988 and 1996/1998– % Distribution of Responses

*Basic Salaries**			*Value of Fringe Benefits*		
Range (£k)	*1987*	*1988*	*Range (£k)*	*1987*	*1988*
10 & under	3	1	1 & under	47	22
11-15	8	8	1.1–2.0	0	18
16-20	20	15	2.1–3.0	11	15
21-25	23	19	3.1–4..0	9	9
26-30	14	18	4.1–5.0	9	7
31-40	17	21	5.1–10.0	16	15
41-50	15	9	10.1–15.0	8	8
Over 50	15	9	Over 15.0	8	6
Median	25.0	26.8		2.5	3.0
Maximum	190.0	80.7		130.0	120.0
Minimum	6.0	6.0		0.0	0.0
Responses	221	157		215	140

Range (£k)	*1996*	*1998*	*Range (£k)*	*1996*	*1998*
Under 21	9	7	1 & under	19	24
21-30	12	14	1.1–3.0	12	13
31-40	18	15	3.1–5.0	12	8
41-50	21	20	5.1–10.0	14	16
51-60	11	14	10.1–15.0	17	11
61-70	9	7	15.1–20.0	6	7
71-80	7	7	20.1–40.0	12	5
81-100	4	8	41.1 – 100.0	8	10
>100	9	8	>100		6
Median	45.0	47.0		7.8	6.0
Maximum	250.0	170.0		202.6	364.0
Minimum	5.0	9.6		0.0	0.0
Responses	146	176		146	176

Source: Business Economist, Summer 1988, Table 1, p 40, and January 1998, Table 1, p.14.

* Including London Allowance

Table 5: Basic Salary by Employment: 1987/1988 and 1996/1998

Employment	*Responses*		*Basic Salaries (£k)**			
	1987	*1988*	*1987*	*1988*		
	%	*%*	*Median*	*Median*	*Min*	*Max*
Banking	18	17	25.1	29.6	13.0	80.7
Other Financial	14	17	30.3	30.8	14.0	60.0
Consultancy	14	13	27.7	27.3	6.0	60.0
Other Services	13	13	20.0	21.6	12.0	57.0
Private Industry	25	27	23.5	28.0	15.0	77.5
Public Corporations	3	3	24.9	27.9	20.7	33.0
Government	7	6	23.5	26.8	13.4	37.5
Academic	7	4	19.4	16.5	9.9	32.0

	1996	*1998*	*1996*	*1998*		
	%	*%*	*Median*	*Median*	*Min*	*Max*
Banking	10	20	55.3	65.0	20.0	140.0
Other Financial	18	17	74.0	66.5	21.3	170.0
Consultancy	22	17	50.0	41.0	15.0	115.0
Other Services	5	9	45.8	43.0	24.0	125.0
Trade Associations	8	6	29.9	34.0	17.0	92.3
Industry	21	13	44.1	45.0	9.6	100.0
Public Corporations						
Government	9	8	39.4	22.0	13.3	60.0
Academic	7	10	39	31.2	24.4	49.8

Source: Business Economist, Volume 19, No.3, Summer 1988, Table 2, p41 and January 1998, Table 2, p.16.

* Including London Allowance

Table 6: Basic Salary by Age and By Sex: 1987/1988 and 1996/1998

	% of Responses		*Median Basic Salaries (£k)**	
	1987	*1988*	*1987*	*1988*
Under 30	15	13	16.0	18.0
31–35	18	21	21.9	24.0
36–40	17	18	25.0	30.0
41–45	14	16	25.3	28.0
46–50	14	13	34.1	33.0
Over 50	22	19	26.3	35.0
Men	87	87	25.0	28.0
Women	13	13	20.0	21.0

	% of Responses		*Median Basic Salaries (£k)**	
	1996	*1998*	*1996*	*1998*
Under 30	15	15	22.7	27.0
31–35	12	13	36.2	54.0
36–40	14	18	56.6	45.5
41–45	14	17	58.4	66.0
46–50	21	16	46.8	50.0
51-55	15	15	48.0	54.5
>55	9	6	50.0	50.0
Men	84	86	46.4	50.0
Women	16	14	34.0	33.0

Source: Business Economist, Volume 19, No.3, Summer 1988, Table 3, p43 and January 1998. Table 3, p.18.

* Including London Allowance

Table 7: Value of Fringe Benefits By Employment: 1987/1988 and 1996/1998

Employment	*Value of Fringe Benefits (£k)*			
	1987	*1988*		
	Median	*Median*	*Maximum*	*Minimum*
Banking	5.2	5.5	58.0	1.8
Other Financial	5.5	6.0	120.0	1.0
Consultancy	1.5	4.0	30.0	0.4
Other Services	1.9	2.0	14.0	0.0
Private Industry	2.5	2.9	12.0	0.0
Public Corporations	1.2	1.0	1.1	0.5
Government	1.2	1.5	2.0	0.0
Academic	0.0	0.0	0.0	0.0
	1996	*1998*		
	Median	*Median*	*Maximum*	*Minimum*
Banking	15.9	18.0	250.0	0.9
Other Financial	17.0	24.1	364.3	0.9
Consultancy	2.1	3.0	119.9	0.0
Other Services	6.6	5.2	106.0	0.0
Trade Association	3.4	3.6	13.5	0.0
Private Industry	2.5	7.1	51.5	0.0
Public Corporations				
Government	1.2	1.4	3.7	0.0
Academic	0.0	0.0	5.0	0.0

Source: Business Economist, Volume 19, No.3, Summer 1988, Table 5, p45 & January 1998, Table 5, p.21.

Table 8: Mean US Academic Salaries, 9-month amounts in1995-96, Top and Bottom 6 Out Of 21 Disciplines –Ranked by Full Professor Salary

Subject area	*Full Professor*	*Assistant Professor*
1. Computing and IT	$81,000	$50,000
2. Economics	$79,000	$49,000
3. Chemistry	$73,000	$40,000
4. Astronomy	$73,000	$43,000
5. Physics	$71,000	$41,000
6. Biology	$69,000	$40,000
16. English	$63,000	$35,000
17. Anthropology	$63,000	$38,000
18. Religious Studies	$62,000	$38,000
19. German	$61,000	$36,000
20. Art	$58,000	$33,000
21. Music	$56,000	$34,000

Source: US Faculty Salary Survey 1995-1996. The data here include figures for tiny universities. Top research universities pay their senior professors much more.

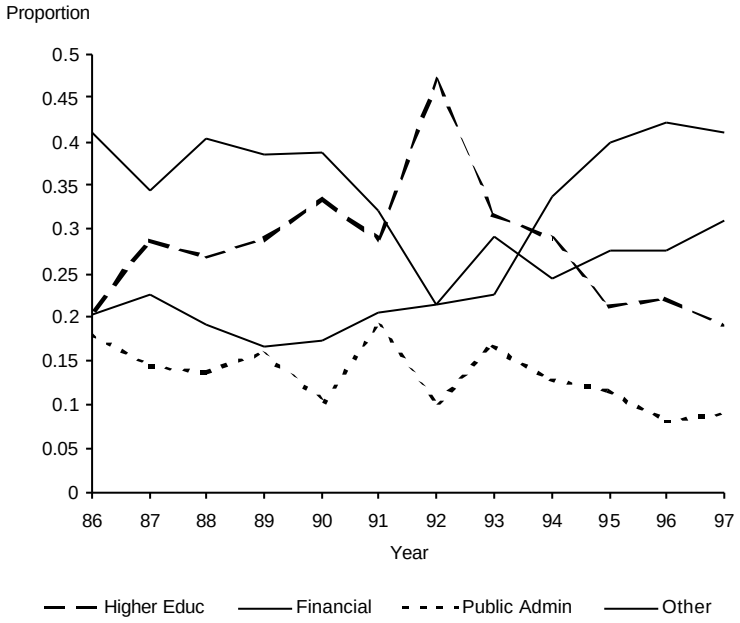
Table 9: Civil Service Salaries, 1997 Rates

	Assistant Economist Entry Range	*Grade 7 Economic Advisor*
London	£15000 to £28000	£28000 to £45000
National	£14000 to £26000	£26000 to £42000

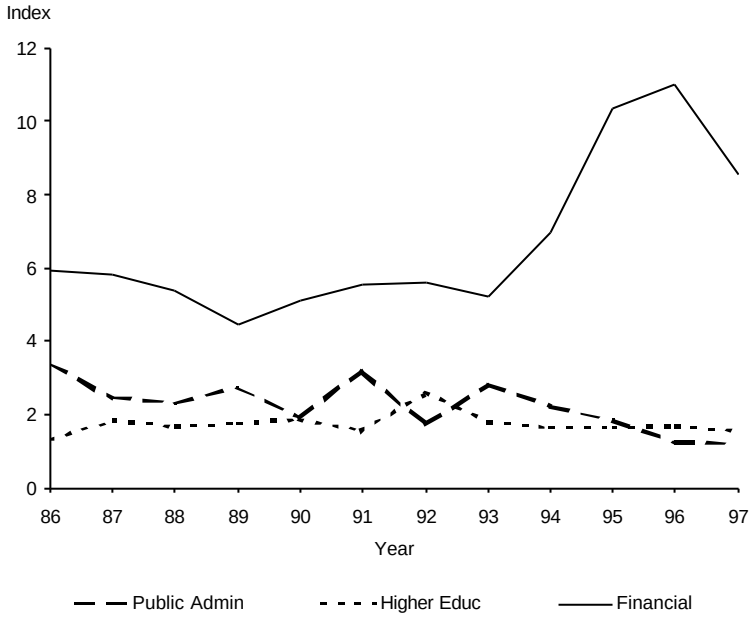
Source: GES. Note: Scales vary across departments. These are indicative only

Figure 2: First Employment of Postgraduates from UK Universities

(b) First Employment of Economics Postgraduates:
Sector shares in permanent UK employment



(b) First Employment of Economics Postgraduates:
Sector shares in permanent UK employment relative to all postgraduates



Source: University Statistical Record First Destinations Publications and HESA data

Sectoral share for a discipline is: (discipline share) = (number from discipline entering sector)/(number from discipline entering long term UK employment)

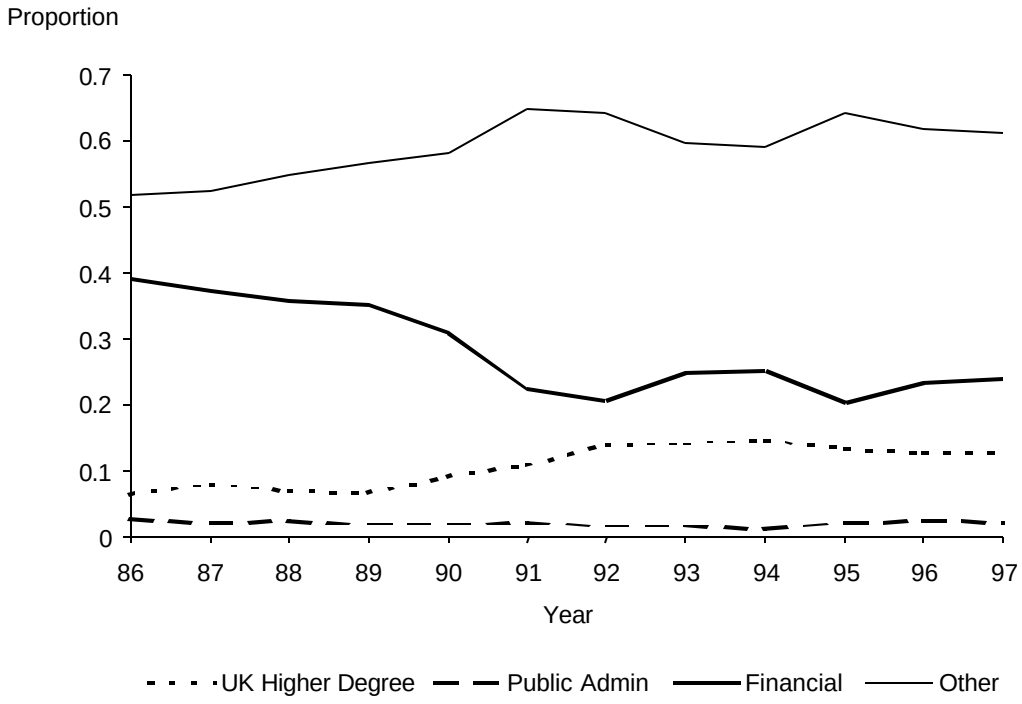
Relative share is: (sector share for economics)/(sector share for all disciplines)

Note: Due to changes in definitions in 1994 when data collection transferred to HESA, series from 1995 to 1997 may not be strictly comparable to series up to 1994. Data includes PhD and Masters students.

For USR data: *Public Admin* includes those in employment in Civil Service and related employment, *Higher Education* includes those in employment in Polytechnics and Universities, *Financial* includes those in Accounting, Banking and Insurance.

For HESA data, *Higher Education* is SIC 8030, *Public Admin* is SIC 75, *Financial* incorporates SIC 65, 66, 67 and 74.12

Figure 3: First Destinations of First Degree Graduates in Economics – numbers to each destination as a proportion of total of known destination



Source: University Statistical Record First Destinations Publications and HESA data

Sectoral share for a discipline is: (discipline share) = (number from discipline entering sector)/(number from discipline entering long term UK employment)

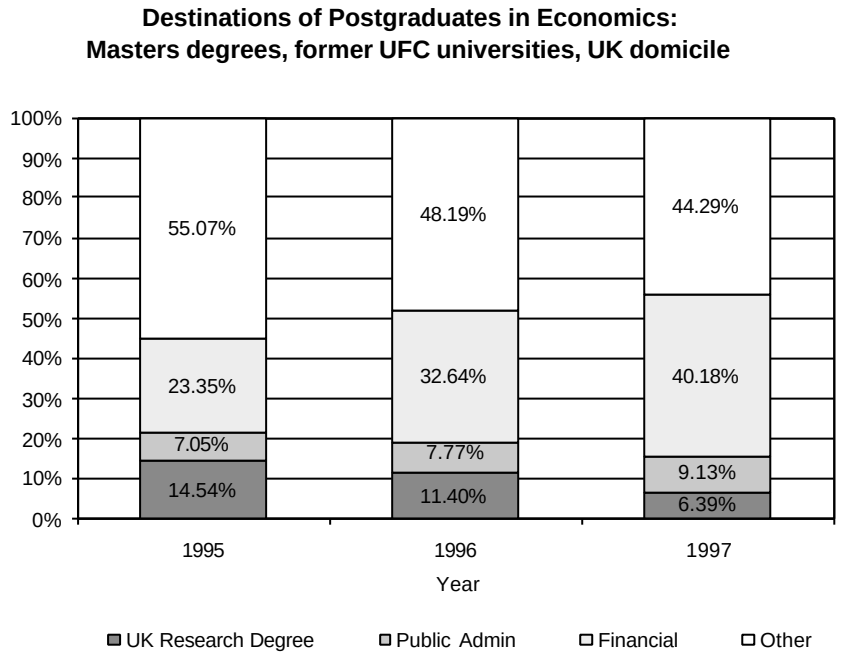
Relative share is: (sector share for economics)/(sector share for all disciplines)

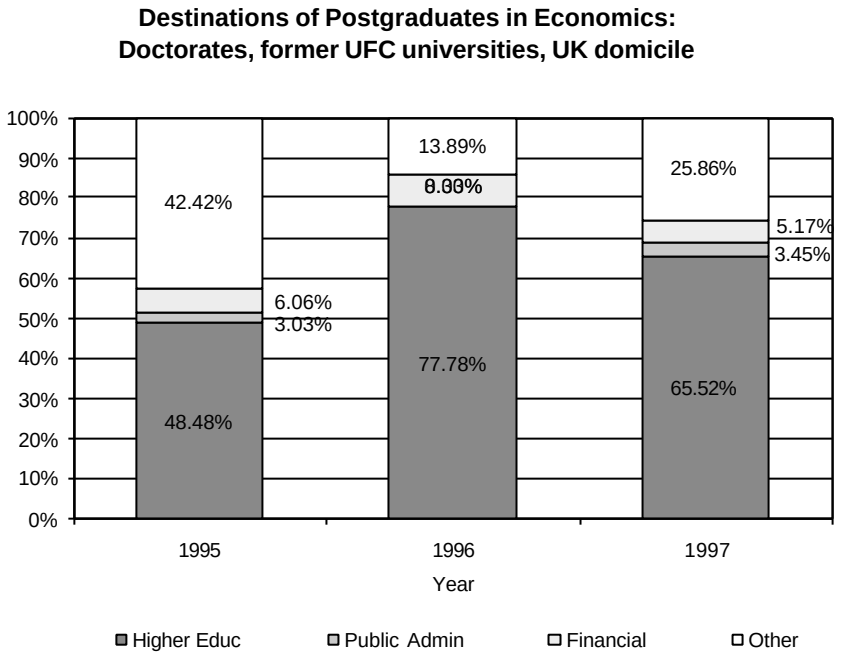
Note: Due to changes in definitions in 1994 when data collection transferred to HESA, series from 1995 to 1997 may not be strictly comparable to series up to 1994. Data includes PhD and Masters students.

For USR data: *Public Admin* includes those in employment in Civil Service and related employment, *Higher Education* includes those in employment in Polytechnics and Universities, *Financial* includes those in Accounting, Banking and Insurance.

For HESA data, *Higher Education* is SIC 8030, *Public Admin* is SIC 75, *Financial* incorporates SIC 65, 66, 67 and 74.12

Figure 4: Destinations of Graduates of Higher Degrees



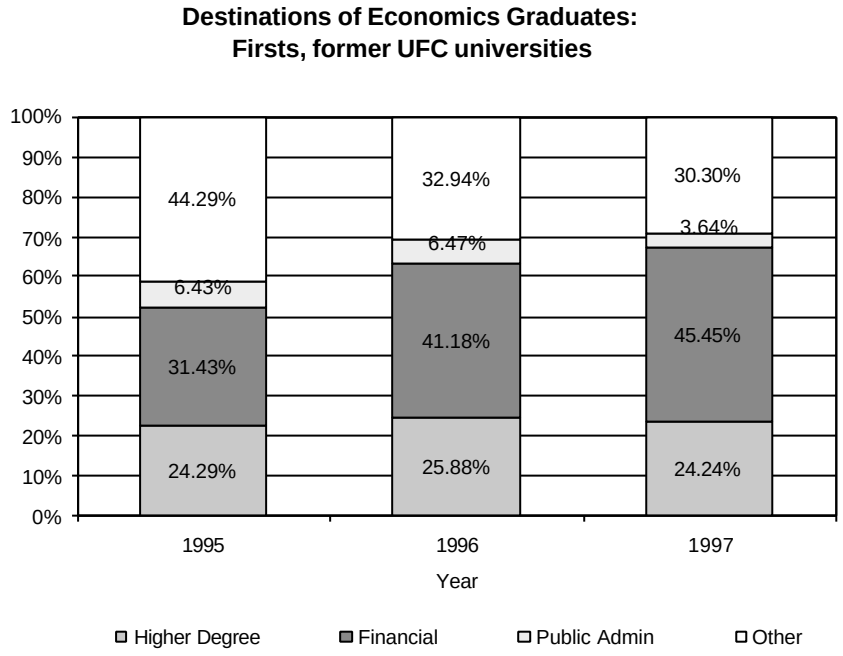


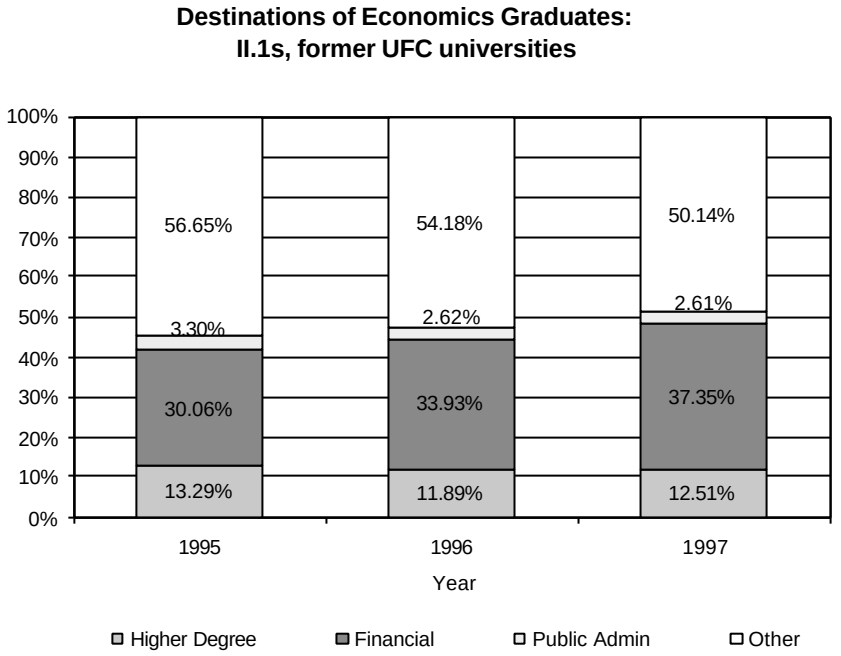
Source: HESA data

Higher Education is SIC 8030, *Public Admin* is SIC 75, *Financial* incoporates SIC 65, 66, 67 and 74.12

Numbers for Public Administration and Financial Services employment are for those entering employment which is not fixed term or is of more than 6 months duration

Figure 5: Destinations of Graduates from First Degrees in Economics





Source: HESA data

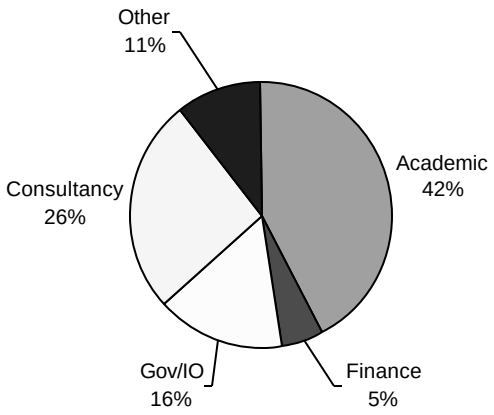
Higher Education is SIC 8030, *Public Admin* is SIC 75, *Financial* incorporates SIC 65, 66, 67 and 74.12

Numbers for Public Administration and Financial Services employment are for those entering employment which is not fixed term or is of more than 6 months duration

Figure 6: Current Employment of ESRC PhD Research Studentship Recipients, 1991 and 1995

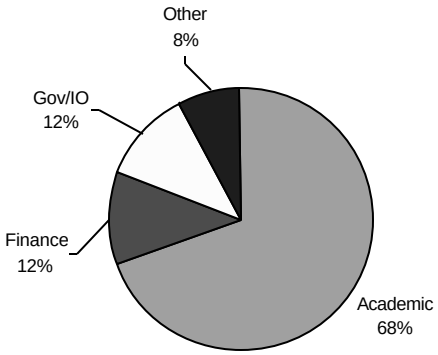
1991 Awards

17 of known destination



1995 Awards

26 complete and of known destination



Source: Survey of recipients of ERSC awards (PhDs) made in 1991 and 1995

25% of those to whom awards were made in 1991 could not be traced. 46% of those given awards in 1995 were either still completing their PhDs, or could not be traced.

IO = International Organisation

Figure 7: Destinations of University of London Graduates 1995-1997, Excluding Students Returning Overseas

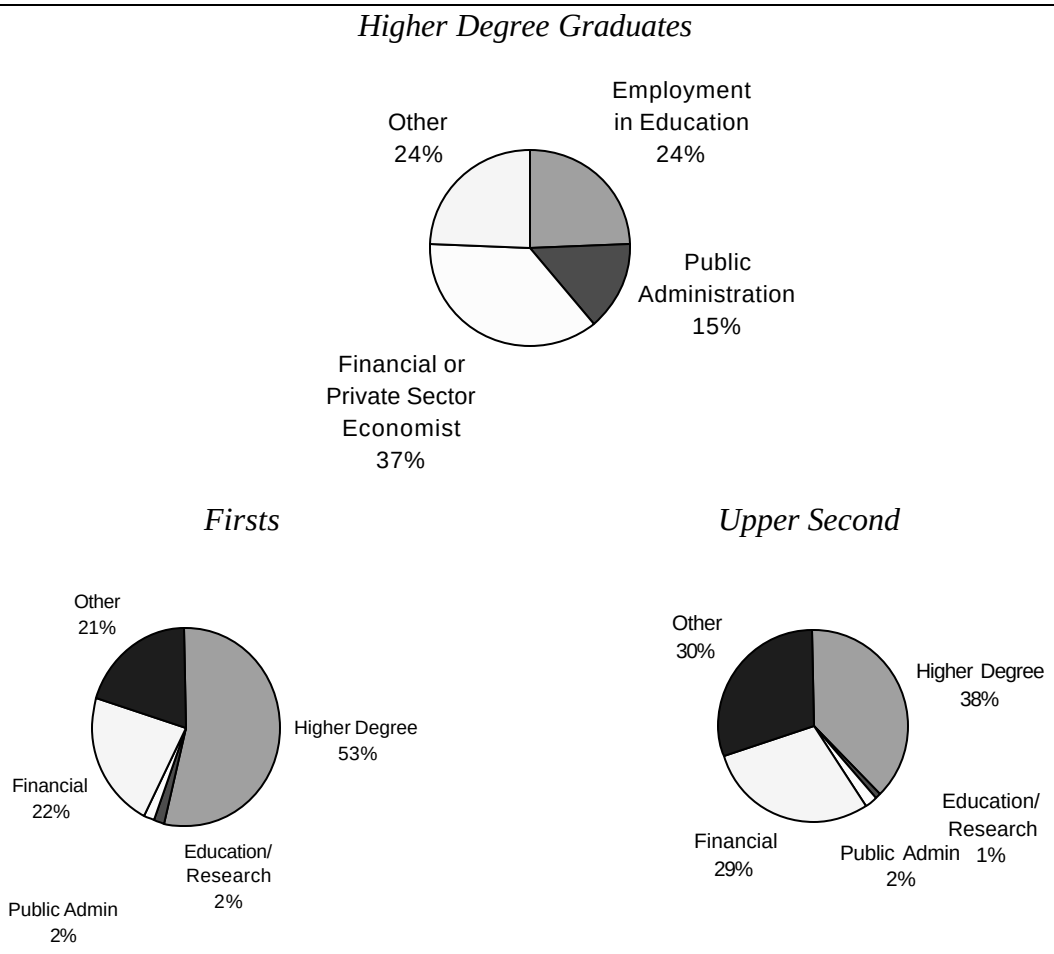


Table 10: Proportion of University of London Graduates in Economics and Related Disciplines Entering Financial Services: by Degree Class and Year

Destination	*Class*	*1995*	*1996*	*1997*
Financial Services	I	35%	19%	28%
	II.1	30%	28%	33%
	Other	30%	19%	14%
Continuing in Education	I	52%	57%	59%
	II.1	35%	42%	39%
	Other	22%	34%	24%

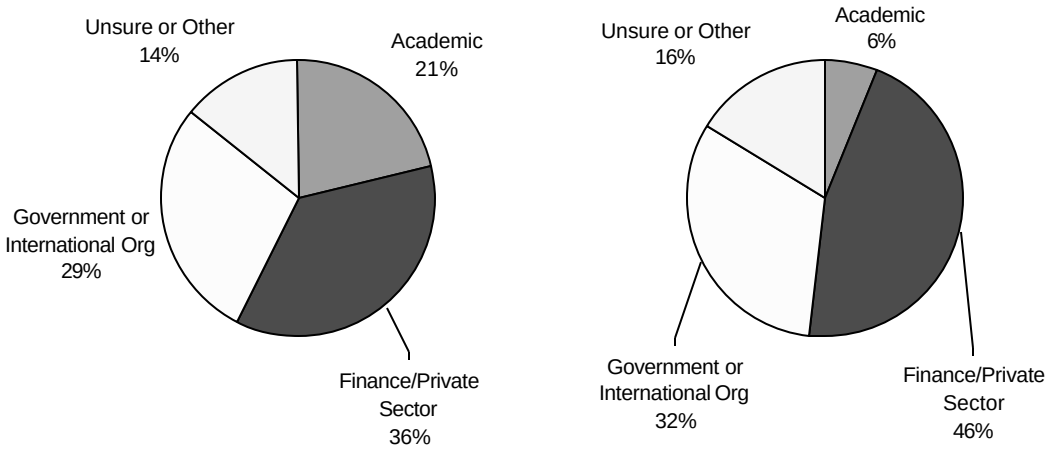
Source: Careers Office First Destinations Survey

Other

Data from the Questionnaire to Masters and PhD Students at University College London, Warwick, the Scottish Programme, Cambridge, Kent, Swansea and Manchester

Figure 8: Intended Careers of Economics Masters Students

All Masters Students *UK Masters Students*



Source: Survey of Economics Postgraduates, 1998 (done for this report).

Table 11: Intended Careers of Economics Postgraduates

Percentage of students choosing option as main career intention:	*All Masters*	*All PhDs*	*UK Masters*	*UK PhDs*
Academic	21%	57%	6%	47%
Finance/banking	12%	3%	8%	0%
Industrial	0%	0%	0%	0%
International organisation	13%	7%	6%	0%
Economist in private sector	23%	15%	36%	12%
Economist in government sector	15%	4%	25%	6%
Self-employment	1%	1%	3%	0%
Unsure/Other	14%	14%	16%	35%
Sample size	113	76	36	17

Source: Survey of Economics Postgraduates, 1998

Table 12: Earnings Expectations and Beliefs of Postgraduates: Median of Responses

	All Masters	*All PhDs*	*UK Masters*	*UK PhDs*
Expected Earnings in 10 years	£40000	£35000	£40000	£40000
If in University Job	£25000	£30000	£27000	£30000
Professor at 50	£40000	£40000	£40000	£45000
Lecturer at 30	£23000	£22500	£24000	£25000
Sample size	120	81	36	17

Source: Survey of Economics Postgraduates, 1998

Table 13: Earnings Expectations of Postgraduates Considering PhD or Academic Career: Median of Responses

	All Masters: will or may do PhD	*UK Masters: will or may do PhD*	*All: pursuing academic career*
Expected Earnings in 10 years	£40000	£40000	£30000
Sample size	84	21	58

Source: Survey of Economics Postgraduates, 1998

Table 14: Motivation for Studying Economics at Masters level

	All Students	*UK Only*
Enhance career prospects	56%	66%
Requirement for further study	23%	6%
Intellectual curiosity in economics	16%	17%
Personal satisfaction	7%	6%
Other	3%	6%
Did not get suitable job	1%	0%
Sample size	112	35

Source: Survey of Economics Postgraduates, 1998

Table 15: Motivation for Studying Economics at PhD level

	All Students	*UK Only*
Want to follow academic career	45%	35%
Enhance career prospects	31%	24%
Intellectual curiosity in economics	15%	12%
Personal satisfaction	7%	18%
Requirement for further study	1%	6%
Did not get suitable job	1%	2%
Other	0%	0%
Sample size	75	17

Source: Survey of Economics Postgraduates, 1998

Table 16: Perceived Advantages of an Academic Career

Percentages choosing option as one of three advantages of academic career:	*All Masters*	*All PhDs*	*UK Masters*	*UK PhDs*
Intellectual Stimulation	77%	72%	92%	88%
Flexibility of working hours	46%	61%	44%	65%
Contact with students	37%	33%	31%	29%
Independence	36%	61%	50%	65%
Peer recognition	12%	11%	14%	24%
Financial rewards	6%	0%	3%	0%
Other	3%	2%	3%	12%
Sample size	129	85	36	17

Source: Survey of Economics Postgraduates, 1998

Table 17: Perceived Disadvantages of an Academic Career

Percentages choosing option as one of three disadvantages of academic career:	*All Masters*	*All PhDs*	*UK Masters*	*UK PhDs*
Low pay	49%	71%	69%	76%
Slow career progression	38%	31%	33%	41%
Solitary environment	29%	33%	36%	41%
Pressure to publish	36%	25%	33%	35%
Academic peer pressure	17%	16%	19%	0%
Other	9%	9%	17%	24%
Boring	9%	5%	17%	12%
Sample size	129	85	36	17

Source: Survey of Economics Postgraduates, 1998

Table 18: Factors in Career Choice of Masters Students

Most common factors in choice of career:	*All Masters*	*UK Masters*
Challenge	43%	61%
Ability development	40%	56%
Social life	29%	25%
Financial rewards	27%	28%
Working conditions	16%	6%
Promotion possibilities	15%	17%
Relations with colleagues	11%	8%
Flexible hours	9%	6%
Status	7%	11%
Sample size	129	36

Source: Survey of Economics Postgraduates

Other options ranking below those listed are: performance related pay, job security, resource adequacy, physical surroundings, comfort

Table 19: Factors in Career Choice of Masters Students Considering PhD/Academia

Most common factors in career choice – those considering PhD/Academia	*All: will or may do PhD*	*UK: will or may do PhD*	*All: career in academia*
Challenge	52%	71%	41%
Ability development	45%	62%	46%
Social life	37%	38%	33%
Financial rewards	32%	33%	8%
Working conditions	20%	5%	50%
Promotion possibilities	15%	14%	0%
Relations with colleagues	11%	0%	21%
Flexible hours	11%	10%	25%
Status	8%	10%	4%
Sample size	91	21	24

Source: Survey of Economics Postgraduates

Other options ranking below those listed (for all Masters students considering a PhD) are: performance related pay, job security, resource adequacy, physical surroundings, comfort. These options score between 0 and 10% for UK students considering a PhD and for all those pursuing an academic career. *Note*: only two UK students in the sample definitely want to follow an academic career

Table 20: Reasons for not Continuing on to PhD

Responses for those who answered "possibly in the future" or "never" to the question "Are you considering doing a PhD?":	*All Masters*	*UK Masters*
Would rather work now, decide later	36%	30%
No interest in academic career	20%	37%
Lack of financial means	18%	7%
PhD takes too long	14%	11%
Other	9%	15%
Little enhancement of career prospects	3%	0%
Sample size	65	27

Source: Survey of Economics Postgraduates

Table 21: Three Most Recent Appointments and Staff Losses in Five Years to October 1998, by Geographical Location

	Entry level appointments (lecturers and research)		*Staff losses*[i.]	
	South East & Midlands	*Elsewhere*	*South East & Midlands*	*Elsewhere*
Median applications per post	12	11	-	-
Left to another academic job	-	-	56%	56%
Retired or ill health			24%	28%
Mean salary (sd)	£20198 (5361)	£18980 (4853)	£29368 (9031)	£25662 (7183)
Percentage UK nationals	51%	59%	74%	79%
Mean age (sd)	30 (4)	30 (5)	43 (12)	41 (12)
Percentage male	89%	78%	81%	92%
Sample	47 approx [i..]	60 approx[i.]	54 approx [ii.]	59 approx[ii.]

Source: Our Survey of 44 Economics Departments, 1998

Notes
i. 37 (South East and Midlands), 47 (Elsewhere) observations only on appointment salary due to non-response
ii. 31, 41 observations only on salary at departure due to non-response

Table 22: Three Most Recent Appointments and Staff Losses in 5 years to October 1998, by Former Funding Status

	Entry level appointments (lecturers and research)		*Staff losses*[i.]	
	'Old' UFC universities	*'New' universities*	*'Old' UFC universities*	*'New' universities*
Median applications per post	14	7	-	-
Left to another academic job	-	-	60%	45%
Retired or ill health	-	-	21%	39%
Mean salary (sd)	£20668 (4912)	£16948 (4582)	£28305 (8898)	£25612 (6734)
Percentage UK nationals	48%	75%	75%	80%
Mean age (sd)	30 (4.7)	29 (5.0)	41 (12)	42 (12)
Percentage male	86%	76%	87%	86%
Sample	78 approx [i.]	29 approx[i.]	78 approx [ii.]	35 approx[ii.]

Source: Our Survey of 44 Economics Departments, 1998

Notes:

i. 58 ('Old') and 26 ('New') observations only on appointment salary due to non-response
ii. 44 ('Old') and 28 ('New') observations only on salary at departure due to non-response

Table 23: Three Most Recent Appointments and Staff Losses in Five Years to October 1998, by RAE Grade

	Entry level appointments (lecturers and research)		*Staff losses*[i.]	
	*5/5**	*Others*	*5/5**	*Others*
Median applications. per post	20	10	-	-
Left to another academic job	-	-	67%	53%
Retired or ill health	-	-	10%	30%
Mean salary (sd)	£19297 (5275)	£20324 (4373)	£29090 (9020)	£26776 (7962)
Mean age (sd)	29 (3)	30 (5)	41 (11)	42 (12)
Percentage UK nationals	50%	57%	60%	80%
Percentage male	100%	78%	83%	88%
Sample	24 approx[i.]	83 approx[i.]	21 approx[ii.]	83 approx[ii.]

Source: Our Survey of 44 Economics Departments, 1998

Notes
ii. 9 (Grade 5/5*), 66 (Others) observations only on appointment salary due to non-response
iii. 15, 57 observations only on salary at departure due to non-response

Table 24: Distribution of Responding Institutions

	Former UFC funded ('Old')	Other universities ('New')	Total
South East and Midlands	13	9	22
Elsewhere	15	7	22
Total	28	16	44

Source: Survey of Economics Departments, 1998

The response rate is around 44% of the CHUDE address list. A list of responding departments is provided in Appendix

Table 25: Distribution of Responding Institutions

	RAE 5/5*	Other	Total
South East and Midlands	7	15	22
Elsewhere	1	21	22
Total	8	36	44

Source: Survey of Economics Departments, 1998

The response rate is around 44% of the CHUDE address list. A list of responding departments is provided in Appendix

Table 26: Other Data from the Departmental Questionnaire

Our survey of Economics departments in the UK Staff numbers in the 44 departments responding are:

- 168 professors
- 210 readers/senior lecturers/principal lecturers
- 368 lecturers
- 88 research

For the 44 responding institutions:

- Total number of appointments at entry level (i.e. new postgraduates) in the 5 years to October 1998 are 173, of which 87 are UK nationals.
- Overall the number of posts has fallen by 18 over the five years to October 1998.
- The total number of UK PhD students working part-time is 81, though Oxford say they have many more than their statistics show
- The total number of UK masters students in these institutions is about 177

Source: Survey of Economics Departments, 1998

Table 27: Respondents' Views on Reasons for Staff Losses

Percentage choosing each option	*Former UFC universities*	*'New' universities*	*South East and Midlands*	*Elsewhere*
Poor promotion prospects	18%	19%	27%	9%
Salary too low	36%	19%	32%	27%
Workload	32%	13%	36%	14%
Shrinkage in student numbers	4%	25%	14%	9%
Lack of resources	11%	25%	23%	9%
Other	32%	25%	23%	36%

Source: Survey of Economics Departments, 1998

Data from the Research Assessment Exercise, 1996

The RAE public dataset provides some information on the size of the stock of academic staff and postgraduates in university departments in the UK

Table 28: Staff Numbers in Economics and Econometrics

At 31st March 1996	*Category A*	*Category A Research Active*	*Research postgraduates and post-doctoral*
Economics and Econometrics	1420	888	165
ESRC-related, excluding stats., OR, psychology	22265	12691	2205
All ESRC-related, including stats., OR, psychology	24731	14262	2926
Share of econ/econometrics in all ESRC related disciplines	5.7%	6.2%	5.6%

Source: RAE database, 1996

Econometrics and Economics is represented by 86 institutions

Table 29: Numbers of Postgraduate Students in Economics and Econometrics

	1992	*1993*	*1994*	*1995*
Total number of full-time students	585	659	777	783
Total number part-time students	285	293	320	320
Total number of doctorates awarded[i.]	131	153	165	166
Total number of masters by research[ii.]	82	103	100	110

Source: RAE database, 1996

i. Doctorates awarded in calendar year.

ii. Masters by research awarded in calendar year

Table 30: Number and Source of Research Studentships in Economics and Social Sciences

	1992		*1993*		*1994*		*1995*	
	Econ-omics	*Social Sci. Mean*	*Econ-omics*	*Social Sci. Mean*	*Econ-omics*	*Social Sci. Mean*	*Econ-omics*	*Social Sci. Mean*
Res. Councils[iii]	38	47	43	56	47	57	60	64
Charities	5	10	15	10	17	10	18	12
UK Govt. etc.[iv]	40	24	54	31	53	30	51	29
Local Auth.	0	28	2	40	0	37	2	44
Industry	7	25	5	25	8	28	5	31
University[v]	24	72	47	114	54	117	85	142
Overseas	50	53	62	60	75	65	61	64
Other	16	15	15	22	16	20	10	19
Total	*180*	*274*	*243*	*358*	*270*	*364*	*292*	*405*

Source: RAE database, 1996

i. *Econ* refers to the Economics and Econometrics Unit of Assessment*; Social Science Mean* refers to the average across all social science Units of Assessment (including Psychology and Statistics/OR)

ii. Figures include studentships for *research* Masters and Doctoral programmes

iii. Research councils category includes Office of Science and Technology, British Academy, Scottish Office Department of Education and Industry, Scottish Home Office Department, Scottish Office Department of Health, Department of Education for Northern Ireland and Department of Agriculture for Northern Ireland.

iv. UK Govt. etc includes British Council and Overseas Development Agency

v. University includes university and college scholarships

IX. Appendix A: Who We Interviewed

Our assurances of confidentiality prevent us from naming those whom we interviewed and who are quoted on page 2 onwards.

However we should stress that the list of those we interviewed cut across a wide variety of institutions and geographical areas. The list included:

- A number of acting or previous Heads of Department in very old universities
- A number of acting or previous Heads of Department in institutions which acquired university status in the 1960s
- A number of acting or previous Heads of Department in 'new' universities, that is the former Polytechnics
- Students at various levels of study
- Administrative officers and non-academic staff.
- Consultants

Geographically, these interviews covered Wales, the South, the Midlands, Scotland and the North of England. We found that the message given to us by people from all types of institution and from all regions was similar.

X. Appendix B: Anonymised Summary of Comments from UK Postgraduate Students

Responses were obtained from MSc and PhD students in the following institutions:

	MSc	PhD
Cambridge	18	8
Kent	0	5
Manchester	9	7
Scottish Graduate Programme	22	20
Swansea	1	0
UCL	50	31
Warwick	29	14

A sample of comments is below:

Level	*Age*	*Sex*	*Summary of comments on why more students do not go on to PhDs/academia*
MSc	22	F	Has spent 4 years at college and wants different environment
MSc	28	M	Returning to previous employer
MSc	26	M	PhD no use outside academic career; would need something substantial to do at same time (e.g. research, teaching)
MSc	28	M	Many people do not see themselves as sufficiently creative for academia; need to achieve something as pay low; goals, rewards, promotion and pay better in business sector; four more years of study unappealing; many do MSc with existing careers;
PhD	30	F	Great questionnaire! Thinks academic work is isolated, adversarial; Believe most academic work of limited social value compared to natural sciences; More about 'intellectual machismo'
PhD	25	M	Financial rewards of alternatives, e.g. consultancy
PhD	26	M	PhDs unattractive because: lack of money while studying; lack of support from supervisors; difficult to get academic job and PhD useless elsewhere
MSc	24	F	Returning to Civil Service; prefers opportunity to apply economics to government policy, working on real issues
MSc	28	M	More years in study unattractive when (expensive) fun to be had elsewhere; PhD students do not mature during research; girls unattracted to boffins
MSc	26	M	Prefers to use economics to help solve real world problems
PhD	28	F	Long and uncertain career; little possibility to change direction; labour market experience often valued more than qualifications
MSc	31	F	PhD appealing but more interested in applied work
MSc	22	M	Cannot find single topic that could hold interest for 3 years; prefers variety; could not stand to write PhD only for it to be unread and forgotten
MSc	26	F	Put off PhD by funding; would be 30 by the time PhD finished; peers would have houses etc.; needs some financial security and wants family;

MSc	26	F	Father lectures; works 12 hrs/day, has high stress levels and cannot reduce workload except through retirement; has little control and spends too much time in meetings, bureaucracy
PhD	29	M	Student-supervisor relationship variable; no monitoring of this; universities should pay supervisors and monitor performance
PhD	26	M	Challenge of developing innovative ideas; ambiguity associated with job (task?) description and expectation
MSc	32	M	Funding is the main problem, for myself and for my colleagues; coupled with uncertainty due to apparent glut of Doctors of Economics
MSc	26	F	Financial rewards are not immediate
MSc	22	F	Lack of practical application of theory; PhD takes a long time, by which time you are less attractive to the general job market, only more attractive to specific job market. A high paying job would be harder to find when really needed due to high debt
MSc	24	F	I don't think I would be able to cope with intellectual level needed
MSc	22	F	Will have enormous debts after MSc; If PhD could be done straight after degree, or more MSc funding available, then might be able to consider academic career; financial rewards after another 3 years cannot compensate or pay off debt
MSc	21	F	PhD lonely, stressful, poverty stricken; rewards in academic life do not reflect commitment for PhD; particularly true in private sector where rewards are so high
MSc	31	F	Downside of academic work is the pay
MSc	28	F	Very poor starting pay; rewards based on research not teaching; PhD required
MSc	23	M	Little or no benefit in gaining a job; tendency to specialize too far restricts career paths e.g. IGOs/NGOs or academia. Personally not sure if good enough for academic life, or will find conditions sought
MSc	21	M	Funding is important issue. Students might be expected to fund themselves if course rewarding. Many students are dissuaded by need to finance their studies up-front. Funding could be offered in return for undertaking to remain in academia
MSc	22	M	No desire to get so specialized in one field; academia incredibly bitchy; viewed as under-appreciated profession
MSc	21	M	Takes too long; Don't want to leave university as a balding 25 year old; Too much emphasis on publishing, not enough on teaching
PhD	30	M	Universities run down; teaching not valued highly in British society; most young graduates care more about money; no financial reward to 3-4 years financial discomfort; if scholarships 50% more valuable + travel allowances then PhD more attractive
PhD	26	M	Academic life has bad image to most sections of society i.e. 'boring boffins'; market returns are slow and small; funding very difficult to secure; fear of being over qualified for jobs in the private sector
PhD	25	F	Scarcity of funding for PhDs
PhD	30	M	Pay too low; nature of academic research in economics - too much maths/rigour; narrowness of mainstream methodology; too detached from real world; too much pressure to publish; lack of performance related pay
PhD	33	F	Level of funding for PhDs is low; after surviving on a student grant for 4-5 years, the thought of another 3 is unappealing

XI. Appendix C: Anonymised comments from Departmental Questionnaire (one comment is given here from each department returning the questionnaire)

*RAE 5/5**	*'Old'*	*SE or Midls*	*Summary of Comments*
No	Yes	No	Few left; may have redundancy problems given fall in enrolments in economics
No	Yes	No	Fall in undergraduate numbers. Subject too narrow and fails to address important questions; lack of support for UK postgraduates
			Excessively narrow paradigm in economics means problems in attracting and retaining postgraduates
No	No	No	Hard to recruit staff and students; not popular location;
			Main problem is reputation of town; decline in 'A' economics; scrabble for students by old universities; undergraduate numbers a problem
No	Yes	No	Mid ranking dept hence problem getting suitable applicants;
			Salary main problem; starts low and increases slowly; many UK departments survive by hiring good overseas applicants; domestic academic labour base undoubtedly weak; problem may not be as severe as figures suggest
No	No	No	Poor health has caused losses; strongest candidates recently non-UK, or UK temporary
			ESRC needs to be more open to 'new' universities in terms of funding PG students
No	No	No	Marginalisation of economics within business school; no recruitment problems as no vacancies for several years; no retention problems because ageing profile
No	Yes	No	Lack of resources enforcing early retirement; Have had difficulty recruiting high quality staff; Failed to appoint at chair level 4 years ago - post deleted; Because of resource problems we have suffered badly from pre RAE transfer markets
No	Yes	No	Pleased with field for last lectureships; shortlisted 6 new or near completion PhDs, and all had promise; Does not envisage recruitment or retention problems; dependent on continued university support for Department in terms of promotion/salaries;
No	Yes	No	Young staff face no tenure, low pay (16000), insufficient to buy house, pressure to publish, high teaching loads
			Low public opinion of our profession, low pay, poor prospects means that the best undergraduates rarely even consider an academic career; whereas 25 years ago we were producing an adequate stream of recruits.
Yes	Yes	No	1998 saw very strong field (100) for 3 permanent lectureships; Almost all strong applicants were foreign, though 50% UK trained
			Providing there is a strong supply of academics from Europe/World, does it matter that it does not appeal to UK citizens? Although salary is a factor, the general lifestyle does not seem to appeal to undergraduates.
No	Yes	No	No problems at present; University is committed to retaining good staff
			Apprehensive about future recruitment, mainly because of salary levels
No	No	No	No recruitment or retention problems
No	Yes	No	Some difficulty in getting good applicants; poor response from GB

No	No	No	As part of Business, see no major problems in future. Economics is core subject to 7500 students so we need the staff; promotion through the early ranks is not difficult
			Business school has staff of 93, so economics is only 10% of total; quality of applicants for last 2 research assistant posts was very high (many with PhDs)
No	Yes	No	Staff poached by other institutions; no vacancies at the moment so no comment on recruitment problems; suspect that low level of salaries relative to alternative employment would be strong negative factor
No	Yes	No	Difficulty retaining staff in core areas as they are in demand elsewhere
No	No	No	Yes, we are already facing likely moves by younger staff to private sector non-teaching jobs. Older staff, especially those with growing research profile are looking to enhance their careers.
			We have been buoyant economics dept. with large undergraduate Programme. Student recruitment has held up and we tend to overshoot targets; but this is achieved against a much tighter resource constraint
No	Yes	No	Very difficult to recruit and retain in financial economics and econometrics
No	No	No	Retirement a main cause of staff losses; We expect to lose at least one member of staff in the next 12 months to better paid job; expect to have difficulty attracting high calibre applicants to new posts
No	Yes	No	Main factor is geographic location and distance from London
No	Yes	No	Attractive early retirement package is the main reason for recent staff losses. No recruitment or retention problems. Very pleased with last recruitment experience.
No	No	Yes	Department stabilised
No	Yes	Yes	Losses through promotion elsewhere, not lack of prospects here. Lacking staff with commitment to university and UK; relies on few to keep things running; difficult to attract UK people
No	Yes	Yes	Department has been able to recruit high quality staff because of distinctive niche in market. Morale is not high; would expect more staff to leave in coming years, probably for non-academic employment
			Not entirely happy with post-graduate recruitment; intake fell at MPhil/PhD level in 98/99
No	No	Yes	Staff loss due to other opportunities; Difficult to recruit well qualified staff; Have had to grow our own in past decade, i.e. take good young staff, encourage them, but then they leave
			I can see recruitment problems in future years; Good UK PhD students who have worked for us part-time inevitably get a better job elsewhere
No	Yes	Yes	No staff losses in economics; Business school; no economics degrees, but 7 economics related PhDs
No	No	Yes	Calibre of applicants for recent lectureship was not very high; Perhaps it is felt in the postgraduate community that it is difficult to pursue a research career in the new universities
No	Yes	Yes	Staff on fixed term contracts leave for permanent posts elsewhere
No	No	Yes	Extreme difficulty with finance appointments despite excellent external funding; some difficulty in attracting good quality applicants in other areas in economics
No	No	Yes	Lack of research opportunities; modal age of department is 55; low research profile
Yes	Yes	Yes	Problem attracting and retaining 'stars'; more bound by rules than other universities

No	Yes	Yes	2 chairs and 1 readership vacancies at the moment; but no recruitment or retention problems; had 40 applicants of whom 20 were serious applicants; just appointed to a lectureship from a field of 120
No	No	Yes	Faces untypical staffing problems. Difficulty in finding regional academics and staff tutors who can combine economics expertise with a generalist social sciences competence
			No staff losses in past 5 years as economics discipline has been in period of reconstruction/expansion
Yes	Yes	Yes	Staff loss due to better offers elsewhere. Currently trying to fill 7 vacancies: 3 chairs, 2 readerships, 2 lectureships
Yes	Yes	Yes	Last recruited to 2 posts in Feb 98; Total applications 245, of which 18 British. 6 seriously considered. Majority of candidates from US but unable to retain US appointees
Yes	Yes	Yes	Staff losses due to career development; main problem is that we cannot offer the same level of salary as our US competitors
No	No	Yes	Workload may be a problem; reduces research opportunity. Generally we have attracted strong short lists
No	No	Yes	Morale not high due to increased work load; higher proportion of generalist training and poor resource support to cope with increased student numbers; staff do not however have many options elsewhere
			Last full time appointment in 1989; both demand and supply are low in our academic labour market; Location expensive and teaching not attractive to discipline specialist - wide ranging courses and high teaching loads
No	No	Yes	No
Yes	Yes	Yes	Continual recruitment problems, given salary levels in comparison with city etc. Lack of security is a main cause of staff leaving
Yes	Yes	Yes	Recruitment: probably not [a problem]; Retention: always [a problem]
No	Yes	Yes	Retirement the main reason for staff losses. Numbers of good PhDs (especially with English as first language) are very few - short lists are now very short
			Economics here is allocated lowest income per home student relative to other departments, hence difficult to fund new posts

XII. Appendix D: Departments Responding to Questionnaire to Heads of Department

Department of Economics, University of Buckingham
Department of Economics, University of Kent
University of Plymouth, Business School
University of Bangor
School of Social Science, University of Teeside
Edinburgh University, Department of Economics
Department of Economics, Glasgow Caledonian University
School of Economics, Leeds Metropolitan University
Department of Economics, SOAS
Department of Economics, University of Wales, Swansea
School of Social Sciences, University of Greenwich
Aston Business School, University of Aston
Department of Economics and Accounting, University of Liverpool
Business School, University of North London
Department of Economics, University of Stirling
Department of Economics, University of Exeter
Department of Economics, University of Aberdeen
Economics Sector, University of East Anglia
Department of Economics, University of Derby
Department of Economics, University of Reading
Department of Economics, Queens University of Belfast
Department of Economics, University of Kingston
Business School, University of Glamorgan
Department of Economics, University of Lancaster
School of Economic Studies, University of Manchester
Department of Economics and Politics, Nottingham Trent University
Sub-faculty of Economics, Oxford University
Department of Economics, Queen Mary and Westfield College
Faculty of Social Sciences, The Open University
Department of Economics, University of Southampton
Faculty of Economics and Politics, University of Cambridge
Department of Economics, London School of Economics
Department of Economics, University of Central England Business School
Department of Economics, University of Sheffield
School of Business, Oxford Brookes University
School of Public Policy, Economics and Law, University of Ulster
Department of Economics, University of East London
Applied Economics, University of Cambridge
London Business School
Social and Economic Sciences, Bradford
Department of Economic Studies, University of Dundee
Department of Economics, University of Warwick
Department of Economics, Loughborough University
Department of Economics, Heriot Watt University

XIII. Appendix D: ESRC Research Studentships 1991 & 1995, Telephone Survey

Name: Age: Nationality:

Some questions about your work:

1. Who is your current main employer?
2. What is their main activity?
3. What is your current job?
4. And what attracted you to the sector in which you work, rather than the alternatives available to a person with your qualifications? Was salary an important issue in your decision?

5. Who was you first employer after your application for an ESRC studentship?
6. What was their main activity?
7. What was the job?
8. And what attracted you to this sector? Was salary an important factor here?

9. Have you had any other jobs in between these two? Please mention:

10. Why did you change sectors (if applicable)?

11. If this is your first job, have you ever considered a job in an alternative sector (e.g. financial/ consultancy/academia/central government –any others?)

12. If yes (no), what attracts you to (puts you off) these alternatives? Again, is salary an important factor?

About your PhD:

13. What were your main reasons for deciding to do a PhD/DPhil

14. Did you complete your PhD/DPhil?

15. If no, why not?

16. What was the subject area of your final Thesis?

17. Do you think doing a PhD/DPhil in economics was worthwhile, in retrospect?

Comments:

18. We are interested in finding out why more people do not do PhDs in economics. Is there anything you would like to say about this?

XIV. Appendix E: Postgraduate Questionnaires

MASTERS QUESTIONNAIRE **University: _____**

Age:____ Sex: __ Nationality:_____ Course:_____ Full/Part-Time

1. What is the main reason you decided to do the postgraduate degree you are doing? (please tick ONE)

____ didn't get a suitable job
____ enhance career prospects
____ intellectual curiosity in economics
____ personal satisfaction
____ requirement for further study (e.g. PhD)
____ other: _____ (please explain)

2. Are you considering doing a PhD?

____ yes, straight after the MSc
____ possibly sometime in the future
____ no, never

3. If your answer to 2. was *yes,* in which field of economics are you going to do your PhD?

_____

4. If your answer to the question above was *possibly* or *no, never,* what is your main reason for answering as you did? (please tick ONE)

____ PhD takes too long
____ little enhancement of job prospects
____ lack of financial means
____ no interest in an academic career
____ would rather work now and decide later
____ other: _____

5. What is the main career you are considering (or already pursuing) ? (please tick ONE)

____ academic
____ banking/financial
____ industrial
____ international organisation
____ professional economist in the government sector
____ professional economist in the private sector (continued)

____ self-employment
____ not sure/don't know yet
____ other: _____ (please explain)

6. What factors most influence your answer to 5.? (please tick up to <u>THREE</u>)

____ ability development
____ challenge
____ comfort
____ financial rewards
____ flexible hours
____ job security
____ performance related pay
____ physical surroundings
____ promotion possibilities
____ relations with co-workers
____ resource adequacy
____ social and personal life
____ status
____ working conditions

7. Whether or not you ranked academic in question 5, what would you consider the (please tick up to <u>THREE</u>):

advantages of an academic career?	disadvantages of an academic career?
____ contact with students	____ academic "peer" pressure
____ flexibility of working hours	____ boring
____ financial rewards	____ pressure to publish
____ independence	____ relatively low pay
____ intellectual stimulation	____ slow career progression
____ peer recognition	____ solitary environment
____ other: _____	other: _____

8. How many hours would you consider to be an appropriate working week?

____ less than 35
____ 35-40
____ 41-45
____ 46-50
____ more than 50

9. Would you be willing to work during weekends?

if paid overtime
____ yes, as often as needed
____ yes, but only occasionally
____ no, never

if not paid overtime
____ yes, as often as needed
____ yes, but only occasionally
____ no, never

10. Do you think in choosing careers, students are strongly influenced by the monetary rewards?

____ strongly agree
____ agree
____ don't know/not sure
____ disagree
____ strongly disagree

12. Roughly how much do you expect to be earning ten years from now? £ _____ per annum

13. How much do you think it would be ten years from now if you took a university job? £ _____ per annum

14. For a similar type of job and pay, would you rather work in the:

____ public sector ____ private sector ____ indifferent

15. For a similar type of job and pay, would you rather work for a:

____ large multinational ____ medium sized firm ____ small firm ____ indifferent

17. How stressful do you think an academic career would be compared to a career in business or industry?

____ much more stressful
____ somewhat more stressful
____ about the same
____ somewhat more relaxed
____ much more relaxed

18. How many hour per week would you say an average academic economist works?

____ less than 35
____ 35-40
____ 41-45
____ 46-50
____ more than 50

19. How much do you think a 50-year old full professor of economics at a university like this one is paid as a university salary? £ _____ per annum

20 . How much do you think a 30-year old lecturer in economics at a university like this one is paid as a university salary? £ _____ per annum

21. If academic economists were paid 25% more, would that make a university career much more attractive to you?

____ yes, very much.
____ yes, it would make some difference.
____ not really: it would make little or no difference to me.
____ no

22. How are you funding your current period of postgraduate study?

____ self-funded.
____ ESRC award.
____ university/college scholarship.
____ funded by current employer.
____ other: _____

23. If you answered *funded by current employer* to question 22, what is your employer's main activity:?

COMMENTS - We are interested in understanding why more people do not go into PhDs/academic life. Is there anything else you would like to tell us?

PhD QUESTIONNAIRE **Universi ty: _____**

Age:____ Sex: __ Nationality:_____ Course:_____ Full/Part-Time

1. What is the main reason you decided to do a PhD in economics? (please tick ONE)

____ want to follow an academic career
____ didn't get a suitable job
____ enhance overall career prospects
____ intellectual curiosity in economics
____ personal satisfaction
____ other: _____ (please explain)

2. What is the main career you are considering (or already pursuing)? (please tick ONE)

____ academic
____ banking/financial
____ industrial
____ international organisation
____ professional economist in the government sector
____ professional economist in the private sector
____ self-employment
____ not sure/don't know yet
____ other: _____ (please explain)

3. Whether or not you ranked *academic* in question 2, what would you consider the main advantages of an academic career (please tick up to <u>three</u>):

advantages of an academic career?	disadvantages of an academic career?
____ contact with students	____ academic "peer" pressure
____ flexibility of working hours	____ boring
____ financial rewards	____ pressure to publish
____ independence	____ relatively low pay
____ intellectual stimulation	____ slow career progression
____ peer recognition	____ solitary environment
____ other: _____	other: _____

4. Do you think in choosing careers, students are strongly influenced by the monetary rewards?

____ strongly agree
____ agree
____ don't know/not sure
____ disagree
____ strongly disagree

5. Roughly how much do you expect to be earning ten years from now? £ _____ per annum

6. How much do you think it would be ten years from now if you took a university job?

£ _____ per annum

7. How stressful do you think an academic career would be compared to a career in business or industry?

____ much more stressful
____ somewhat more stressful
____ about the same
____ somewhat more relaxed
____ much more relaxed

8. How many hour per week would you say an average academic economist works?

____ less than 35
____ 35-40
____ 41-45
____ 46-50
____ more than 50

9. How much do you think a 50-year old full professor of economics at a university like this one is paid as a university salary? £ _____ per annum

10 . How much do you think a 30-year old lecturer in economics at a university like this one is paid as a university salary? £ _____ per annum

11. If academic economists were paid 25% more, would that make a university career much more attractive to you?

____ yes, very much.
____ yes, it would make some difference.
____ not really: it would make little or no difference to me.
____ no

12. How are you funding your current period of postgraduate study?

____ self-funded.
____ ESRC award.
____ university/college scholarship.
____ funded by current employer.
____ other: _____

13. If you answered *funded by current employer* to question 22, what is your employer's main activity:?