



International Benchmarking Review of UK Economics



Contents

Foreword

1	Summary Points	1
2	Introduction	2
3	Research Quality	4
	3.1 Broad Evaluation	5
	3.2 Fields of Specialisation	8
	3.2.1 Development economics	10
	3.2.2 Econometrics	10
	3.2.3 Financial economics	11
	3.2.4 Industrial organisation	12
	3.2.5 International trade	13
	3.2.6 Macroeconomics	13
	3.2.7 Labour economics	14
	3.2.8 Public economics	15
	3.2.9 Microeconomic theory	16
	3.2.10 Law and economics	16
	3.2.11 Economic geography	17
	3.2.12 Behavioural and experimental economics	17
4	Research Capacity	18
	4.1 Economics in Business Schools	18
	4.2 Size and Concentration	19
	4.3 Postgraduate Education	20
	4.4 Foreign Nationals	21
	4.5 Gender	22
	4.6 Funding	23
5	Research Impact	26
6	Concluding Comments	28
	References	29
	Annex A:	30
	Response of the Steering Group to the Helpman Panel's International Benchmarking Review of UK Economics	
	Annex B:	32
	Membership of the Panel	

Foreword

The UK's Economic and Social Research Council (ESRC), the Royal Economic Society (RES) in consultation with the Conference of Heads of University Departments of Economics (CHUDE) agreed in 2007 to work in partnership to benchmark the quality and impact of research in the UK against international standards. This is the third in a series of ESRC sponsored assessments that is covering major social science disciplines in the UK.

The review process was managed by a Steering Group composed of senior academics, funders and research users under the chairmanship of Professor Sir John Vickers (University of Oxford and President of the RES). The Steering Group appointed an International Panel of eminent economists, chaired by Professor Elhanan Helpman (Harvard University), to make an independent assessment of the UK's performance and to report on its findings. The Steering Group and International Panel Members are listed at Annex A and B respectively.

The Steering Group warmly welcomes this thorough and rigorous assessment of the state of Economics in the UK, and is delighted with the Panel's positive endorsement of the strength of the discipline. The report concludes that UK economics research is exceptional by international standards, and in terms of its overall contribution is second only to the United States. The UK is the world-leader in micro-econometrics and has significant strength and influence in a number of other important sub-fields such as labour, public and development economics. The report also recognises the high quality of applied work in the UK and the huge impact that this has on policy and practice. This assessment is testimony to the expertise and commitment of scholars at all levels of the discipline.

All of the report's recommendations will be considered fully, and where areas of relative weakness have been identified the organisations involved will work together to address them. We hope that the report will be debated by all those with an interest in the development of Economics in the UK, and that it will provide a focus for extending the enormous contribution described by the International Panel.

We wish to extend our gratitude to Professor Helpman and the other Panel members for their hard work in producing such an insightful and stimulating report. The Steering Group would also like to thank all those who discussed their work with the Panel or contributed in any way to the review.

Professor Ian Diamond, Chief Executive, Economic and Social Research Council

Professor Sir John Vickers, President, Royal Economic Society

November 2008

1 Summary Points

- First and foremost, the research achievements of United Kingdom scholars are exceptional by world standards; the UK economics profession is more prominent than any other country's except for the United States. UK scholarship has been very influential in a number of important fields, such as labour economics, public economics, and economic development, and it has attained world leadership in microeconometrics.
- While maintaining strength in the areas that are doing well is important, it is also important to strengthen a number of fields that are doing less well. The Panel feels that macroeconomics requires particular attention, because it is a core subject of the discipline and it is lacking in a number of dimensions in the UK. Although microeconomic theory is doing better than macroeconomics, it too needs improvement in order to fulfil its mission as a core subject.
- Improvements of fields cannot be achieved by earmarked research funds alone; the remedy has to involve the recruitment of high-quality scholars. For this reason research funds should be tied to recruitment.
- Curiosity-driven research, theoretical and empirical, should not be discouraged by the format of submissions of research proposals, such as the requirement of references from final users of research output. The ESRC needs to make a bigger effort to inform researchers that such references are not mandatory and should be provided only when appropriate.
- The Panel supports the move to a 2+2 format of postgraduation education. In addition, we recommend developing a support system that will provide talented Ph.D. students with financial security during the entire period of their studies.
- The training of Ph.D. students can be enhanced by co-operative networks of economic departments, and countrywide specialised Ph.D. courses offered in the Spring or Summer.
- Economic research in the UK is very influential outside academia and has a large impact on policy. This is a major achievement that results from the high-quality of applied work and the healthy relationships between researchers and policymakers.



2 Introduction

Benchmarking economics in the United Kingdom is a formidable task. We approach it with great humility, fully knowing that no matter how hard we try to understand the ins and outs of the UK academic system, its strengths and weaknesses, its relations with the international community of scholars and with governmental and non-governmental agencies, we are bound to miss details of relevance to our task. Our cumulative experience, as a panel, with higher education systems and research outlets in various countries and institutions, provides us with some assurance, however, that we have gathered most of the relevant information, asked the most pertinent questions, and interpreted the evidence presented to us in a sensible way. Our hope is that whatever we have missed is not important enough to materially change our portrait of the state of UK economics, and that what we have learned during this assessment process will be useful in making a strong economics discipline even stronger.

With the aid of the able staff of the Economic and Social Research Council (ESRC), we commissioned a set of documents that provided us with a wealth of information about economics and related disciplines in the UK. These documents cover bibliometric data (Evidence, 2007), statistical data (Wakeling, 2008), a survey of non-academic users of economics research (People Science and Policy, 2007), and sub-disciplinary overviews.¹ We also read a number of documents provided by the ESRC that aided our understanding of the UK system, and other documents that we encountered in the course of our work; some of these are listed at the end of the report. In addition, the ESRC invited all department heads to submit their views on the state of UK economics. Not all responded, but those who did – 32 in total – provided valuable input into our assessment process.

After reading these materials we were well prepared for the next stage: face to face meetings with department heads, researchers, graduate students and postdoctoral fellows, and users of economic research. These meetings took place in Warwick during the annual conference of the Royal Economic Society (RES) and in London after the conference. To heads of departments and groups of researchers we posed the following questions:

- What is the quality of research in the UK (e.g., as judged by the development of new methodologies, both theoretical and empirical)?
- How does the UK compare to the US and to other European countries?
- Is the training of students at different levels (e.g., undergraduate, graduate) adequate, and are the academic careers open in the UK satisfactory? Does the UK attract foreign students in satisfactory numbers? Does it train students for other European countries?
- Is there adequate research on applied UK problems, and are research findings used satisfactorily outside academia?
- Is there adequate co-operation across institutions, with other disciplines (e.g., political science, sociology), and internationally?
- Is research funding adequate?

¹ The sub-disciplinary overviews covered financial economics, labour economics, industrial organisation, development economics, international trade, public economics, econometrics, macroeconomics, and microeconomic theory. We do not deal with economic history in this report.

Our discussions began with these questions, yet in every case we followed the natural route that evolved in the context of the subject matter.

Research students and postdoctoral fellows were asked to comment on the following issues:

- Personal experience of research training.
- Personal experience of research training.
- Strength of UK economics.
- Funding opportunities and resources.
- Opportunities and barriers for those wishing to pursue academic careers.
- Future plans and concerns.

Finally, in the London meeting with users of economic research we asked the following questions:

- In what areas of economics do you find research that is particularly useful?
- In what areas is the available research lacking, either in terms of subject matter or depth?
- What dissemination activities are most effective in communicating the outcomes of economic research so that they can feed into policy and practice?
- What is distinctive about UK economic research?

We are very grateful to the many participants in these meetings for sharing with us their views and experiences. Their patience and wisdom greatly contributed to our education. They should not be blamed, however, for our errors of fact or misunderstandings.

Finally, Professor Sir John Vickers, President of the RES, and Professor Neil Rickman, Chair of the Conference of Heads of University Departments of Economics, provided invaluable guidance to the panel. We are very grateful to them.

Digesting the enormous amount of information, both quantitative and qualitative, that we collected in the course of this work was not easy. But we feel quite satisfied with the results and reasonably confident that we can draw a consistent view of the state of economics in the UK. It is an impressive view of a strong discipline in a country that played a dominant role in the evolution of economics from a sub-field of philosophy to its current status as a stand-alone sphere of academic endeavour. This overall evaluation was easy to make. The more difficult task was to delve into the state of the many fields that characterise economics today and to form a more nuanced view of the UK profession. By doing just that we have identified, or so we think, extremely successful areas on the one hand and areas that have weakened over time on the other. These findings are detailed in the next section.

3 Research Quality

Economic research spans many fields and its coverage has been growing over time. Not all fields play the same role, however. Some form the core of economic education and serve in addition as fields of specialisation. Others, which are not part of the core, are fields of specialisation that can be broadly or narrowly defined. They differ greatly in size, as judged by the number of experts engaged in their pursuit or the number of scholarly publications. As a result of these differences cross-field comparisons of quantitative indicators require careful calibration and sensitivity to the field's status in the profession.

Three fields form the core of economic education: microeconomic theory, econometrics, and macroeconomics. Every Ph.D. student takes courses in these fields, which fill up most of the first-year curriculum in typical 2+2 (or 2+3 more recently) programmes of the US type. Microeconomic theory provides tools for analytical reasoning about consumers, firms and markets; econometrics provides statistical methods for data analysis; and macroeconomics provides insights into aggregate economic phenomena. After the first year's basic training, students take specialty courses in the second year in order to develop an expertise in a couple of fields. In European-style programmes, in which students study toward a masters degree first and then choose whether to continue to a Ph.D. degree, first-year courses are focused on a similar core when the masters programme is a two-year programme, but often also when it is a one-year programme. This structure of postgraduate education gives microeconomic theory, econometrics, and macroeconomics special status, and it dictates the minimal range of specialisation that a department needs to sustain a postgraduate programme. Moreover, many European-style economics *undergraduate* programmes in universities and US-style economics majors in colleges also require students to take courses in microeconomic theory and macroeconomics, although fewer require econometrics.

In addition, to these core courses undergraduate and postgraduate programmes offer specialty fields. These can include specialised courses in microeconomic theory, econometrics, or macroeconomics, or specialised courses in other fields, such as international economics, public economics, or industrial organisation. To assess a country's strengths and weaknesses therefore requires an assessment of its strengths and weaknesses in a broad range of scholarship. The division into fields can be done in different ways. One could use, for example, the standard classification of the *Journal of Economic Literature (JEL)* for the publication of articles and books in economics.² Or one could use alternative classifications, such as the classification employed by econphd.com for ranking economics departments.

For the purpose of this report we have chosen a classification that closely replicates the fields of specialisation offered by major Ph.D. programmes. This classification has the advantage of being aligned – although not perfectly – with field journals, which eases the evaluation of publications in areas of specialisation. We discuss these fields in Section 3.2.

² The JEL classification consists of: A - General Economics and Teaching; B - Schools of Economic Thought and Methodology; C - Mathematical and Quantitative Methods; D - Microeconomics; E - Macroeconomics and Monetary Economics; F - International Economics; G - Financial Economics; H - Public Economics; I - Health, Education, and Welfare; J - Labour and Demographic Economics; K - Law and Economics; L - Industrial Organisation; M - Business Administration and Business Economics • Marketing • Accounting; N - Economic History; O - Economic Development, Technological Change, and Growth; P - Economic Systems; Q - Agricultural and Natural Resource Economics • Environmental and Ecological Economics; R - Urban, Rural, and Regional Economics; Y - Miscellaneous Categories; Z - Other Special Topics.

3.1 Broad Evaluation

Data on the publication and citation records of UK scholars suggest a strong performance by world standards, and so do the numbers of scholars who are fellows of learned societies and recipients of prestigious prizes.

During the ten-year period 1997-2006, the UK produced an annual average of close to 13.5 per cent of the world's economics papers in the journals covered by Thomson Scientific. And this share increased over that decade. By comparison, the US share declined from close to 60 per cent to about 53 per cent. France and Germany, who started with roughly one quarter of UK publications, increased their share faster than the UK. According to these statistics the UK is second only to the US in overall publication share, and given the difference in population size, it has a higher output per capita.³

One very rough measure of a publication's impact is its citation record, and in particular its impact relative to a world baseline as measured by the rebased impact (RBI). The latter is calculated by dividing a paper's citation count by the average citation count of papers in the same category. RBIs above one reflect more than average citations, while RBIs below one reflect less than average citations. On this measure the UK's impact during 1997-2006 was very close to the world baseline, yet higher than that of France, Germany, Australia, and Canada. But it was significantly below the US impact, whose papers were cited about 30 per cent more than baseline. It follows that – according to this measure – the UK is second only to the US in the impact of its papers, but the gap in citations per paper between the two countries is substantial. The good news is that this gap declined over time, but so has the UK's lead over the Netherlands and Australia, two countries that seem to be slowly catching up.⁴

The excellence of a profession, a university, or a department, is often better measured by the high-end rather than the average performance. For this reason we have also examined publication and citation records in high-impact journals. They include nine general-purpose and 13 field journals. Table 1 reproduces the relevant information for the general-purpose journals. While the share of UK publications was on average 13.5 per cent in the many journals covered by Thomson Scientific, its share in these high-impact journals varied substantially. Columns two and three of the table, for the years 1997-2001 and 2002-2006, respectively, show that the UK share was about three times higher than average in the *EJ*, which is published by the Royal Economic Society, and about one and a half times higher in the *REStud* and the *JEEA*, which are also based in Europe.⁵ UK shares in the *EJ* and *REStud* declined over time. With the exception of the *AER* and the *REStat*, in which the UK share is substantially lower than 13.5 per cent, its representation in the other journals is also below par with the UK's overall contribution to the economics literature but less so. The *AER* is published by the American Economic Association, it is one of the very best journals, and one would have expected a significantly larger UK share.

³ See *Evidence* (2009).

⁴ See *Evidence* (2009).

⁵ The *REStud* is UK-based, while the *JEEA* belongs to the European Economic Association.

Table 1: Frequency of Publication and Citation in General-Purpose Journals

	UK papers as % of journal papers		UK RBI divided by journal RBI	
	97-01	02-06	97-01	02-06
<i>EJ</i>	44.2	37.1	0.9	0.8
<i>AER</i>	3.3	6.7	1.2	1.0
<i>REStud</i>	26.4	16.8	1.0	1.2
<i>Eco</i>	11.6	13.0	0.8	1.1
<i>IER</i>	10.1	12.3	1.0	1.8
<i>REStat</i>	6.7	6.0	0.9	1.3
<i>JEEA</i>	–	20.1	–	1.0
<i>JPE</i>	10.0	7.3	1.1	1.5
<i>QJE</i>	9.1	6.8	1.0	1.0

Source: Evidence (2009, revised Table 8). *The full names of the journals are: Economic Journal, American Economic Review, Review of Economic Studies, Econometrica, International Economic Review, Review of Economics and Statistics, Journal of the European Economic Association, Journal of Political Economy and Quarterly Journal of Economics. Data for the JEEA, which is a new journal, is available for 2006 only.*

The last two columns of the table report the UK's RBI in every journal relative to the journal's average RBI in the two subperiods 1997-2001 and 2002-2006; they can be interpreted as measures of the quality of UK publications in each journal relative to the journal's average publication. Journal average RBIs vary substantially, with higher-impact journals having higher RBI indexes. It is therefore more demanding to attain a ratio larger than one for higher-impact journals than for lower-impact journals. The table shows, however, that almost all the ratios exceed one, with the *EJ* having a ratio slightly below one and *Eco* having a slightly lower ratio during the first five years but a slightly higher ratio during the subsequent five years. One also observes a general increase in this ratio over time, which can be interpreted as an improvement in the quality of UK publications relative to the standards of these journals. In addition, 12 out of the 324 highly cited economists on the list of Thomson Scientific are based in the UK. Again, this is the highest number among all countries except for the US, which dominates the list. Finally, according to Vasilakos et al. (2007, Table 41), the UK has the highest number of citations after the US in the RePEc list, and it is ranked third when US states are considered to be country-equivalent units (Massachusetts leads the list, with California ranked second). In the latter case, i.e., when every US state is considered a separate 'country,' the UK also has the largest number of authors on the RePEc (Research Papers in Economics) list. But this proves to be a double-edged sword, because it implies that UK citations per author are ranked significantly lower. Nevertheless, even in this case the UK is doing better than all the 'real' countries, except Israel and Ireland.

Judged by the above reported quantitative indicators we conclude that the publication record of UK scholars is very good by world standards, both in terms of quantity and quality. UK scholars publish widely, they are well represented in the best journals, and their work in the high-impact journals is cited more than average.

As important as quantitative evidence of this sort can be, it does not paint a complete canvas of a country's research activities. It is particularly liable to miss striking achievements that place scholars and countries in leadership positions. To identify such achievements it is necessary to look beyond simple statistics and to assess the importance of contributions beyond citation counts. We will argue in the next section that the UK is strong in a number of fields and that its relative strength in various areas has shifted over time.

Before we elaborate these claims, however, we are delighted to report that the UK has attained world leadership in microeconometrics. Microeconometrics does not fall neatly into the traditional division of economics into fields, because it consists of econometric techniques for the analysis of microeconomic data on the one hand and the application of these techniques to concrete issues on the other. UK scholars have excelled in the development of the statistical tools and especially in their application to a wide range of issues – such as wages, education, health, and taxes – in diverse fields of the discipline. And the interplay between statistical methodology and empirical analysis has been the hallmark of this work. This contribution has been unique indeed.

The esteem accorded UK economists is also evident from an examination of fellows in learned societies and recipients of prestigious prizes. In 2006, the UK had 35 fellows in the Econometric Society, about twice the number of French fellows, with France having the third largest number overall. Europe, excluding the UK, had 50 fellows. The US had by far the largest number, however: 305. Among the fellows of the European Economic Association (EEA), 36 are UK-based, which is the largest number among the European countries. Moreover, this is more than twice the number based in France, which has the second largest membership.⁶ UK economists have also received a disproportionately large share of the Yrjö Jahnsson Prize, which is awarded biannually by the European Economic Association to "...a young European economist who has made a contribution in theoretical and applied research that is significant to economics in Europe." This is the most prestigious prize awarded by the EEA and in three out of the eight years in which it was awarded the prize was given to UK economists. In the last decade one UK-based economist was also awarded the Nobel Prize. Finally, UK economists have served as presidents of important international learned societies, such as the European Economic Association and the Econometric Society.

⁶ See *Wakeling (2008)*.

3.2 Fields of Specialisation

Having addressed the general state of economic research in the UK, we now discuss strengths and weaknesses in particular fields. Important information about the purview and quality of UK publications that serves as background for this discussion is contained in Table 2, which reports similar statistics to Table 1 except that now they concern field rather than general-purpose journals. Before we discuss these statistics, however, it is important to note that they may not provide a balanced view of the strengths and weaknesses of various fields, because general-purpose journals publish many field-specific studies. Moreover, some of the very best papers in all fields are published in general-purpose journals, because they are more prestigious and scholars therefore prefer to publish in them. As a consequence a country's particularly strong areas of expertise can be under-represented in field journals. For this reason it is necessary to use supplementary information and form qualitative judgements about the prominence of individual fields. This is our approach in what follows.

Table 2: Frequency of Publication and Citation in Field Journals

	UK papers as % of journal papers		UK RBI divided by journal RBI	
	97-01	02-06	97-01	02-06
<i>JEco</i>	13.1	17.8	1.4	2.2
<i>JET</i>	8.9	12.0	1.0	1.0
<i>JPubE</i>	13.2	8.0	1.0	1.8
<i>JDE</i>	13.1	13.9	0.9	1.5
<i>JHE</i>	17.1	17.1	1.0	2.2
<i>JME</i>	7.3	5.8	0.9	2.2
<i>JIE</i>	9.0	11.0	1.0	1.4
<i>JF</i>	4.3	6.6	0.9	1.1
<i>RJE</i>	7.7	12.6	1.3	2.0
<i>JUE</i>	3.9	7.6	0.7	1.3
<i>JOLE</i>	7.6	8.8	1.7	0.6
<i>JEEM</i>	3.8	6.5	1.7	1.4
<i>JLawE</i>	4.5	8.3	0.8	0.5

Source: Evidence (2009, revised Table 8). *The full names of the journals are: Journal of Econometrics, Journal of Economic Theory, Journal of Public Economics, Journal of Development Economics, Journal of Health Economics, Journal of Monetary Economics, Journal of International Economics, Journal of Finance, Rand Journal of Economics, Journal of Urban Economics, Journal of Labor Economics, Journal of Environmental Economics and Management and Journal of Law and Economics.*

Recall that the UK has published an annual average of about 13.5 per cent of the papers in economics. Columns two and three of Table 2 show its publication share in various field journals in 1997-2001 and 2002-2006. According to these data, during the first five-year period, UK publications in the *JEco*, *JPubE* and *JDE* were close to this average. Publications in the *JHE* were significantly above par, while publications in the remaining journals were below par. Particularly low were the publication rates in the *JME*, *JF*, *JUE*, *JEEM* and *JLawE*. A comparison of columns two and three shows that during that decade publication shares remained roughly constant in the *JDE* and *JHE*, declined significantly in the *JPubE* and *JME*, and increased in the other journals.⁷ Among the journals whose share increased, particularly noteworthy were the increases in the *JEco*, *JET*, *JF*, *RJE*, *JUE* and *JLawE*. Despite this growth, however, the *JF*, *JUE* and *JLawE* retained low shares in the second five-year period.

Relative RBIs are reported in the last two columns of Table 2. During the first five years of the decade covered by these data, UK citation rates were close to average in most of the journals and, with the exception of the *JUE*, below-average citation rates were not very significant. On the other hand, the *JEco*, *JOLE* and *JEEM* had UK citation rates well above average. Note, however, that with the exception of the *JEco*, the other two journals contained few papers by UK scholars.

Comparing the last two columns of the table reveals that the quality of publications, as measured by the RBI index, increased over time in all journals except for the *JOLE*, *JEEM* and *JLawE*. The decline in the RBI of the *JLawE* was particularly steep. On the other side there were large RBI increases in a number of journals, particularly in the *JPubE* and the *JHE*. These statistics suggest that the UK is doing well in many fields but not in all. Some of the fields appear to be relatively small in the UK and not very prominent. Others are large and strong.

⁷ Although the publication share 13.5 per cent is a decade-long average, annual fluctuations around this figure were small, as can be seen in *Evidence* (2009, revised Table 2).



3.2.1 Development economics

Development economics is a vibrant field in which UK scholars are heavily engaged; its main focus is on issues of concern to developing countries. Much of the UK work in this field is applied, and especially so in what is known as ‘development studies,’ in which many non-economists participate.

Economic research in development has moved away from the ‘big’ questions of growth and stagnation to a plethora of microeconomic issues such as financing agricultural investments or designing teacher incentives in rural schools. As a result, the empirical studies have adopted new methodologies and applied them to countries in Africa, Asia, and South America. This research is more issue – than geography-oriented, and similar tools are used in a wide range of applications. Although a group of leading UK scholars is very active in this line of inquiry, area studies still dominate UK research. UK scholars are active in international networks that specialise in development economics, both in Europe and in the US.

Leading UK development economists often have additional areas of expertise, such as international trade, microeconometrics, or political economy, which nicely complement their development research. They are active in micro-development studies yet do not fail also to address larger questions of development, such as the impact of violence and civil war on the process of development. As Table 2 shows, UK publications in the *JDE* are slightly higher than the average for all of UK economics and their citation rate has improved over time, as measured by the RBI index. Our sense is that the field is healthy and doing well.

3.2.2 Econometrics

The field of econometrics ranges from abstract econometric theory to applied econometrics. Between them, microeconometrics, macroeconometrics and financial econometrics are recognisable subfields. So the field is large and diverse, with ramifications in other areas.

The share of UK publications in the *JEco* increased to 17.8 per cent during the decade reported in Table 2, which is well above the UK share of total publications in economics. Moreover, the UK RBI for this journal also increased, to 2.2, which is very high indeed.

These statistics for the *JEco* are reflective of the field in the UK more generally. There are a number of UK departments with significant expertise in econometrics and a substantial group of scholars who publish high-quality work. There is much strength in theoretical econometrics, such as time series theory and non-parametric methods, and especially in applied microeconometrics. In this area a remarkable volume of high-quality work has emerged amidst a healthy culture that combines rigorous econometric standards, methodological eclecticism, substantive empirical questions, and data production.

Over the last decade there were major developments in structural micro- and macro-econometrics, such as models of demand for differentiated products and dynamic stochastic general equilibrium macro models. These developments exploit advancements in computer-

intensive techniques, such as the simulated method of moments or Bayesian estimation. Research undertaken in the UK in these areas, and especially in macroeconometrics, has been thin by comparison with the US.

UK empirical economists collaborate with social statisticians and other social scientists in developing high-quality data for research purposes. As a result, there has been a large improvement in data availability, notably in longitudinal surveys. The frontier is to find ways of making administrative data increasingly accessible to researchers. As the examples of some Scandinavian countries show, progress in this area affords important research opportunities.

Econometrics is doing very well in the UK, but it is somewhat unbalanced. In addition to the substantial strength in microeconometrics, financial econometrics – although less prominent – is also doing well, and improving. But the UK is not well represented in other new areas of research, such as set estimation and structural approaches, and it has weakened in macroeconometrics in relative terms.

3.2.3 Financial economics

Financial economics can be viewed as a field of economics, but also as part of the broader finance subject area in which business schools have taken the lead. The dividing line between financial economics and finance is difficult to draw, but some distinction between the two seems important in placing developments in the UK in context. The finance profession in US business schools has developed a separate identity both in the teaching curriculum and in research that makes it distinct from an economics field.

In the UK, the distinction between financial economics and finance is not as clear cut, however, because UK scholars have drawn on their existing strengths in economics. As a result, financial economics as a field within economics is well represented in the UK and it is particularly strong in some theoretical areas. Areas of strength include contract theory and equilibrium approaches to corporate finance and banking, with applications to credit cycles and liquidity analysis. The associated research into financial stability and financial regulation has also been excellent. However, the UK is less strong than the US in empirical corporate finance – an area that has become very important in the leading US business schools and in some economics departments. But empirical research in asset pricing in the macro tradition is better represented in the UK, as is financial econometrics.

Viewed more broadly, rather than as a field of economics, the UK finance profession still lags behind the US, but UK business schools have achieved rapid progress in recent years and have narrowed the gap. As shown in Table 2, UK publications in the *JF* have increased over time and so has their visibility. UK publications in this journal are still below par, however, and significantly so.

3.2.4 Industrial organisation

Industrial organisation deals with market structure and the conduct of firms. It is well covered in the UK. Table 2 shows that UK publications increased in the *RJE* to 12.6 per cent in 2002-2006 and their RBI was much higher than the journal's average. The benchmarking panel also received a submission on publications in industrial organisation in the most recent five year period, 2003-2007. In an unweighted count of papers in industrial organisation in the five leading general-purpose journals together with the three field journals (*RJE*, *Journal of Industrial Economics*, and *International Journal of Industrial Organisation*), papers with UK-affiliated authors accounted for 13 per cent of all papers published. These figures reflect a strong presence in the field.

Nevertheless, the raw count of papers masks an uneven impact of UK research. Theoretical work was in the past an area of strength, and especially so in topics that relate to market conduct and regulation. Yet theoretical work in this field has dried up not only in the UK but in the profession at large.

The UK has some centres of excellence in empirical industrial organisation. However, they are not as prominent as the UK's past leading status in theoretical industrial organisation. Part of the disparity is accounted for by the way in which the subject has evolved. The centre of gravity has moved away from those areas in which the UK was traditionally strong into areas of empirical research that emphasise case studies of particular industries, employing structural estimation approaches to novel datasets. Success in this type of research entails deep knowledge of econometrics and computation techniques, as well as traditional tools from theoretical industrial organisation. Although UK scholars are represented in this newer literature, their weight is relatively small. Remedying this gap will not be easy, however, because the more fashionable empirical research employing structural econometrics entails considerably greater risk for young scholars who need to master a wide range of technical skills and institutional knowledge, as well as having to negotiate the difficult path of obtaining novel datasets for particular applications. Indeed, even for leading US researchers in this area the number of published papers tends to be small. For the time being, the UK's impact on the structural empirical approach is likely to be muted.

The shift in emphasis towards structural estimation, which dominates the US profession, has opened the leadership in other areas to new entrants. As a result, UK scholars have increased their profile in the traditional areas of industrial organisation, such as regulation and business strategy. These scholars are active in international networks, such as the Centre for Economic Policy Research (CEPR) and the European Association for Research in Industrial Economics, and their work is highly valued.

3.2.5 International trade

International trade is typically coupled with foreign direct investment (FDI) as a single field, where foreign direct investment is viewed as the study of multinational corporations. These aspects of FDI differ from the macro approach, which focuses on FDI as an item in the capital account. And international factor movements are also considered part of the field. Taken together the field is still rather small and yet UK publications in the major field journal, the *JIE*, are somewhat below par compared to its total publications in economics (see Table 2).⁸ The share of UK publications in this journal has increased over time and so has its RBI relative to the journal's average; the RBI was on a par with the journal's average in 1997-2001 and was 40 per cent higher in 2002-2006.

Expertise in the field is highly concentrated in just a handful of economics departments and the output of the leading scholars is of high quality. There is a good balance between theory and applied work, with the theoretical work being particularly strong. UK scholars have contributed to theoretical and empirical studies of trade flows, trade policies, and the operation of multinational corporations.

Judged by participation in international networks of scholars in this field, UK economists are doing well. They are highly active in the main European networks (CEPR, European Research Workshop on International Trade, European Trade Study), and they are well represented among the highly cited economists and the fellows of the Econometric Society.

Recent hires at the junior and senior level have significantly strengthened the field in the UK. The field is doing well and improving.

3.2.6 Macroeconomics

Macroeconomics is a broad area. It ranges from aggregate consumption and investment to economic growth, business cycles, money and international finance. It is so diverse, touches on so many issues, and uses so many methods from other areas, that one wonders whether it can meaningfully be defined as a field. What gives macroeconomics its unique identity is its focus on economy-wide issues.

The fact that macroeconomics is so diverse makes it difficult to assess its strength in the UK from bibliometric data, as many macro papers are not published in field journals. Table 2 provides evidence on the UK share of papers published in the *JME*, which declined from 7.3 per cent to 5.8 per cent from 1997-2001 to 2002-2006.⁹ Yet the UK RBI has significantly increased in this journal during that decade.

⁸ One caveat is that the *JIE* publishes papers in international trade and in international macroeconomics.

⁹ A similar upward trend is observed for the *JIE*, which publishes papers in international macroeconomics, where the UK share rose from 9 per cent to 11 per cent.

Judged by these data, one may think that macroeconomics is in reasonable shape. A closer look reveals problems, however. According to views expressed in interviews and evidence from web sites, few schools in the UK have a critical mass of top researchers in this field. Our impression is that in most UK universities there simply may not be enough capacity left to teach state-of-the-art macroeconomic courses, and surely not enough talent to supervise frontier research in this field. UK researchers are not very visible in major areas of macroeconomics – such as international macro, business cycles, macroeconometrics, and ‘new’ Keynesian economics – which are very active in North America and Continental Europe. They still maintain, however, great strength in the interface between macro and labour. In this sub-field UK leadership has not declined, and it has remained very prominent.

We have not been able to understand why this decline has occurred, especially in view of the UK’s past strength in some key macroeconomic areas. But we believe that it is of first-order importance to remedy the situation. As we pointed out earlier, macroeconomics is part of the core of economics education and it therefore plays a central role in the training of economists. Moreover, it is a field of specialisation that generates scholarly work on issues of major importance, such as monetary, fiscal and exchange rate policies. For these reasons it should not be neglected.

3.2.7 Labour economics

Labour economics deals with all aspects of labour markets, such as labour supply, wage determination, and labour union activities, as well as other topics such as human capital formation and personnel economics. As a result of this multitude of subject matters and the importance of workforce issues in many branches of economics, labour economics intersects with a variety of other fields, and some of these overlaps are substantial. This also leads to the use of different tools of analysis, theoretical and empirical, in different parts of the field. UK scholars have been active in many areas of labour economics and they have contributed to both theory and applications. The empirical work has been particularly strong, however.

The UK share of publications in the *JOLE* increased to 8.8 per cent in 2002-2006, which was still below the UK share of total publications in economics. At the same time, the UK RBI of these publications declined relative to the journal’s average (see Table 2). We do not see this as a reason for concern, however, because during the same period UK scholars published influential labour economics papers in leading general-purpose journals. For example, in the submission on labour economics to the panel it is estimated that the share of labour economics articles among the top-five cited UK articles in the top-five general-purpose journals was 11 per cent on average in 1990-2005. This figure suggests that the field is well represented among the strongest UK publications.

During the last ten years, UK scholars have significantly contributed to research on diverse topics such as wage inequality, labour supply, and workplace performance evaluation, and they have provided leadership in developing new approaches to the structural estimation of equilibrium search-and-matching models of the labour market. And they have done important work on job satisfaction and happiness.

The international profile of UK labour economists is high, they are well represented among the highly cited economists and among the presidents of international learned societies. We view labour economics as one of the strongest fields in the UK; it has a healthy mix of approaches and great strength in empirical micro labour.

3.2.8 Public economics

Public economics is a large field that encompasses a variety of methodologies and many areas of research, such as taxation, health, welfare systems, political economy, the provision of public goods, and environmental economics. The field has traditionally been exceptionally strong in the UK. In the 1970s and early 1980s several UK scholars were world leaders; they opened new lines of research and set the standards for others to follow. The influence of UK research on the field is less remarkable now than it was in its heyday. Nevertheless, it is still exceptional in some areas and the overall quality of the field remains very high.

The share of UK publications in the *JPubE* declined from 13.2 per cent in 1997-2001 to 8.0 per cent in 2002-2006. At the same time UK citation rate relative to the journal's average increased almost twofold: from the journal's average in the first half of the decade to 1.8 in the second half. The UK share of publications in the *JHE* remained high throughout the decade, in excess of 17 per cent, and the citation rate relative to the journal's average also doubled (see Table 2). Evidently, the UK is well represented in these journals, with highly visible papers, as well as in general-purpose journals.

Public economics has evolved in new directions, most of them empirical. Innovative theoretical work emerged in political economy (which has become an important field in its own right) and in dynamic optimal taxation and social insurance. UK scholars contributed significantly to theoretical work in political economy, in which the UK is very strong, but not to dynamic taxation. Instead, they contributed to the empirical analyses of a variety of topics, such as education, health, taxation, and social insurance.

We also feel that the UK lost some of the strength it once had in environmental economics, despite the fact that its publications in the *JEEM* were significantly more cited than the average paper in that journal (see Table 2). The fraction of UK papers in the *JEEM* was quite small, however (see Table 2). We feel that this is not an area of particular strength in the UK, although the field is also underdeveloped in the US and other countries. Since the interest in environmental economics is growing, the field may attract more talent in the future.

Public economics continues to be strong in the UK, but its strength is more evident in certain areas, such as political economy and the empirical analysis of taxes, while in other areas there is room for improvement.

3.2.9 Microeconomic theory

Microeconomic theory dwells on the development of analytical tools for economic analysis and, as such, is of interest to experts in theory and applied fields alike. Micro theory covers decision theory, general equilibrium theory, game theory, mechanism design, social choice and more. Because of the special status of microeconomic theory in the core of postgraduate economics education, no department can be in good shape without some strength in this field.

Table 2 shows that the share of UK publications in *JET* increased to 12.0 per cent over the decade 1997-2006 and the citation of UK papers in the journal remained on a par with the journal's average. However, our sense is that the status of the UK in this field has declined. While in the past UK-based scholars made major contributions in many areas – such as auctions, mechanism design, regulation, repeated games, global games, networks, financial general equilibrium, information economics and contracts – the flow of such high-quality contributions has slowed. This reflects partly a decline in microeconomic theory relative to other fields of economics in the profession at large, and partly a decline of this field in the UK relative to its glorious past here. But it also reflects a decline relative to current frontier research, because creative research in this field has remained strong in the US, sometimes by scholars who had previously been located in the UK.

One hopeful sign is that some UK departments have been successful in hiring theorists from other countries, some on a part-time basis; and there are many young scholars specialising in microeconomic theory on the staff of economics departments in the UK. In this regard the situation is much better than in macroeconomics, but there is still room for a concentrated effort to improve the quality of this field.

3.2.10 Law and economics

UK scholars published little in this area and their citation record declined sharply over time. To examine whether this conclusion is biased as a result of our use of the *JLawE* as the main outlet for publications in law and economics, we asked Evidence Ltd. to collect data on publications in another top journal in this field, the *Journal of Legal Studies*. They found that UK scholars have published only five articles in this journal over the last ten years.

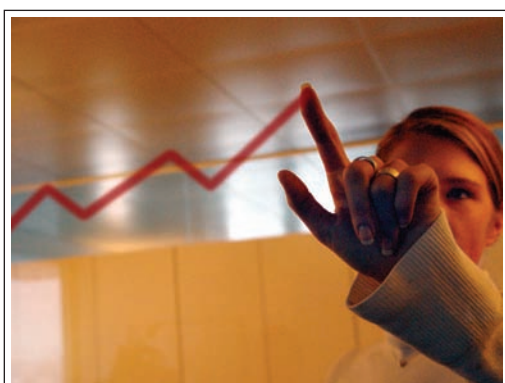
Communications with UK scholars during our interviews and with American scholars who specialise in law and economics confirmed our impression that law and economics is not doing well in the UK. Although some work on law and economics is done by UK scholars working in public economics and industrial organisation, it appears to us that this area of scholarship is important enough to raise concern over the paucity of research by economists. The reason is that the legal system has important effects on the conduct of economic activity and an understanding of this relationship can improve legislation, regulation, and the operation of courts.

3.2.11 Economic geography

UK publications in the *Journal of Urban Economics* were low in the first five-year period but increased to 7.6 per cent in the second. Although this is still below the average of 13.5 per cent, we do not feel that this is a cause for alarm. First, the UK's relative RBI index in this journal increased significantly over the decade, suggesting an improvement in the visibility of UK publications. Second, UK scholars played a major role in the development of what is known as the 'new' economic geography, which suggests that the country is endowed with substantial talent in regional economics. Publications in economic geography have appeared in a variety of general-purpose journals as well as in journals dedicated to international economics, because much of the work in this area focused on inter-regional trade and migration.

3.2.12 Behavioural and experimental economics

Although there have been scholars working in this area for a number of decades, it has gained greater prominence and greater visibility in recent years, as judged by the number of papers published on the subject in first-rate general-purpose journals and the number of Ph.D. dissertations written on the subject in leading economics departments. So far there is no professional consensus on how to incorporate the findings of this research into mainstream economics. Nevertheless, there is little doubt that it will affect in significant ways the evolution of traditional fields. It has already had a measurable impact in macroeconomics and public economics. As of now UK scholars have not played a leading role in these developments, but there are signs of emerging spots of strength in some institutions. We think that it is in the interest of the UK to build more capacity in this area and to accelerate its growth.



4 Research Capacity

The UK economics profession has roughly 1,500 FTA staff members, of whom three-quarters hold permanent positions and only seven per cent are on research contracts. Less than 60 per cent of these scholars are active in research. Classified according to the 2001 RAE, FTE positions in economics accounted for 6.3 per cent of the FTE positions in the social sciences. This is a little higher than sociology or politics and international studies, but it is much lower than business and management, which had 24.9 per cent of the positions.¹⁰

4.1 Economics in Business Schools

The above estimates are based on submissions to the Economics and Econometrics panel of the 2001 Research Assessment Exercise (RAE). They significantly underestimate the number of scholars active in economic research, however, because many departments of economics are located in business schools and those often choose to submit to the Business and Management panel. Naturally, when economists in business schools publish in economic journals, such as the journals reported in Tables 1 and 2, their publications are treated in the bibliometric data in the same way as other publications. For this reason the discussion in the previous section covers scholarship in all economics departments. By some estimates there are more than 800 economists in UK business schools, but we do not have estimates of how many of them belong to departments that submitted to the Business and Management panel.¹¹

Submissions to the Economics and Econometrics panel of the RAE declined over time. While 60 departments submitted to this panel in 1992, only 41 submitted in 2001. Moreover, out of the UK's 85 departments of economics a growing number are located in business schools. We were informed that the relocation of economics departments into business schools has occurred as part of a broader reorganisation process. The question we posed at meetings with department heads and other scholars is whether this might impact the nature of research in those departments. Judged by economics groups in American business schools, one can expect more concentration on financial economics, banking, strategy (which has a close affinity to industrial organisation), and other subjects of interest to business schools. The opinions varied widely. Some felt strongly that this trend would impact the nature of economic research in the UK, and not for the better. Others felt that it would not. Some staff members of economics departments in business schools reported that they felt no pressure to change their research interests in order to better fit their school's core interests. Other scholars reported that, although no direct pressure of this sort exists, they have observed a shift in their colleagues' interests. Finally, there is the question of whether business schools will allow economics departments to expand at rates comparable to stand-alone economics departments.

¹⁰ See *Wakeling (2008)*.

¹¹ See *Wakeling (2008)*.

We cannot provide a clear-cut assessment of the extent to which the relocation of economics departments into business schools will impact their research. Yet, we feel that such a trend may lead to a reorientation of research priorities, as well as a dilution of the support for research that may not have immediate applicability or a constituency of direct users. Even if scholars in those departments are not directly pressured to change their research, the culture of business schools, expectations of promotion, and status considerations within schools will induce many to better tailor their work to what is valued by business schools.

4.2 Size and Concentration

Economic departments differ greatly in size. There are more than 20 very small departments (with five or less FTEs), and most departments have less than 15 FTEs. This size distribution points to a problem that we shall soon discuss: difficulties in furnishing high-quality postgraduate programmes. But there also exist very large departments; six of them have more than 50 FTEs and ten have between 31 and 50 FTEs.¹² These have the capacity to teach undergraduate and postgraduate students and to train postdoctoral scholars.

As it happens, the fields of economics in which the UK excels are concentrated in a handful of large departments. Although not everyone of them is equally good in each of the successful fields, the concentration of talent is very high indeed. We feel that this concentration is a positive factor from the point of view of generating high-quality research, since it increases the visibility of the best UK scholars and it enables the exploitation of economies of scale in the organisation of research activities. This concentration also has two implications for postgraduate teaching. On the one hand, it enables a handful of universities to offer high-quality training of postgraduate students, because these institutions have the manpower to offer first-rate core courses and a good choice of high-quality field courses. On the other hand, it makes the task of adequately training postgraduate students very difficult for the smaller departments. The latter problem was conveyed to the panel in a number of interviews, in particular those with postgraduate students and postdoctoral fellows.

Although we think that the concentration of training of postgraduate students, particularly Ph.D. students, is unavoidable if one desires to offer first-rate programmes, we also understand the desire and need of smaller departments to have postgraduate programmes. Under the circumstances a possible solution, which will benefit small and large departments alike, is to have more co-operation among neighbouring institutions in the training of postgraduate students, and to organise supplementary training by organisations such as the Royal Economic Society. We understand that a successful network of postgraduate education has formed in Scotland, exactly in order to overcome the constraints imposed by small size. The Netherlands and Switzerland followed a similar path. Evidently, networks of this type can benefit other parts

¹² See *Wakeling (2008)*.

of the UK as well. We also understand that the RES organises an Easter school that offers short courses. These appear to be very successful, but they are too short to overcome the scarcity of courses in the smaller departments. We recommend expanding the Easter school-style programme to longer courses and more fields and offering them during feasible time periods, such as summers. We feel that combining regional networks with longer and more varied courses of the Easter school style will greatly improve postgraduate training in the UK.

4.3 Postgraduate Education

Although undergraduate education and masters programmes are very important, each one in its own way, we focus our discussion on Ph.D. programmes because these programmes have the largest research component. In the UK, postgraduate courses are primarily masters courses which are also attended by Ph.D. students. This feature, which results partly from the 1+3-year structure of postgraduate education and partly from resource constraints, is not particularly suitable for the training of Ph.D. candidates. Not that the UK does not produce high-quality Ph.D. graduates, which it does, but dedicated Ph.D. courses can improve the education of all students. A shift to a 2+2-year system, which has already taken place in some departments, makes it even more beneficial to supply specialised Ph.D. courses.

While a 1+3 format may have been suitable some years ago, the rapid growth of technical and substantive knowledge needed to engage in economic research makes the training requirements of Ph.D. students – who for the most part are expected to become researchers – very different from the training requirements of masters students, who become applied economists in the City or in public organisations. The 1+3 structure has two problems. First, the first-year classes are not sufficiently advanced for Ph.D. students, because they are shared with masters students. Second, the specialised courses are not always as advanced or as broad as they should be when they are shared with masters students.

To support the 2+2 form of education requires better financial packages for postgraduate students. It is important, at least in the large leading economics departments, to commit to supporting postgraduate students for a number of years, making the continuation of financing contingent on performance. Postgraduate students find the current system disruptive. Not only do they feel pressure and discomfort with the need to repeatedly apply for funding, they also find the timing of the funding decisions in conflict with the exploration of other opportunities. Moreover, the postgraduate students reported that many of their colleagues end up working at non-academic jobs in order to support themselves. We find this state of affairs unsatisfactory for Ph.D. students. It may have contributed to the high withdrawal rate of students from postgraduate programmes after the first year (in addition to the attractive alternatives available to them in the market place).¹³ Although the ESRC has addressed this problem by raising the

¹³ See *Wakeling (2008)*.

support to students of economics on the one hand and by allocating to the discipline a substantial 'quota' of studentships on the other, more needs to be done to remedy this situation. There is need for a support system that enables talented Ph.D. students to have financial security during the entire span of their studies, and economics departments should do more to increase funds for Ph.D. students. Separating Ph.D. students from masters students will make it easier to focus the financing on Ph.D. candidates.

While we see the need to support Ph.D. students, we are less enthusiastic about supporting masters students, and especially so in 2+2 programmes. Masters students who do not continue in a Ph.D. programme find lucrative jobs that most likely pay off the investment in their studies. Under the circumstances it makes more sense to use the available resources for Ph.D. student stipends and the development of courses dedicated to Ph.D. needs. Separating Ph.D. from masters programmes will help in this regard.

Although we emphasise the need for 2+2 programmes, we do not recommend this transition in all departments. It is our view that the large and strong departments should develop 2+2 programmes, which will offer dedicated Ph.D. courses and will focus on the training of Ph.D. students. Smaller departments may prefer to keep the 1+3 format. In other words, there is room for diversity, as long as enough 2+2 programmes are offered by leading departments.

4.4 Foreign Nationals

A repeated theme in our interviews was the very high number of foreign nationals among the postgraduate students and junior faculty members. While close to 60 per cent of staff members in economics were UK nationals in 2005/6, their share exceeded 80 per cent among older faculty members (56 and over) and was a little over 20 per cent among younger faculty members (34 and under). A large fraction of the foreign young faculty members come from EU countries. Therefore the gap between the fraction of UK plus other European Union (EU) nationals among the younger staff and older staff is substantially smaller, but it remains significant nevertheless.¹⁴

Two arguments were advanced to explain the concern about foreign nationals. First, they are less likely to remain in the UK in the long run, and their disproportional presence among young faculty members leads to a high turnover of staff in economics departments. Second, foreign nationals are less likely to work on UK problems, even if they are employed by British institutions, and therefore their disproportionate representation among young faculty members predicts a decline in research of policy relevance for the UK.

We take these arguments seriously, despite the fact that there is no reliable evidence that the presence of foreign nationals in large numbers has hurt the UK academic or policy-analysis endeavour. Against the negative consequences (should they exist) of foreign nationals, one has to weigh the positive ramifications of attracting better talent to the UK. Economics departments

¹⁴ See *Wakeling (2008)*.

that compete for talent worldwide hire the best people they can find and foreign nationals raise the quality of the pool. The US experience suggests that foreign nationals can significantly enhance the quality of economics departments. As in the UK, large fractions of US postgraduate students and young faculty members are foreign nationals. Ali et al. (2007) examined assistant professors in the ten leading US departments of economics. They found that 75 per cent of these scholars did their undergraduate degree outside the US. Among those who hold a foreign undergraduate degree, the largest fraction is from Israel, followed by Italy, Germany and the UK. And among those who hold a foreign Ph.D. degree, the largest fraction is from the UK followed by Israel, Italy and Germany (although these numbers are rather small).

Our sense as outside observers is that there is too much anxiety about the possible negative impact of foreign scholars on UK research in the long run. We have some sympathy to the argument that foreign scholars may work less than UK nationals on UK-relevant policy issues, and that a shrinking share of UK nationals might reduce the pool of talent that can be drawn into active policy making or policy consulting, although the US experience shows that even foreign scholars make important contributions to US policy analysis. Interestingly, these concerns are not uniform; they appear to be more pronounced among macro and labour economists, for example, than among scholars of international trade or econometrics. It is indeed possible that these differences in attitude reflect the relative importance of UK policy issues in these different fields.

4.5 Gender

The panel obtained a submission on the status of women and met with a group of scholars to discuss gender issues. According to the data reported in Georgiadis and Manning (2007, Table 1), women comprised close to 20 per cent of full time staff in 2006, but only 8.66 per cent of professors. Moreover, the proportion of women decreased with the age group of faculty members and they were under-represented in economics more than in other comparator disciplines.¹⁵

The RES has a standing committee that collects data and studies the status of women, and gender problems appear to be of concern to both the RES and the ESRC. Yet testimony by department heads and other faculty members suggests that university administrations do not pressure departments to raise the fraction of women on their staff. Although there are allowances for maternity leaves, the general perception is that it is harder for women to develop an academic career. This is not much different from the situation in other countries, such as the US and Canada, and the standing committee of the RES is working to identify the main obstacles to improving parity with men. We are in no position to make recommendations on these issues, except suggesting that university administrations may consider being more active in remedying this imbalance.

¹⁵ See *Wakeling (2008)*.

4.6 Funding

Under the dual funding system, departments that submitted to the Economics and Econometrics panel received close to £20 million in 'block' grants in 2007.¹⁶ During the five-year period 2000/2001-2004/2005 they also received an estimated £52 million of research income from other sources. Of the latter, 37 per cent came from research councils, 24 per cent from the UK central government, 17 per cent from UK charities, and the rest from UK industry, the EU government, other overseas sources, and the like.¹⁷ The 'block' grants are quality and quantity related. Following the RAE in 2001, departments were ranked and funding was channelled to them according to their rank and volume of research output.

Compared to other social science disciplines, departments that submitted to the Economics and Econometrics panel ranked very high. Of the 41 departments that submitted to this panel, 30 (or about three quarters) had a rank of 4 or higher (i.e., 4, 5 or 5*). By comparison, among the more than 90 departments that submitted to Business and Management Studies less than half attained grades of 4 or higher. Sociology and Politics also had smaller fractions of departments than economics with grades of 4 or higher.¹⁸

Research income is highly skewed across departments, however, with a high correlation between income from research councils and income from other sources. This implies a high concentration of resources in a small number of departments. This outcome is natural given the high concentration of talent in a small number of departments.

The ESRC contributes significantly to the funding of economic research in multiple forms. It supports five research centres that focus on diverse topics, such as learning and social evolution and competition policy, and one research programme. It provides two large research grants, three professorial fellowships, numerous standard research grants, and more. These grants cover a very wide range of topics, from the study of religion to econometrics.

The panel heard complaints about the distribution of these funds between large grants to centres and smaller standard grants. We can see that both types of grants play important roles and that given a budget constraint there can be differences of opinion on the appropriate division of the resources. Our sense is that the research centres have played an important role in concentrating talent and in supporting innovative research efforts. We are less confident on the issue of how many centres should be financed and at what level. We believe these judgement calls have to be made by experts who are more familiar with the details of UK economic research.

¹⁶ We do not have an estimate of how much money was channelled to economics departments in business schools that submitted to the Business and Management panel. For this reason this number underestimates the funding of economics through 'block' grants.

¹⁷ See Wakeling (2008, Figure 3.4).

¹⁸ See Wakeling (2008, Figure 3.3).

We also heard complaints about the distribution of smaller funds. Although the success rate of applications in economics is rather high (about one third on average), some scholars feel discouraged and do not submit proposals. This problem appears to be particularly severe in microeconomic theory. Given the importance of this field and its relative decline in the UK, we wish to elaborate on the nature of the problem as it was presented to the panel.¹⁹

There is a perception that the ESRC over emphasises theme-directed scholarship and the relevance of research to final users. Both naturally hurt the more theoretical, curiosity-driven projects and discourage adventurous exploration. These perceptions persist despite the fact that the ESRC changed its policy in 2005, raising significantly the proportion of its budget devoted to responsive-mode funding.²⁰ It was argued in a submission to the panel that applications for ESRC grants contain parts that have to be filled by final users, or where final users who can supply reference letters have to be listed. This requirement is obviously inappropriate for most theoretical work. It has been pointed out to us, however, that the ESRC understands this caveat and it makes allowances for the distinct character of a research proposal.²¹ Yet, it appears that these allowances are not widely known or widely understood. As a result the formal clauses may deter applications of theoretical work that is speculative ('blue sky').

We recommend that curiosity-driven research, theoretical and empirical, be encouraged. In particular, it should not be discouraged by the format of submissions, and references from final users should either not be required, or the ESRC should communicate more clearly to the community of scholars that such references are required only for projects whose success is expected to make a direct contribution to such final users.

Our final comments concern directed funding. As a rule, research projects should be supported on the basis of merit; the best projects should be funded irrespective of field. This policy leads naturally to concentration, because in such a system centres of excellence attract most of the money and the availability of resources helps to attract excellent scholars. This raises the question of whether a pure merit system does not lead to too much concentration and to the destruction of essential areas of research. We feel that it may. For a country such as the UK it makes no sense, however, to invest in every field in order to bring it up to par with the best scholarship; such a strategy may be infeasible or extremely expensive. Under the circumstances weaknesses in some areas of research are inevitable. But there are fields whose importance for the health of the profession is so great that neglecting them can be very harmful. In these cases

¹⁹ *We have, of course, no way of judging the facts, but in this case the problem appears to be real enough to raise concern.*

²⁰ *The ratio of strategic and collaborative funding to responsive funding declined from £42 million/£31 million in 2006-7 to £35 million/£46 million in 2008-9.*

²¹ *According to the ESRC, applicants are not required to nominate user referees if their research is not relevant to the user community. The Council's current policy says that "applicants may nominate up to two potential users of the research who can comment on the utility of the research outcomes. For research where it is difficult to identify value to users outside the research community, these nominations may be left blank. Proposals will not be disadvantaged by the absence of nominated reviewers."*

an effort has to be made to use the available resources to turn these fields around. We feel that macroeconomics in particular is in need of this sort of treatment in the UK, because it is central for postgraduate education – as we explained above – but not strong enough for the task. Strengthening microeconomic theory will also help postgraduate education, although in this field the problems are not nearly as severe as in macroeconomics. Yet we do not think that more funding alone will solve these problems, because the remedy has to involve recruitment of high-quality scholars. For this reason funding has to be tied to recruitment in order to achieve the desired aim. Under the circumstances the major responsibility has to be shouldered by the universities. Funding agencies can help, however, by giving preference to research groups in these areas on a competitive basis, which will help universities' recruitment efforts.



5 Research Impact

The non-academic impact of UK economic research operates through multiple channels. A particularly prominent channel is the direct employment of academic economists by public institutions, such as the Bank of England and the Treasury. These economists have made important contributions to monetary policy, regulation, taxation and more, and it is difficult to overestimate their influence in the UK.

Academic publications are widely used by government agencies and non-governmental organisations, as we found out at meetings with non-academic users of academic research and as reported in *People Science and Policy* (2007). A great majority of the individuals who responded to the *People Science and Policy* (PSP) survey obtained useful information from papers in journals, presentations or seminars, and direct contact with academics.²² They used extensively academic research from the UK and other countries, but they used UK research significantly more. And they found UK research of great value. Having a choice between very helpful, fairly helpful, not very helpful and not helpful at all, 34 per cent of the respondents characterised UK economic research as very helpful and 63 per cent characterised it as fairly helpful. No respondent characterised UK research as not helpful at all and only three per cent characterised it as not very helpful.²³ In addition, academic economists themselves serve as consultants to government agencies and non-governmental organisations. And more than half of the respondents to the PSP survey used economic research commissioned directly from academics.²⁴

Users of academic research draw upon information from many fields of economics. But public economics appears to be the most popular, followed by econometrics, labour economics, and macroeconomics. Financial economics and international economics come next, then industrial organisation, and finally development economics.²⁵ Although the general perception among users of UK economic research is that it is of high quality, some feel that the usefulness of this research and its quality are somewhat unbalanced across fields, and these final users would like to see more high-quality applied work that is relevant for the UK economy.

Sentiments similar to the PSP survey were expressed at meetings with the panel. The perception is that the move to evidence-based policy increased the number of economists in government service on the one hand and the demand for studies by academic economists on the other. Our sense is that government agencies find better and more reliable evidence in fields of economics that are academically strong and less so in the weaker fields. For example, we were told that academic research on pensions and education has been particularly helpful. On the other side, the interface between pure academic and applied monetary policy, which used to be studied in universities, is now studied in the Bank of England because the universities do not produce adequate research on the subject. Moreover, the Bank of England hires scholars with Ph.D. degrees for its own research, among whom only ten per cent are UK nationals. One concern of users of academic research is that the RAE biases the research away from UK applied issues, because research of this type is less likely to be published in high-impact journals.

²² See *People Science and Policy* (2007, Table 3.1). The sample of respondents includes primarily representatives of government agencies, consulting organisations, think tanks, and private sector corporations.

²³ See *People Science and Policy* (2007, Table 2.5).

²⁴ See *People Science and Policy* (2007, Table 2.2).

²⁵ See *People Science and Policy* (2007, Table 2.1).



As far as we can judge, economic research in the UK is very influential outside academia; it produces high-quality applied work that is very useful to government agencies and other organisations. It is, of course, not realistic to expect an academic research portfolio to exactly match the needs of non-academic institutions. After all, academic research is primarily driven by curiosity and the internal agendas of the fields. Nevertheless, many areas of applied economics have overlapping interests with public policy and in these areas the common interests are best served by co-operation. We have seen that 24 per cent of research funding of economics that is not through 'block' grants comes from the UK central government. These funds are a suitable vehicle for the encouragement of studies that are of interest to public policy.

6 Concluding Comments

The health of a discipline has to be measured along many dimensions, and UK economics is no exception. In addition to quantitative data it is necessary to base judgements on a host of other factors that are equally important. In coming to its judgements, the panel relied on a wealth of information from formal and informal reports, personal interviews, and the panel members' past experience with research assessments.

The broad conclusion is that the UK economics profession is thriving and doing well by world standards. It has built substantial strength in a number of important fields and it excels in some of them. A number of other fields need to be strengthened, however, in order to secure the future health of the discipline. We think that research funds have to be tied to recruitment efforts in order to achieve this objective.

Postgraduate education is doing well in large departments, but less so in small ones. We recommend pooling resources on a regional basis and on a countrywide basis, in order to provide Ph.D. students from smaller departments access to specialised Ph.D. courses. We also recommend institutionalising a support system that ensures funding of Ph.D. students during the entire period of their studies. And we support a move to the 2+2 instead of the 1+3 system in the larger departments.

Economic research has a substantial impact outside academia in the UK, through publications, seminars, commissioned studies, and movements of people between universities and public institutions. These interactions appear to be very fruitful, and they benefit research and public policy alike.

References

- [1] Ali, Showkat, Giles Carden, Benjamin Culling, Rosalind Hunter, Andrew J. Oswald, Nicola Owen, Hilda Ralsmark and Natalie Snodgrass. 2007. "Elite Scientists and the Global Brain Drain." University of Warwick.
- [2] Evidence Ltd. 2007. "Bibliometric Data for the ESRC International Benchmarking Review of Economics." Report to the Economic and Social Research Council.
- [3] Georgiadis, Andreas and Alan Manning. 2007. "Royal Economic Society Survey on the Gender and Ethnic Balance of Academic Economics 2006." Mimeo.
- [4] People Science and Policy Ltd. 2007. "Non-Academic Users of Economics Research." Report to the Economic and Social Research Council.
- [5] Wakeling, Paul. 2008. "International Benchmarking Review of Economics Briefing Document: Statistical Overview and Commentary." Mimeo.
- [6] Vasilakos, Nicholas, Gauthier Lanot and Tim Worrall. 2007. "Evaluating the Performance of UK Research in Economics." Report sponsored by the Royal Economic Society.



Annex A

Response of the Steering Group to the Helpman Panel's International Benchmarking Review of UK Economics

The Steering Group welcomes the results of the International Benchmarking Review of UK Economics and is most grateful to Professor Elhanan Helpman and his colleagues for their Report.

Their analysis confirms that Economics research in the UK is exceptional by international standards, second only to the United States, and thriving.

UK Economics research moreover has high policy impact, based on top quality applied work and strong relationships between the academic and policy communities.

As well as documenting the current state of UK Economics, the Helpman Report is also a guide to investment in its future. Areas of strength – such as labour, public and development economics and micro-econometrics – need to be maintained. Weaker core areas – notably macroeconomics – need boosting.

Success requires the recruitment and retention of top quality researchers. The market for talent is international, and we share the view of the Helpman panel that the international openness of the UK profession is healthy.

We would also underline their emphasis on the importance of curiosity-driven research, both in theoretical and empirical work, and corresponding research funding support.

On post-graduate Economics education, the report commends a two-year training element in research degrees at least in larger departments, and stresses the importance of financial security for talented doctoral students.

The report notes challenges facing smaller departments in the provision of graduate education in Economics, and recommends a significant expansion in programmes such as the Royal Economic Society Easter School which bring together students from diverse departments for high-quality training.


These and the other recommendations in the report are constructive, evidence-based proposals for taking UK Economics from strength to strength. We hope that the ESRC, other funders of research, UK universities, learned societies, and our active business and economic policy communities will act on them.

Professor Sir John Vickers (Chair)

President of the Royal Economic Society
All Souls College, University of Oxford

Professor Neil Rickman

Chair of the RES Conference of Heads of
University Departments of Economics (CHUDE)
University of Surrey



Professor Charles Bean	Bank of England
Professor Nick Crafts	University of Warwick
Professor Ian Diamond	Economic and Social Research Council
Mr Chris Giles	Financial Times
Professor Denise Osborn	University of Manchester
Mrs Vicky Pryce	Department of Business, Enterprise and Regulatory Reform and Joint Head of the Government Economic Service
Professor Carol Propper	University of Bristol
Professor David Ulph	University of St Andrews

Annex B

Membership of the Panel

The Steering Group commissioned Professor Elhanan Helpman to chair the International Benchmarking Panel and, working closely with him, determined the membership of the Panel. The Panel consisted of six leading academics drawn from various sub-fields within economics:

Professor Manuel Arellano	CEMFI, Spain
Professor Elhanan Helpman (Chair)	Harvard University, USA
Professor Andreu Mas-Collel	Universitat Pompeu Fabra and Barcelona GSE, Spain
Professor Hyun Shin	Princeton University, USA
Professor Guido Tabellini	IGIER, Università Bocconi, Italy
Professor Philippe Weil	ECARES, Université Libre de Bruxelles, Belgium



Notes



Notes



The Economic and Social Research Council (ESRC) funds research into the big social and economic questions facing us today. We also develop and train the UK's future social scientists.

Our research informs public policies and helps make businesses, voluntary bodies and other organisations more effective. Most importantly, it makes a real difference to all our lives.

The ESRC is an independent organisation, established by Royal Charter in 1965, and funded mainly by the Government.

Economic and Social Research Council
Polaris House
North Star Avenue
Swindon
SN2 1UJ
Fax: 01793 413001
E-mail: comms@esrc.ac.uk
Website: www.esrcsocietytoday.ac.uk



The Royal Economic Society is one of the oldest and most prestigious economic associations in the world. It is a professional association promoting the encouragement of the study of economic science in academic life, government service, banking, industry and public affairs.

Website: www.res.org.uk

ISBN 978-0-86226-201-3