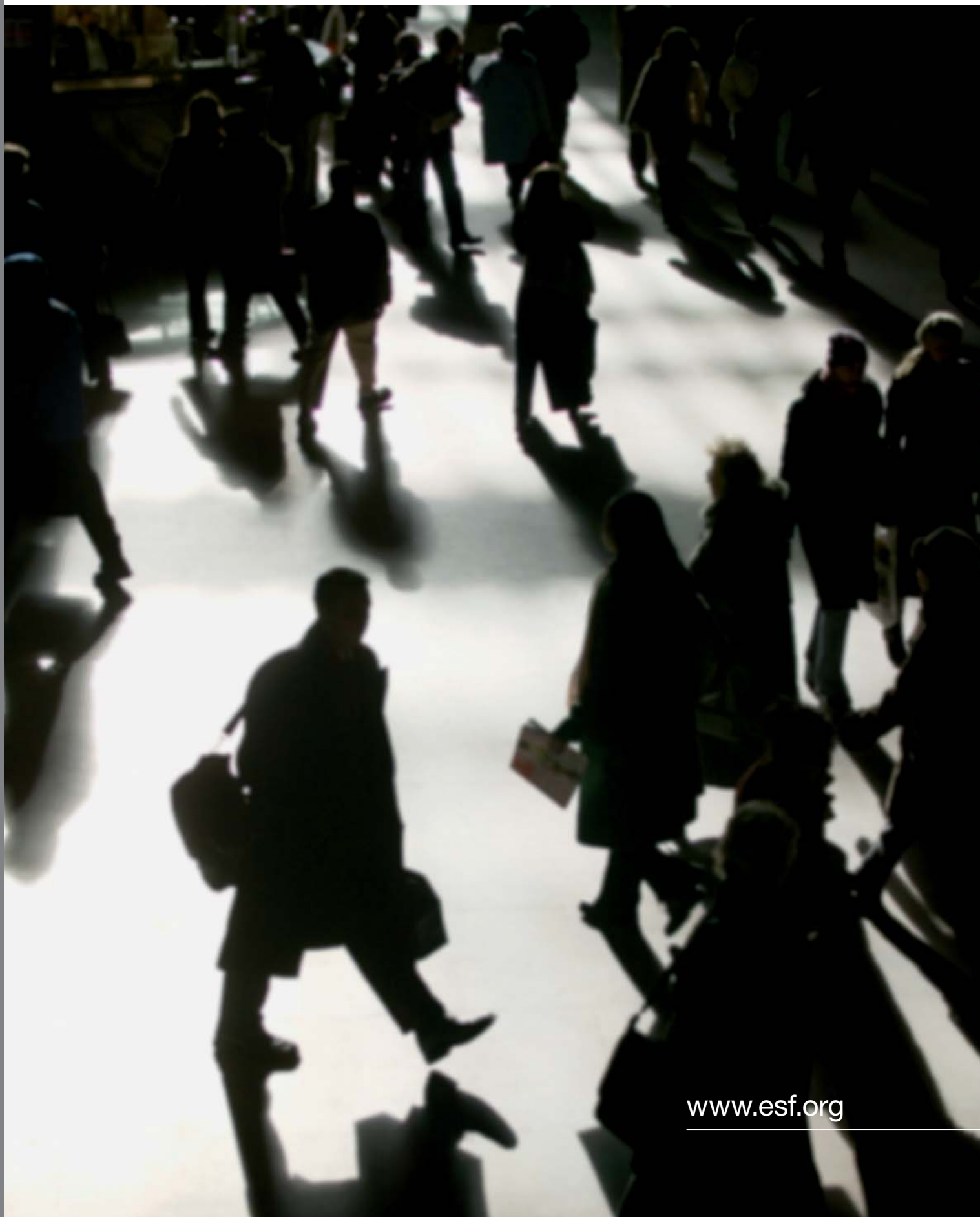


Social Sciences in Europe

A report from the ESF Standing Committee
for the Social Sciences (SCSS)



The European Science Foundation (ESF) was established in 1974 to create a common European platform for cross-border cooperation in all aspects of scientific research.

With its emphasis on a multidisciplinary and pan-European approach, the Foundation provides the leadership necessary to open new frontiers in European science.

Its activities include providing science policy advice (Science Strategy); stimulating co-operation between researchers and organisations to explore new directions (Science Synergy); and the administration of externally funded programmes (Science Management). These take place in the following areas:

Physical and engineering sciences; Medical sciences; Life, earth and environmental sciences; Humanities; Social sciences; Polar; Marine; Space; Radio astronomy frequencies; Nuclear physics.

Headquartered in Strasbourg with offices in Brussels, the ESF's membership comprises 78 national funding agencies, research performing agencies and academies from 30 European nations.

The Foundation's independence allows the ESF to objectively represent the priorities of all these members.

Contents

Foreword	5
Introduction	7
Case studies	10
– Higher education in 2020	10
– Cities of the future	11
– Local food	12
– Why cooperate?	13
– EU crises	14
– East European women	15
– Globalisation past and present	16
– Supporting older people	17
– Future health technologies	18
Facts and figures	19
ESF Member Organisations involved in the social sciences	21

Foreword

This is the second edition of Social Sciences in Europe. Like the first, it is intended to help readers across Europe, and beyond, to appreciate how the social sciences are helping us to expand our knowledge about the forces that drive our actions. The social sciences produce insights that range from the psychological foundations underlying human behaviour and action to the relationships between our behaviour and the cultural, political, social and economic forces that shape it.

Advancing our scientific knowledge of the complex manifestations of human life is one important role for the social sciences. But in addition, social scientists apply this knowledge to improving life across this continent of diversity. Europe is a place of many languages, cultures, religions and economic systems. Alongside immigration from other regions of the world, the comparatively free movement of people within a 25-nation European Union means that European societies are becoming more complex and the people in them have new expectations.

The European Science Foundation's role is to expand the capacity of European research to advance fundamental science and to provide answers to the critical issues raised by rapid social change in Europe.

As can be seen, especially in the Facts and Figures on pages 19-20, the member nations of the ESF devote substantial resources to the social sciences. The social sciences account for a significant proportion of the teaching, scholarship and research carried out at European universities and research centres.

There is a growing recognition of the significance of fundamental social scientific research and its applications. An ever-widening range of organisations make use of expert knowledge in the social sciences, including banks, finance ministries and major companies that have long known the value of employing economists and statisticians. There is an increasing trend for management and business to be viewed as valid subjects for education and research. Now people with qualifications in these and related areas, such as industrial and organisational psychology, are in demand in industry and government. Fundamental research in neurosciences, cognitive sciences and psychology is contributing to advances in robotics, which is playing an increasingly important role in modern society.

The social sciences also play a vital part in assessing the social, economic and ethical implications of developments in fields such as genetics and nanotechnology. This role involves anticipating and moderating the implications of technological and scientific advance for the benefit of society at large. This involves a new type of interdisciplinary collaboration that is based on anticipating the social, political, economic, and ethical consequences of progress in neighbour-

ing disciplines such as the physical and life sciences. Such collaboration can only be expected to increase as European states and organisations consider big decisions on topics such as energy supply, education, and the provision of health care.

In this context, the European Commission's proposed Framework 7 research programme on socio-economic sciences and the humanities, a specific thematic area of FP7 alongside such topics as IT and materials science, is a welcome new development.

The first edition of this brochure highlighted a range of outstanding European social science in ESF member states large and small. The subject matter it embraced ranged from tourism to organised crime. In this second edition, we have chosen to emphasise the ways in which the ESF itself supports and promotes the applications of the social sciences in Europe.

One of the main ways in which we do this is by promoting "Forward Looks" at topics which are of importance on a European scale. Two are featured here, one on the growth of cities and the other on the future of higher education. Both are issues that concern policy-makers and practitioners across Europe and indeed they have a global relevance as urban-based knowledge economies become the dominant form of social organisation around the world.

The social sciences also take part in European Collaborative Research Programmes, which are intended to help generate considerable research synergy across a number of countries. EUROCORES are ESF's premier support mechanism for research. As we explain below, this support is being used to look at the vital subject of human mobility into and within Europe, and at commercial topics such as trading and cooperation.

Another well-used form of support which we offer to the European research community is the Scientific Network. One of these we discuss here is looking at the topic of identity and participation in society. These are important to a continent where individuals have increasing freedom to decide how to think about themselves.

The social science bodies affiliated to the ESF are listed on pages 21-22. Most if not all of them are actively considering their international strategies, in response to the spread of globalisation and the internationalisation of research. Our aim is to transcend national as well as disciplinary boundaries, promoting excellence, and pushing European Social Science to the forefront of scientific achievement. We hope you agree after reading this brochure that a research organisation at the European level is a vital part of this process, enhancing both the research we can accomplish and the value it can have for society.

Standing Committee for the Social Sciences, ESF

Introduction

The social sciences are the umbrella for a range of disciplines which have the common aim of examining and explaining human functioning at a variety of interlocking levels, ranging from the neural foundations of human functioning to individual behaviour, group processes and the functioning of whole societies. Consequently, the social sciences employ a wide range of methods appropriate for the different levels of analyses which they encompass. But while the methods which social scientists use vary, they are all tailored for scientific rigour, and to ensure that we secure reliable knowledge.

The social sciences also gain from the insights of related disciplines such as the humanities, medical and life sciences, with which they share overlapping interests. These points of convergence make for a fuller understanding of the diverse facets of the social science enterprise. They arise from literary, philosophical and historical inputs on the one hand, to biological and medical ones including human biology.

The social sciences allow us to address vital applied issues including many social, economic, and political problems that society faces today. In these pages, we focus on the applications of the social sciences rather than the basic social scientific research that provides its scientific foundation. But applications such as those we describe below would not be possible without groundbreaking fundamental work in cognitive sciences, psychology, sociology, political sciences, economics, and methodology.

The case studies that follow show that social sciences produce deep insights into many contemporary problems. Of these, one of the most pressing is Europe's future in a world of global competition. Is it a problem or an opportunity for the companies and workforces of Europe if China and India become as rich as we are already? What does it mean for the former communist states of Eastern Europe, which are involved in their own economic revolution, and for the continent's richer states? What are the implications for education and research in a world driven by the movement of knowledge?

The social sciences allow us to think about these issues in a creative way. Research in economics, international relations and geography is obviously vital when considering the problems of global economic change. But it is also important to use social sciences such as management, sociology and education to consider the implications for businesses, schools and public services.

Another major concern for European governments and organisations is innovation, and here again the social sciences have much to offer. For one thing, innovation is not just about hardware and software. Social sciences tell us how people use innovation, and how it fits into existing social and behavioural patterns.



Royalty-Free/Corbis

Social sciences: engaging the public in rapid technological change

Perhaps more importantly, the social sciences are the key to the increasingly vital process of engaging the public in technical change. It is no longer acceptable for an invention to be developed without showing that an informed public accepts it. Social science provides the tools for doing this. Debates on such topics as stem cell research are now occurring on a European scale. The ESF has recognised this and encourages discussion between researchers from many disciplines.

The growing pace of technical change touches on concerns ranging from the food we eat to how we communicate with one another. It is certain to continue generating controversies that will require the insights of the social sciences.

But issues of consent and public engagement are not confined to the field of innovation. They also arise in government and commerce and for the increasingly important European non-profit sector.

Here the social sciences can help answer questions about accountability in many different contexts. How do the regional levels of political organisation

Introduction

springing up in many European states interact with existing systems on a bigger and smaller scale? What makes consumers decide that a new product is unacceptable or that a commercial organisation is behaving unethically? How do the costs get allocated if pollution that starts out in one country ends up in another? We all accept that European societies are not the same as those of Asia, North America or the developing world. But it is perhaps not so well appreciated that despite its apparently universal value of profit, business is an aspect of human life that has its own flavour in Europe and needs to be thought about on its own terms.

These issues arise with particular force in Europe, where societies are fast-changing and varied. Consumer reluctance to accept genetically-modified foods has been more general in Europe than in the United States. On stem cell research, European attitudes vary within individual countries, let alone across the continent, and it seems that there is no one answer to the issues that it raises.

These examples show that whether one is a prime minister, a chief executive or a professor, the days are long gone when you could decide what to do and tell the public about it later.

However, a glance at the bigger picture suggests that Europe's future as a world centre for innovation is likely to be endangered if unanimous consent is required for everything. Some people will never like wind farms, and others can not accept living near a nuclear power station. It is essential to find ways of dealing with disagreements over major issues that cannot be resolved. This is a task for which social science provides the intellectual framework.

The immense scope of the social sciences to improve health, wealth and happiness in Europe means that there is a growing need for social scientists. Nor in the modern era can we train someone by their early 20s with all the skills they are going to need for a lifetime of professional activity.

Instead, social scientists themselves are participants in the rapid social and economic change that is now affecting everyone in Europe. This means that they are having to learn new methods, gather data from new sources and participate in bigger and more interdisciplinary teams.

While they do not demand the satellites and particle accelerators that researchers in "big science" find essential, social science has itself been getting bigger in recent years. Its practitioners need more data to work on, and new methodology to draw the right conclusions from it. Developing new data and methods has emerged as a prime concern of the social sciences. Economists have long gathered and used data in bulk, on everything from factory output to personal spending. Censuses are another form of social



Matton Images

Who will pay for high-technology medicine?

science data-gathering which is growing in scope and value. But developments such as the European Social Survey, of which the ESF was a prime mover, mean that data is now being collected continent-wide on a consistent basis on many characteristics of society, including attitudes and behaviours. We were delighted that the European Commission awarded a 2005 Descartes Prize to the ESS, the first time the Prize has been awarded for achievement in the social sciences.

Social scientists are also being found in an ever-growing range of contexts. Education is the original social science. Every society in history has had some way of educating its young. The training of teachers was the original mission of many of Europe's universities.

Even today, people who never meet an economist or a social anthropologist encounter teachers, if only in childhood.

But today, society also needs a steady supply of trained people in many other social science disciplines. European universities are training them in grow-



Renewable energy – avoids climate change, but at what cost to the landscape?

ing numbers and a wide range of employers find them valuable.

However, it may be that the social sciences are only now starting to appreciate their role in a fast-changing Europe. Many fields of scientific research produce findings that have implications for public policy or for economic activity. But social scientists go one better by producing findings that affect policy directly. They examine questions such as why people commit crime and what might make them seek alternative careers, how taxes and interest rates affect economic activity, and exactly how children learn in school.

The importance of their research means that social scientists are often called upon by the media, governments, companies and others as expert advisers. But future years are set to see an expansion of this role. While many European governments have a chief scientific adviser and a chief economist, some now have a chief social scientist as well.

The ESF's interest is in expanding this process and ensuring that it takes root at a European level. The emerging European Research Council will have the social sciences firmly on its agenda and will involve countries outside the European Union. If it succeeds in its aim of expanding Europe's supply of world-class science, the overall reputation of the social sciences is bound to be enhanced. In addition, recipients of ERC funding will be expected to engage interested audiences in their work. It is to be hoped that these will include European leaders at all levels.

Many of the ESF member bodies which have participated in the preparation of this report are already in close contact with users of social science research. They are showing that social scientists are one of the most important groups to consult if one is considering a tricky public issue such as drug use, obesity or the spread of the internet. The contemporary demand in many countries for evidence-based policy reflects political awareness that past approaches which found favour with politicians were sometimes informed by an inadequate knowledge base and all too often did not have the intended effects.

It would be an exaggeration to claim that enhancing the influence of social scientists in contemporary European societies can solve this problem overnight. But their wisdom can provide a bridge between the targets of policy-makers and the steps that can be taken to accomplish them. The controversies over banning smoking in public which are now at various stages of resolution across Europe show that even scientifically sound policy developments need to be consistent with the social systems in which they are being implemented. Insights from the social sciences are vital to ensuring that societies take decisions that are right in principle and workable in practice.

ESF Social Sciences case studies

Higher Education

What is higher education for? At the very least, it is the essential provider of professional people for society, and of new knowledge derived from research. As the Information Society becomes more of a reality, these roles become more important. The EU's Lisbon process places higher education at centre stage in expanding Europe's capacity for innovation and its economic growth. And alongside this priority, higher education is expected to ease social injustice as well.

An ESF Forward Look at higher education in 2020 is examining the role of higher education and the pressures on higher education systems.

Part of the project is looking at the economic role of universities. We know that "human capital" nowadays can lose its value with surprising speed. We can no longer get a lifetime of education by our early 20s. How can higher education cope with people's professional needs throughout life, as well as educating an ever-growing percentage of young adults? And what is their role in generating wealth and economic growth via technology transfer?

Universities are responding to these pressures partly by becoming increasingly differentiated. Some are world brands, employ Nobel Prize winners and produce future presidents and chief executives. Others take on a national or regional role. The Forward Look is examining this differentiation. It is also looking at the distinct roles universities take on in terms of teaching and research, and in vocational rather than academic work. If Europe becomes more integrated, will its universities converge too, as the Bologna process suggests, or will they seek out more distinctive roles?

Can universities build social justice?

Large social expectations are placed on higher education alongside our more traditional view that it should develop skills and knowledge. These expectations reflect the growing role of educational credentials in providing opportunity and mobility. People from different social classes, ethnic groups and geographical regions have long had better or worse access to university. But the consequences of being excluded from today's mass higher education are even more severe than exclusion from university was in the past. This means that educational inequality, including different levels of access to forms of education with varying status, is increasingly important. The Forward Look is examining higher education's roles in extending opportunities for social mobility and in achieving greater social justice.



Getty Images

Universities have to cope with stakeholders including parents, students, governments and industry

The Forward Look is also seeing what these changes mean for the management and control of universities. The way universities are run and funded has changed drastically in recent years. Many universities are funded largely by the state and have had to become more transparent in accounting for the funds they receive. Senior managers have often become more powerful. But at the same time, universities have become increasingly subject to external review and evaluation. External and internal stakeholders such as students, parents and employers have been gaining in importance, but often have little formal power. The Forward Look will think how these influences might balance out across Europe in 2020.

It is also looking at how higher education institutions fit into the communities of which they form part. Universities are often significant partners for government bodies, companies, and intermediary organisations such as development agencies. Even global universities are also important local organisations and major employers. How will these relationships be realigned between now and 2020?

The Forward Look process is an active one and involves a series of workshops in autumn 2006, followed by full-scale conferences in 2007. Policy-makers as well as scholars will be involved. The idea is to improve on the fragmented dialogue and rhetoric that have characterised past thinking about the direction of higher education.

Urban science

Some time in 2006, a migrant somewhere in the developing world got off a bus in a new city. With this small step, humanity finally reached the point at which 50 per cent of people live in towns.

Europe is one of the world's most urban regions. Now the ESF has responded to Europe's, and the Earth's, growing urbanisation by establishing a Forward Look on Urban Science. It aims to help Europe's scientists by providing mechanisms for them to think about the big issues of urban development.

At Forward Look meetings, scientists agree that urban studies needs to become more scientific and less anecdotal. For example, some European scientists are discussing just what it is that makes capital cities special. By definition, they house national governments. But they are also the focus of culture, learning, the arts, and of transport and economic links.

Social scientist Göran Therborn is studying the capital cities of central and eastern Europe in this context. He has found that many of these capitals are major winners in the post-communist era. For example, Prague has become a substantial tourist destination. Reinforcing the message that capital cities are also economic centres, Bratislava has average incomes three times those in rural Slovakia.

Because of their success, capital cities can have the problems of riches as well as of poverty. Streets clog up as car use increases. Capital cities also respond to pressure for change. Tourists come to the capitals of eastern Europe to see the buildings of the Imperial and even Communist eras. But the mayors who have taken over prefer to opt for a new pan-European style of architecture, involving shopping malls, glass tower blocks and conference centres, as they compete to see their capitals become world cities.



Prague emerged as a major tourist destination after the end of communism

The Risky City

Cities pose their own distinctive risks, a theme pursued at a Forward Look workshop held at Leipzig in Germany. It brought together a wide range of researchers but also politicians, artists and activists. While it discussed the problems of African and Asian cities, its main focus was Europe. Research in Germany has shown that precarious employment (or flexible employment, as employers might see it) has led to "thirdworldisation" of many areas of inner cities. Such areas feel threatening. People who have the option of leaving them for the suburbs tend to do so.

For those who remain, some of the problems arise from social change and others from the nature of cities themselves. Because of their density, cities can harbour infectious disease all too efficiently. They also put more psychological stress on their inhabitants, and concentrate pollution, of land, water and air. High-quality urban regeneration is not possible without more research on remediating polluted land and ensuring that no more land is damaged.

US researcher Robert Beauregard, a FLUS participant, argues that there is little point in studying cities within a national context. Ideas and practices migrate just as people do. In the era of globalisation this happens over large distances and very rapidly.

But Asta Manninen and Lewis Dijkstra, participants in a FLUS conference in Helsinki, point out that cities present opportunities as well as challenges. They call for more data to be collected on topics such as tourism and culture, as well as on poverty and disadvantage. Dijkstra says that such data is already being gathered by the Urban Audit, which is looking at 258 European cities and generating comparable data on the way they work. The cities are in 27 countries and the audit has already come up with some surprises. We often think that urbanisation is unstoppable. But almost half of the cities lost population between 1996 and 2001, perhaps to suburbs. Nor are all cities prosperous. In 2001, 51 per cent of the employment-age population of Manchester in the UK were in work, compared to 72 per cent for the UK as a whole.

Local food

International workshops on topical subjects are one of the main ways in which the ESF promotes scientific collaboration within and beyond Europe. In June 2006, the subject was Local Food in Europe and the venue was Bordeaux in France.

Affluent European consumers have got used to the idea that they can eat food from all over the world at any time of year. But they also like the idea of eating local produce and encouraging local trade.

The workshop looked at the issues from the perspective of the social sciences, business and government. Many foods regarded as local have a long history and their meaning for the consumer goes well beyond their nutritional value. The workshop looked at consumer attitudes to local food and found that people often value local products for their perceived authenticity as well as their inherent properties.

Roberta Sonnino, a speaker at the workshop, pointed out that the extensive research about globalisation, of food and other items, has overshadowed work on local economic issues. She added that a new set of ideas using the concept of embeddedness is now allowing locally-based activity to be considered in a more rigorous way. Another presenter, Alte Hegnes, pointed out that local food can sometimes seem to be less fully part of the modern world than food that has travelled long distances.

It seems that consumers who think about these issues can mean different things at different times when they discuss local food. Sometimes they simply mean food that has come a short distance from its point of origin. But they may use the term “local” to refer to food they regard as part of their local diet, irrespective of how far it has come to reach them.

Local food may be traditional in origin, but recent action by the EU means that it also has a contemporary political flavour. Since 1992, the European Commission has given Protected Designation of Origin (PDO) status to some foods, as well as other classifications including Protected Geographical Indication and Traditional Speciality Guaranteed. All are meant to protect local tradition, although their implementation can be controversial. 16 categories of olives alone have PDO status.

At the Bordeaux workshop, there were proposals to take this system to a new level with a classification that might be called the “localised product.” This would assure quality and local origin, and might let consumers get the idea of local food in a simpler way than the EU procedure allows.



Matton Images/Iconotec

Exploring what we mean by “local food”

North and South

The workshop was held in southern France, at the hinge between northern and southern Europe. It heard that these two regions have very different views on the apparently simple idea of local food.

In France, Italy and Spain, producers of food have for centuries protected their rights to use specific titles for food which they have produced in particular ways and in a particular place.

However, the same does not apply so generally in northern Europe. There, the workshop heard, laws have been passed to protect food production methods independently of any pressure from manufacturers.

In southern Europe, many areas have a concept close to the French ideas of “Produits de Terroir,” which have a long tradition and are regarded with pride by local producers and consumers. Both tend to demand legal protection for the foods they value most. But this means that local producers are sceptical about the need for detailed documentation and traceability, or for formal rules on topics such as animal welfare. We have been doing this perfectly for centuries, why do we need to write it down? So producers might get PDO status for their products, but only use it for the food they ship to distant buyers, not in their local market.

In northern Europe, there is more demand for proof that food is being produced sustainably and that there is documented evidence of every link in the food chain. This can cover health and hygiene, animal welfare, and claims that food is organic. This is especially important because organic status has even higher value in shops than local origin, and means higher prices.

Cooperation and Trading

People do it, companies do it – even bacteria do it. But why do organisms and organisations alike choose to cooperate?

The ESF is looking at this question via a four-year research programme which starts work in 2007 and is called TECT, the Evolution of Cooperation and Trading.

This programme involves researchers from 15 European countries as well as the US. It will itself be truly cooperative and will combine insights from the social sciences, biology and the humanities.

TECT is one of the ESF's European Collaborative Research schemes, EUROCORES, the largest type of research initiative we support. National bodies fund the research while ESF pays the cost of ensuring effective international collaboration.

Cooperation seems to be a behaviour that has evolved over time. It has been favoured by natural selection because it can yield better results than individual action. One aim of TECT is to trace how cooperation has evolved in a range of species. It is often assumed that most human behaviour arose during the Pleistocene era, from about 1.8 million to 10,000 years ago. But cooperation may have far deeper roots. It may turn out that humans cooperate in ways that found their way into our genes long before Homo sapiens existed.

It may be possible for TECT to investigate the development of cooperation by experiments with ants or other animals that evolve more rapidly than humans, or by watching the changing behaviour of successive "generations" of robots.



Love and marriage – the biggest cooperative venture of all

Cooperation or extinction

The TECT researchers point out that sexual reproduction is perhaps the most perfect example of cooperation in biology. After all, it involves two creatures getting together, at a huge cost in time and effort, in the hope of ensuring that their genes make it to the next generation. For humans, the personal and financial price is immense and lasts most of a lifetime.

TECT may look more closely at how this form of cooperation is decided upon. For example, how do varying sizes of nuptial gifts affect partner choices in humans? What effect has China's one-child policy, which has led to a large increase in the number of sons compared to daughters, had on decisions about forming families?

Often cooperation involves losses as well as gains. Short-term benefits are sometimes sacrificed to allow longer-term alliances to develop that may be more valuable. Being known as a bad collaborator is damaging to an individual. Even corporations go to great lengths to avoid reputation damage, which can repel suppliers, customers and other important collaborators. TECT researchers point out that even people in anonymous experiments can make sacrifices in this sort of way when it has no apparent benefits. How has this behaviour grown up?

TECT plans to get answers by looking at human and animal societies. There may well be genetic aspects to cooperative behaviour, but we know that it has taken different forms at different times and places. So cultural as well as biological aspects will be investigated. An example is the evolution of trading, which has grown up in all cultures and is not possible without cooperation. Normally economists study mass behaviour. But TECT plans to examine small-scale market activity to see how trading works in practice.

TECT will also draw new connections between behaviour and its underlying roots in the brain. It is now possible to use scanners to observe brain activity during activities such as trading or cooperation. This approach may yield information on how thought processes differ and what they have in common between people when the basic human activity of cooperation is going on.

EU crises

Europe is a rich part of the developed world, with a temperate climate and few earthquakes or volcanoes. But the European Union still has its crises, ranging from floods to terrorist attack. In 2005 the ESF held a workshop meeting at Ste Maxime in France to consider how it can manage them better.

The workshop heard that Europe has a growing number of continent-wide or national systems whose continuity is essential to public safety and business stability. They can be threatened by sudden events such as severe weather or terrorist attacks, or by slower-moving causes such as incremental climate change.

The workshop heard that significant breakdowns in European society could be caused by improbable but impactful events such as severe weather. A bad winter could spread flu and other diseases while a very hot summer could mean electricity blackouts and extensive forest fires.

Modern technology means that the threats which a society such as Europe faces can arrive quickly from across the world, whether the issue is avian flu or a computer virus. The EU's own thinking on security reflects the fact that threats can come from inside or outside Europe.

Rhona Flin of the University of Aberdeen in Scotland told the workshop about one key group of people in this dangerous world – the crisis managers, from military commanders to civil servants, who have to deal with them. Different skills are needed to minimise crisis risk, cope with a crisis when it arises, or clear up afterwards. For those in charge of short-term response, a range of essential skills have been identified, including the ability to be aware of a situation quickly, decision-making, communication, teamwork and leadership. These are familiar management skills, but applying them during a fast-moving crisis may need to be taught more explicitly in future than it is today.

Laurent Carrel of the Swiss federal government told the workshop about an exercise he helped run to simulate an influenza epidemic in Switzerland. Producing the simulation and involving all branches of the Swiss government was very expensive and time-consuming. Although the exercise was a success, it showed that the Swiss system was better at producing an immediate response to a crisis than at dealing with the public response to it and implementing longer-term measures to stabilise the situation after the crisis was past its worst.

The EU is constructing a high-technology security system designed to cope with military and security threats within and close to its borders. But the workshop heard from Antonio Missiroli of EU-ISS in Paris that environmental degradation, disease, and disruption



Matton Images

to power systems or communications are also significant hazards, and call for different approaches. Many of the key resources for coping with such crises exist at a national level. Rather than Europeanising them, it might be better to set up simple coordination mechanisms to make them available wherever they are needed. As Iztok Prelezj of the University of Ljubljana in Slovenia told the meeting, natural disasters consistently kill far more people than terrorism, in the EU and around the world.

Without a trace?

Where does your food come from? In Europe, traceability is embedded in food safety legislation as a basic consumer right. But the US has long regarded European demands that food can be traced from field to shop as a back-door form of protectionism designed to keep US food out of European kitchens.

Javier Lezaun of the London School of Economics told the workshop that all this has changed with the arrival of terrorist threats against the US. US legislation to reduce threats of bio-terrorism introduced food traceability with little controversy.

He suggests that at one level, this series of events points to political differences between the EU and the US. US policymakers tend to concentrate on threats of violence such as military or terrorist attack, while their European counterparts also think more about threats such as environmental hazards – and food issues. And he suggests a more basic message as well. Most of the time, dull and bureaucratic state agencies handle big crises by means of regulation. Often the key to a crisis is to make sure that national or international agencies are working properly.

East European Women

In recent years, migration into western Europe has changed in character. Countries such as Ireland and Italy, for decades principal sources of emigrants, have turned into destinations for immigration. An increasing number of the immigrants are white and European, in contrast to previous immigration from Asia, Africa and the Caribbean. And many are women.

In 2006 the ESF supported a workshop in Helsinki to consider the issues that such migration presents. Appropriately for the subject matter, 18 of the 19 participants were female and most were born after 1960. They heard that immigration from eastern Europe poses completely different issues from those raised by earlier forms of migration, for the people involved, for the societies in which they arrive, and for social scientists, who need new ways of thinking about the phenomena they observe.

They heard that despite the EU's benign rhetoric on women and equality, immigrant women in western Europe have been subject to a range of unequal and discriminatory practices and rules. In some countries, progress towards equality for immigrants has been reversed. New categories of "regular" and "irregular" migrant have eroded the status of trafficked women.

In the Nordic region, long regarded as a world beacon for racial tolerance and women's rights, things are far from perfect for women who arrive from the east. If a woman arrives in the west with a husband and family, she has to cope with his lower status as a migrant and with the discrimination she faces herself, in society and in the labour market. A study of Bosnian women in Sweden, refugees from acute political upheaval, shows that they face severe discrimination there.

Women arriving in western Europe are also in constant danger of being assumed to be prostitutes, an accusation which has been levelled at women in their sixties.

The workshop focussed on Europe from the Nordic region to the Mediterranean, where countries along a north-south axis are receiving immigrants from the east and acting as a transit route for many more.

Participants heard that the problems faced by such immigrant women are a tricky subject for academic research. Research presentations tend to be heavy on statistics. But overall facts about large groups often fail to capture the experiences of private life for the people involved. This is especially true when the law is being broken, for example by an illegal immigrant or someone working illegally, or when domestic or other violence is taking place. This means that methods drawn from the humanities, such as the oral history approach, are often most appropriate.



Matton Images

A misjudged migrant?

Husband hunting?

Research shows that east European women rarely seek to get rich by marrying western men. Although marriage is a common reason for women to migrate from eastern Europe to the Nordic countries, only a few seek contacts or marriage through the Internet and similar means. They usually meet their future partners in everyday life, perhaps at work, in grassroots organisations, on holidays, or through relatives and friends.

But women who move west to marry are dependent on their male partners to stay in the West. Their dependency has been intensified as the period needed for getting permission to stay has been prolonged by EU regulation. Women who are subject to violence in the family find it difficult to escape without the risk of deportation. Finding work is difficult for immigrants even if they are well-educated and have previous experience. Often they exchange established paid work with a meagre salary in the east for exclusion and marginalisation from the labour market in the west, compensated by the basic social subsidies it provides.

Globaleuronet

European nations and enterprises have been at the forefront of globalisation for centuries. The ESF is helping us understand globalisation as it has taken place so far, and perhaps gain some insights into what might happen next.

To do this, the ESF is supporting a network called Globaleuronet. Running from 2006 to 2010, Globaleuronet is bringing together economists, historians and other researchers. They will gather the biggest and most consistent set of data on European economic activity from 1850 to the present day. Building on recent programmes in many individual European countries, it will cover domestic and international economic activity, migration, wages and prices, and economic growth. And as a sign of new thinking in economic history, it will capture non-economic measures of prosperity such as social welfare.

Although we tend to think that globalisation began with the 747 and the internet, researchers involved with Globaleuronet point out that 19th century Europe was already part of a globalised world based on nation states, empires and world trade. It came to an end because of acute social and political forces, in a sequence of events that culminated in the First World War and the depression of the 1930s. We may assume that 21st-century globalisation cannot be reversed, but precedents exist that suggest otherwise.

Although globalisation is driven by market forces, European experience shows that markets which are regulated produce the most satisfactory economic and social outcomes. Markets do not just happen. They need to be stabilised, legitimated and placed in a social and legal framework. Researchers involved in Globaleuronet point out that past lessons in this arena may be valuable for current debates on globalisation. How will European institutions develop in an era of global networks?

Globaleuronet will look at this problem by drawing lessons from Europe at a national and continental level, and by comparing European experience with the development of the US and other parts of the world.

Globalisation is often thought of as the next stage of world economic development, involving high levels of integration around the world, headlong innovation and widespread diffusion of knowledge. Globaleuronet will look at the technological and human bases for globalisation, examining innovation and technology transfer, productivity and growth in manufacturing, services and agriculture, and the sources of economic growth.

With the involvement of participating groups in 13 European countries, Globaleuronet will hold a range of meetings including an extended summer school to ensure that its new thinking about European economic



Globalisation 19th century style

activity is developed fully and communicated to a wide audience.

Participants in Globaleuronet intend to make its findings known well beyond the academic world. Education and the dissemination of its findings have been built into the planning of Globaleuronet from the start. In addition, researchers across the world will be able to use the Globaleuronet database for their own projects.

What price regulation?

By their very nature, globalised businesses operate on a bigger scale than national or European regulatory systems. But Globaleuronet researchers believe that European history contains useful lessons on making different scales of organisation work together.

They point out that many European institutions were created as a reaction to the growing force of international organisation. These might include trade unions and business groups within individual countries. But it has proved possible for such bodies to work with globalised business instead of opposing it.

Researchers within the Globaleuronet collaboration aim to find out why Europe offers so many successful examples of market and non-market organisations that work together successfully. They point out that many European institutions are old and have developed over time. The full story of their development may have lessons for Europeans and for people in other types of society.

FAMSUP

Populations are ageing around the world. And families are vital for older people. The ESF has supported a scientific network called FAMSUP to investigate how families support their older members. Its researchers looked at both individual and family behaviour and at national policies on caring for older people. FAMSUP ran from 2001 to 2004.

The FAMSUP network members point out that personal care such as bathing, feeding and transport can be provided by families, by paid-for services, or both. But even when these services are paid for, they still have a personal and emotional content and are not just goods bought in the market. This means that such transactions are affected by a subtle interplay between public policy, demographic and social change, cultural variation and the behaviour of individuals and families.

Comparing data from the Belgium, Italy, the Netherlands and the UK, Network members found that older people from lower social and economic backgrounds receive more informal care than more affluent members of society.

In an intriguing analysis of care for the elderly in Sweden, researchers found that older people in areas which provide a high level of formal public services tend to make less use of them than people in poorly-provided areas do. This may be happening because the Swedish system is excellent at targeting care where it is needed. But it is also possible that higher levels of state care encourage the provision of informal care.

It is also apparent that there are substantial variations within countries in the level of services they provide for older people. In the UK, local authorities have wide discretion over how much to charge for meals on wheels and other services. It seems that higher charges may lower service use and encourage informal care.



Is she supporting children as well as her father?

Sandwich women (and sometimes men)

FAMSUP scientists took a fresh look at what the media terms the “sandwich generation.” These are the middle-aged people who must face the demands of caring for both dependent children and ageing relatives. As more people spend longer in education, many people remain dependent upon their parents while they are well into their twenties, while ageing populations make it more likely that older dependents will also be on the scene.

They found that family culture may determine patterns of care-giving. In both the UK and the United States, married women who care for children are also more likely to care for parents.

Other FAMSUP data from 10 European countries suggests that a new category of sandwich carers is now emerging. This group are caring for their parents and for their grandchildren, rather than for their children.

The FAMSUP scientists also point out that the barrier between formal and informal care is not solid. In Germany, Sweden and Italy, state payments can be used to help family members look after older relatives. Swedish local authorities can also employ family members as care-givers for their relations. In the Netherlands, people can have a “personal budget” to buy public-sector services or to pay for informal care.

The FAMSUP researchers gathered a wide range of data, which has allowed some deeply-held assumptions about care of the elderly to be examined. One is the belief that the societies of southern Europe are better at supporting the old than people in northern countries. This turns out not to be true. Good and bad levels of support coexist in many European countries. Nor is it true that the percentage of older people living alone is on the rise. In fact, trends towards more marriage and later child-bearing mean that the percentage of older people living on their own has stabilised and may even be shrinking in many countries.

Health differences

During the 20th century, advances in health were the biggest contributor to world economic growth, and provided half of its increased human welfare.

But will this progress continue in the new century? The ESF is working with Kiel University in Germany to organise a series of 10 conferences on the Global Health Economy which will consider the next stages in world health.

Each of the conferences is intended to consider a substantial issue. One will tackle the enormous matter of health differences across the world. There is overwhelming evidence that the poor have more illnesses and live shorter lives. National governments, the EU, and others, regard health inequalities as a danger to social cohesion. This subject is now being studied empirically by economists, and has implications for the structure of health services, medical practice and medical technology.

The conference series will also look at the related topic of how biomedical innovation is organised in different countries and cultures. Even rich countries vary in how they apply new medical technology. Developing and implementing this technology is expensive. But money is not enough. There also needs to be an institutional framework in which innovation can flourish. This involves a range of elements including protection for new intellectual property, an effective university system and other public assets.

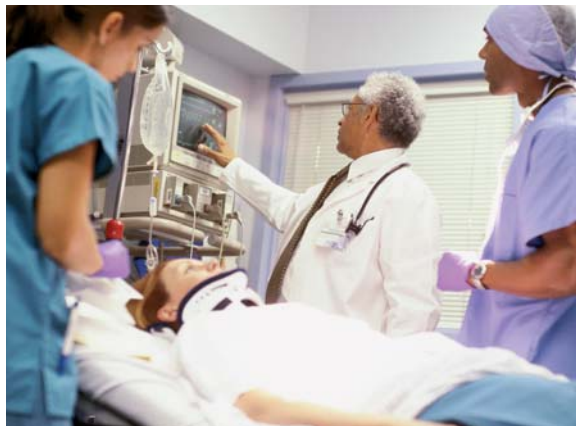
The conference's organisers believe that Europe has scope to speed up its rate of biomedical innovation. Many of its countries have fragmented healthcare systems and they apply policies which vary widely in their effectiveness.

Because of the growing power of information technology, medical intervention could become more evidence-based, but here too, progress has been uneven. Countries vary in the effort they have put into developing evidence-based approaches, because gathering and disseminating high-quality evidence demands people and money. And even when it does exist, medical practitioners can regard it as a challenge to their professional status.

In 2007, another of the Kiel conferences will look at this issue on a global scale, taking in the perspective of the developing world as well as Europe, North America and East Asia.

As the organisers point out, national health systems are often slow to respond to the wealth of innovation produced around the world, partly because they are forced to respond to local political priorities. This reduces the incentive to innovate and means worse health outcomes for individuals.

Another conference in the series will look at medi-



Matton Images/Fancy/Florian Franke

What future for medical insurance?

cal decision-making and how it copes with rapid innovation. Medical decisions are inherently serious and often irreversible. They also involve risk and uncertainty. This conference will look at how technology assessment and investment analysis might help speed up the use of new medical treatments.

Insurance: at a premium?

Compulsory health insurance began in 19th century in Germany. In 2008, one of the Kiel conferences will look at the future of this once ground-breaking development.

Medical insurance has had many positive social effects. It provides affordable security for the people who are insured. But more importantly for medical progress, the regular payments involved have meant that medical research and development could expand in the knowledge that they had a firm cash flow. Treatments emerged for conditions that had previously been beyond the scope of medical intervention.

But the future of medical insurance is now in doubt. New medical technology is successful but it is also expensive. As the costs turn into bigger medical insurance bills, consumers are likely to become more wary of the costs.

Because medical knowledge is a global resource, it is not possible for national systems to solve this problem in isolation. The Kiel conference will be the first to look at the issue on a global scale. It will use an international and multidisciplinary approach to consider the technological challenge to health services and the ways in which they are paid for.

Facts and figures

The insights of the social sciences are vital to European life, but there is bound to be uncertainty about any estimate of the amount of social science going on in a specific country, let alone a continent.

We know that the social sciences are a significant part of academic activity. Universities and comparable institutions train the next generation of social scientists and also produce new findings, data and methods in these fast-growing subjects. Social sciences such as economics, politics and geography are among the biggest subjects in academic life and attract students in large numbers.

European universities are among the strongest in the social sciences. The table 1 shows the results of research published in 2005 by the Times Higher Education Supplement to determine the world's top social science universities by peer review of academics in the field. It also shows the number of citations per paper they received for the papers they published between 1995 and 2005 as calculated in the Thomson Scientific Essential Science Indicators.

On this measure, Europe is the only competitor to the US in social science research. Non-university organisations such as CNRS in France, the Max Planck Society in Germany and the Russian Academy of Science also produce some of the world's best-regarded social science research.

Academic spending on the social sciences usually adds to up 15-20 per cent of total higher education budgets. The table 2 shows higher education spending on the social sciences for several European countries in 2002.

Figures for five Nordic countries in 1997 show that the share of social sciences and humanities R&D expenditure in the higher education sector was 19-33 per cent.

But because social scientists do not ask for satellites and particle accelerators, this money supports a higher-than-expected percentage of Europe's academic staff. The social sciences account for about a quarter of academic personnel, as the table 3 suggests.

Table 2. Higher education intramural expenditure on R&D by field of science (millions of euro, 2002)

Country	Spending (€m)	% of HE spend
Austria	166	13
Finland	175	19
Germany	759	8
Ireland	61	19
Spain	315	15

Source: OECD Research and Development Statistics

Table 3. Social science researchers in Europe

Country	% of academic FTEs
Austria	14
Belgium	20
Czech Republic	17
Denmark	14
Estonia	18
Germany	12
Hungary	20
Ireland	22
Latvia	19
Lithuania	22
Norway	24
Poland	22
Portugal	23
Romania	15
Slovakia	13
Slovenia	24
Spain	23
Sweden	15
Turkey	33

Source: Eurostat, data for various years from 2002 to 2004

An estimate of the total number of social scientists in all sectors should begin with teachers. There are over four million teachers in Europe, which means perhaps a million teaching one or another of the social sciences.

Table 1. The World's top social science universities in 2005

2005 Rank	Name	Country	Score	Citations per paper
1	Harvard University	United States	100.0	9.4
2	London School of Economics	United Kingdom	96.3	4.6
3	Oxford University	United Kingdom	88.4	5.3
4	California University Berkeley	United States	85.3	6.9
5	Stanford University	United States	80.4	8.5
6	Yale University	United States	77.3	7.2
7	MIT	United States	73.9	8.9
8	Cambridge University	United Kingdom	73.5	4.6
9	Chicago Univ	United States	73.0	9.9
10	Princeton University	United States	68.9	8.0

Source: THES

Facts and figures

Another major employer of people trained in the social sciences is social care, although not all social workers have a social science degree. Many take postgraduate qualifications. The European Region of the International Federation of Social Workers has 40 constituent organisations with a total of 165,000 members.

In addition, government service is a major employer of social scientists, especially economists and statisticians.

The table 4 shows the percentage of government researchers working in the social sciences for a range of European countries.

The employment of social scientists in the private sector is a growth industry. In 2006, Eurostat looked at employment in Austria, Greece, Finland, Ireland and Spain. It found that employers there hire more social scientists than they do scientists or engineers, as shown in the table 5.

Even high-technology industry, where scientists and engineers are essential, also make unexpectedly high use of social scientists. In Greece, over half of the graduate workforce in knowledge-intensive industries has an educational background in the social sciences, and the figure is 29 per cent even in Austria, the lowest result for the five countries. By contrast, only 1-2 per cent of the workforce in agriculture and related activities has a degree in the social sciences.

Table 4. Fraction of government researchers in the social sciences

Country	%
Austria	27
Belgium	6
Czech Republic	7
Denmark	10
Estonia	3
Germany	6
Hungary	11
Ireland	15
Italy	13
Latvia	13
Lithuania	6
Norway	32
Poland	4
Portugal	13
Romania	12
Slovakia	23
Slovenia	26
Spain	4

Table 5. Employment of graduates

Country	Social science graduates	Science graduates	Engineering graduates
Austria	101,920	27,605	158,869
Finland	244,219	90,115	152,266
Greece	271,627	39,984	176,899
Ireland	85,153	55,983	48,443
Spain	1,057,736	328,012	502,966

Source: Eurostat, various years 2000-2002

ESF Member Organisations involved in the social sciences

Austria

Fonds zur Förderung der wissenschaftlichen
Forschung in Österreich
Austrian Science Fund
www.fwf.ac.at

Österreichische Akademie der
Wissenschaften
Austrian Academy of Sciences
www.oeaw.ac.at

Belgium

Fonds National de la Recherche Scientifique
National Fund for Scientific Research
www.fnrs.be

Fonds voor Wetenschappelijk
Onderzoek-Vlaanderen
Fund for Scientific Research – Flanders
www.fwo.be

Bulgaria

Bulgarian Academy of Sciences
www.bas.bg

National Science Fund of Bulgaria
[www.minedu.government.bg/nsfb/
nsfbnach.html](http://www.minedu.government.bg/nsfb/nsfbnach.html)

Croatia

Hrvatska akademija znanosti i umjetnosti
Croatian Academy of Sciences and Arts
www.hazu.hr

Cyprus

Cyprus Research Promotion Foundation
www.research.org.cy

Czech Republic

Akademie věd České republiky
Academy of Sciences of the Czech Republic
www.cas.cz

Grantová agentura České republiky (GAČR)
Czech Science Foundation
www.gacr.cz

Denmark

Det Kongelige Danske Videnskabernes
Selskab
*Royal Danish Academy of Sciences
and Letters*
www.royalacademy.dk

Grundforskningsfonden
Danish National Research Foundation
www.dg.dk

Forskningsrådet for Samfund og Erhverv
Social Science Research Council
www.forsk.dk/fse

Estonia

Eesti Teaduste Akadeemia
Estonian Academy of Sciences
www.akadeemia.ee

Eesti Teadusfond
Estonian Science Foundation
www.etf.ee

Finland

Suomen Akatemia/Finlands Akademi
Academy of Finland
www.aka.fi

Suomen Tiedeakatemiain Valtuuskunta/
Delegationen för Vetenskapsakademierna
i Finland
*Delegation of the Finnish Academies
of Science and Letters*
www.helsinki.fi/science/deleg

France

Centre National de la Recherche Scientifique
National Centre for Scientific Research
www.cnrs.fr

Institut National de la Recherche
Agronomique
National Institute for Agronomic Research
www.inra.fr

Germany

Deutsche Forschungsgemeinschaft
German Research Foundation
www.dfg.de

Helmholtz-Gemeinschaft Deutscher
Forschungszentren
*Helmholtz Association of German
Research Centres*
www.helmholtz.de

Max-Planck-Gesellschaft
Max Planck Society
www.mpg.de

Union der deutschen Akademien
der Wissenschaften
Union of the German Academies
www.akademieunion.de

Greece

Foundation for Research
and Technology – Hellas
www.forth.gr

National Hellenic Research Foundation
www.eie.gr

Hungary

Magyar Tudományos Akadémia
Hungarian Academy of Sciences
www.mta.hu

Országos Tudományos Kutatási
Alapprogramok
Hungarian Scientific Research Fund
www.otka.hu

Iceland

The Icelandic Centre for Research
www.rannis.is

Ireland

Am Chomhairle um Thaighde sna Dána
agus sna hEolaíochtaí Sóisialta
*Irish Research Council for Humanities
and Social Sciences*
www.irchss.ie

Royal Irish Academy
www.ria.ie

Italy

Consiglio Nazionale delle Ricerche
National Research Council
www.cnr.it

Lithuania

Lithuanian State Science and Studies
Foundation
www.vmsfondas.lt

Luxembourg

Fonds National de la Recherche
National Research Fund
www.fnr.lu

Netherlands

Koninklijke Nederlandse Akademie
van Wetenschappen
*Royal Netherlands Academy
of Arts and Sciences*
www.knaw.nl

Nederlandse Organisatie voor
Wetenschappelijk Onderzoek
*Netherlands Organisation
for Scientific Research*
www.nwo.nl

Norway

Det Norske Videnskaps-Akademi
Norwegian Academy of Science and Letters
www.dnva.no

Norges Forskningsråd
Research Council of Norway
www.forskningsradet.no

Poland

Polska Akademia Nauk
Polish Academy of Sciences
www.pan.pl

Portugal

Academia das Ciências de Lisboa
Lisbon Academy of Sciences
www.acad-ciencias.pt

Gabinete de Relações Internacionais
da Ciência e do Ensino Superior
*Office for International Relations in Science
and Higher Education*
www.iccti.mct.pt

ESF Member Organisations involved in the social sciences

Romania

Consiliul National al Cercetarii Stiintifice
din Invatamantul Superior
National University Research Council
www.cnctis.ro

Slovak Republic

Slovenská Akadémia Vied
Slovak Academy of Sciences
www.sav.sk

Slovenia

Slovenska Akademija Znanosti in Umetnosti
Slovenian Academy of Sciences and Arts
www.sazu.si

Slovenska Znanstvena Fundacija
Slovenian Science Foundation
www.ustanova-szf.si

Spain

Consejo Superior de Investigaciones
Científicas
Council for Scientific Research
www.csic.es

Ministerio de Educación y Ciencia
Ministry of Education and Science
www.mec.es

Sweden

Forskningsrådet för arbetsliv
och socialvetenskap
*Swedish Council for Working Life and Social
Research*
www.fas.forskning.se

Vetenskapsrådet
Swedish Research Council
www.vr.se

Switzerland

Rat der schweizerischen wissenschaftlichen
Akademien
Council of the Swiss Scientific Academies
www.cass.ch

Schweizerischer Nationalfonds
Swiss National Science Foundation
www.snf.ch

Turkey

Türkiye Bilimsel ve Teknolojik Araştırma
Kurumu
*The Scientific and Technological Research
Council of Turkey*
www.tubitak.gov.tr

United Kingdom

The British Academy
www.britac.ac.uk
Economic and Social Research Council
www.esrc.ac.uk

Europe is a continent of diverse peoples, economies, political systems and identities. The social sciences are the tool that allows us to understand this complexity.

Social science produces findings which are valuable to policy-makers at all levels, to business, and to anyone who wants to know more about society. How will innovation in medicine be paid for? How are Europe's older people being supported, both by their families and by the state? Do people really value locally-produced food? Can the EU help solve terrorist crises and natural disasters within its member states?

The social sciences are especially important today, because Europe is changing faster than ever. Innovation is quickening its pace, migration and movement are occurring on a mass scale, and globalisation is altering Europe's position in the world.

The social sciences allow us to find out about issues such as these in a rigorous way, using objective data and thorough methods. And their scope is being expanded by new insights from our growing knowledge of the human brain and mind. In this publication, the European Science Foundation explains how the social sciences can help us understand Europe today, and improve it for tomorrow.

This publication was written by Martin Ince, a UK freelance journalist, martin@martinince.com. He wishes to thank Professor Gün Semin, Dr Henk Stronkhorst and their ESF colleagues for their work on this project. He is especially grateful to Jarmo Laine of the Academy of Finland, a principal source for the Facts and Figures pages.

Printing: IREG Strasbourg – October 2006
ISBN 2-912049-55-5

