ACADEMY of SOCIAL SCIENCES | The National Academy of Academics, Learned Societies and Practitioners in the Social Sciences

Introduction:

The Academy of Social Sciences comprises 1,000 distinguished academics and practitioners in the social sciences and some 40 learned societies and subject associations. Before the May election the science minister Greg Clarke and members of the Science and Technology Committee joined business and research leaders to launch the Campaign for Social Science report *The Business of People* to illustrate and celebrate social science's contribution to national prosperity and wellbeing: you might find it useful (1).

Your questions

The extent to which the ring-fence, and the separate arrangements for determining 'resource' and 'capital' allocations, have produced coherent UK science and research investment

The short answer from social science is that recent 'capital' allocations have been lumpy, short term and ad hoc; but capital spending has paid for the launch of valuable social science data sets. Using them, however, now depends on 'resource' budgets.

The boundary between capital and resource (revenue, or current spending) is blurred; it's hard to call these arrangements 'coherent'. You might ask your colleagues on the Public Accounts Committee to take a look. Despite a capital allocation of £18.7 m for 2011-12, the ESRC recorded no capital spending; similarly in 2012-13, despite an allocation of £13.7m (2).

Since 2013-14, the mismatch between planned capital and actual spend has grown, but social science has benefited. Despite an allocation of £12.7m in 2013-14 the ESRC spent £55m and against the same allocation for 2014-15, it spent £45m.

In social science certain kinds of research support have the character of capital investment, for example where they are used construct data sets that will produce findings over the years. For example the Millennium Birth Cohort (3) is

proving a tremendous asset in understanding change in modern Britain. A sample group is being followed from birth in 2000 as they move through school and, now, into the years of transition between child and adulthood. The value of such data appreciates over time. Successive sweeps accumulate rich evidence about – for example – the effects of childhood experience on adulthood and how households have coped with recession and austerity (4).

But the value of longitudinal data depends on further money (resource or capital) being allocated to pay for new sweeps and for curation and organizing access by researchers. The work on data sets will depend on subsequent grants paid out of the ESRC's resource budget or by universities from their funding council grant, from government departments' R&D budgets or support from philanthropic bodies.

During the coalition years, blocks of money labelled 'capital' were made available to the ESRC at short notice, leading to projects being put together at great speed, raising practical difficulties and putting their scientific quality at risk. An example here is work on 'administrative data' – data generated as citizens interact with local government, health, social security and so on. It's potentially a vital resource for socio-economic research, but also for improving public service delivery. Research use depends on government departments' assent to data sharing and legislative changes, which demand a longer run strategy.

The extent to which science and research expenditure in Government departments (outside the Science Budget) complements or competes with the Science Budget

For social science, R&D by Whitehall departments, agencies and devolved administrations is important and should complement the research councils' (and higher education funders') spending. But there is no strategy. Coordination, where it takes place, is informal.

The committee will want to ask whether definitions of R&D across government are consistent. The Office of National Statistics (ONS) definition of research includes aspects of postgraduate training (5).

Government does important socio-economic research outside the Science Budget. An entire department (ONS) is social scientific. A large proportion of research by certain departments (ONS, the Home Office, education, justice,

communities and local government) is social scientific in nature; health, transport, energy and environment has cross-disciplinary portfolios. The Department for International Development relies heavily on social science to achieve its ends, as the impact case studies presented to the funding councils' Research Excellence Framework 2014 attest (6).

Also, important analysis and research are carried out by arm's length bodies including the Bank of England and Office for Budget Responsibility. Elsewhere in the public sector, data is collected using social science methods and analysis by local government, the Environment Agency and the National Audit Office. We can roughly estimate their total research spend but there are no central and verifiable sources.

This spending is not joined up. There is no social science strategy. It's not clear who in government is in a position to 'look across' this terrain. We refer you to criticisms by your colleagues on the (former) Commons Public Administration Select Committee (7) on the paucity of strategic thinking in government.

Research by government departments is a Bermuda Triangle. Research spend is discretionary and usually forms a very small proportion of departmental budgets. In some departments it has been cut disproportionately more than departmental spending. Chief science advisers, some of them social scientists (for example in education), vary in their influence.

Another area where data is lacking and strategy missing is the relationship between the aims and outcomes of the research councils and the higher education funding councils. We prize the Quality-related (QR) allocation – 'dual support'; it protects pluralism in research and buttresses the autonomy of science. But it is striking how little comparison or cross-referencing there is between the two streams. If research funding is geographically concentrated – a subject of intense interest on the part of ministers – is it because research council and QR funding overlaps?

The need for and rationale for any adjustment to the trajectory of future Government expenditure on science and research, and what would be gained from an increase (or lost from a reduction) compared with current expenditure levels;

Also *The extent to which any increase or reduction in Government expenditure on science and research will have an impact on the UK's relative position among competitor states.*

Like the other national academies and campaigns we repeat the case the science minister seemed to accept in his appearance before the committee in July (8).

UK R&D spending is relatively low. It is also highly productive. Empirical studies by social scientists show a strong link between public R&D and productivity growth in private firms. (See the point below about social science research contributing to the effectiveness and productivity of the public sector.) This makes a strong case for increasing the UK's public R&D spend (0.5 per cent of GDP) to 1 per cent, moving towards the norms of leading OECD countries.

Paradoxically UK productivity is low (but could be increased by additional scientific investment) while the productivity of UK science is high.

To the general case, we would add a footnote. The UK economy is now predominantly based on services. Important though manufacturing remains, productivity growth will have to take place in finance, retail, distribution and other service sectors. And in small and medium enterprises. They are being helped to gain better access to evidence and research about products and markets – this comes from social science work. Technological innovation is vital, but so is innovation in business processes, in the structure and function of organizations and in behaviour and the deployment of human resources. These are all domains where social science makes a large contribution that if adequately supported would help meet the UK productivity challenge.

Whether the current distributions of the budget between particular types of expenditure and between different organizations is appropriate for future requirements, and achieves an appropriate balance between pure and applied research

Knowledge used and knowledge waiting to be used is a better description than pure/applied. If the responsive/strategic balance is now about right,

we fear further pressure on the space available for autonomous social science research

We believe there are few if any challenges facing the UK, or firms or organizations within it, that can be addressed except through multi-disciplinary work – in which social science must be integrated from the start, not bolted on once difficulties are met. If Sir Paul Nurse's review ends up recommending research policy be more strategic, we endorse the ambition, provided a) social science sits squarely with the other disciplines and b) strategic research does not overwhelm or suffocate responsive, or curiosity driven work.

The Dual Support scheme is justified as long as funding council grants to universities under QR support autonomous social science.

Instead of 'pure and applied' we favour talking about knowledge used and knowledge waiting to be used.

What level of Government expenditure on science and research is needed: to significantly drive the overall level of such expenditure in the economy, through synergies between government and private sector investment (including overseas investment); and to optimally balance its benefits against the opportunity cost of government expenditure foregone on other public services.

Social science research should be viewed as complementary to public spending: it helps ensure public money is spent effectively and efficiently and, for example in health, can move 'upstream' to save future expenditure.

The work of the Institute of Fiscal Studies shows how social science work can help make public spending more effective. It underpins the evaluation of public policy. The What Works centres supported by the ESRC are an example of how knowledge derived from research can be applied in crime, poverty reduction, urban regeneration and public service effectiveness (9). In austerity, social science is helping government improve services. For example the Department of Work and Pensions and HM Revenue & Customs are using behavioural insights to improve service users' experience, and reduce costs. The AcSS is about to launch a survey of the many ways social science understanding of behaviour, families

and communities is deployed in health, helping to lessen demand on the NHS and promoting healthier living.

1 http://campaignforsocialscience.org.uk/
2 BIS The Allocation of Science and Research Funding 2011/12-2014/15, December 2010; successive ESRC Annual Reports and Accounts
3 http://www.cls.ioe.ac.uk/page.aspx?&sitesectionid=851
4 https://www.understandingsociety.ac.uk/
5 UK Government expenditure on science, engineering and technology, ONS Statistical Bulletin, July 17 2015
6 http://www.hefce.ac.uk/pubs/rereports/Year/2015/analysisREFimpact/
7 Commons Public Administration Select Committee, Strategic Thinking in Government, report April 2012
8 http://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/news-parliament-2015/the-science-budget-ev-1/
9 https://www.gov.uk/what-works-network