

Institution: University of Bristol
Unit of Assessment: 18 Economics and Econometrics
Title of case study: Affecting private delivery of public services for households and businesses across the UK
1. Summary of the impact (indicative maximum 100 words) Professor Paul Grout has had a significant impact on national policy on the delivery of public services by the private sector in the last five years. His research undertaken at the University of Bristol on private provision by regulated utility companies and public private partnerships, using both economic theory and empirical studies, paved the way for his central involvement in, and directly informed, key regulatory decisions. These decisions impact materially on almost every individual and organisation in the UK. His research also directly led to his appointment in 2012 to the Board of Ofgem (the Gas and Electricity Markets Authority), the UK energy regulator.
2. Underpinning research (indicative maximum 500 words) The underpinning research commenced in the early 1990s and is ongoing. It was carried out by Grout (Professor of Political Economy, 1986-) and colleagues at the Universities of Bristol (L. Garside, Research Assistant/Associate, 1999- , A. Jenkins, Research Assistant, 1998-2000), Oxford (Professor M. Stevens) and Bath (Professor A. Zalewska). The research can be grouped together into an examination of two overlapping areas. (i) The regulation of private provision of public services through regulatory agencies This research, notably but not exclusively in the area of regulation of private utility companies, gives important insights into the appropriate rate of return for regulated utilities [1]; the impact of government policies and economic and stock market ‘shocks’ on the risk and cost of capital of private utility companies [1]; valuation of utilities [2]; competition law appeal processes [3], and privatisation [2]. For example, [1] shows empirically that uncertainty about the overarching political environment (e.g., uncertainty about government policy) impacts on the risk and cost of capital of regulated utility companies precisely in the manner predicted by economic theory, and that large economic and stock market shocks (e.g., the dotcom boom and bust) do not impact on the risk and the cost of capital of regulated companies differently from the impact on equivalent companies in the unregulated sector. [3], using a sample of competition commission cases between 1970 and 2003, identifies the characteristics of specific cases that affect the guilty/not guilty decisions made by the competition commission but also shows that the decisions reached by the commission depend to a large extent on factors, such as the experience of the chairman, that are extraneous to the merits of the specific case. (ii) The private provision of public services regulated by long-term contracts This deals with Public Private Partnerships (PPPs), in particular Private Finance Initiative (PFI) versions of PPPs, across a broad array of public services. PPPs typically involve long-term agreements between government and a private sector consortium where the private consortium finances, builds, owns and operates infrastructure (e.g., roads, hospitals, schools) which the government pays for over the life of the contract. Examples of the issues where the research provides important insights include: the assessment of when a PPP is the appropriate model of delivery ([4], [5], [6]); the assessment of value for money; and the appropriate rates of discount for a meaningful public/private comparison [4].

Impact case study (REF3b)**3. References to the research** (indicative maximum of six references)

The high quality of the research is corroborated by the quality of the journal publications and the high amount of associated peer-reviewed competitive grant funding.

- [1] Grout, P.A. and A. Zalewska (2006), The Impact of Regulation on Market Risk, *Journal of Financial Economics* 80, 149-184. DOI: 10.1016/j.jfineco.2005.02.006
- [2] Grout, P.A., A. Jenkins and A. Zalewska (2004), Privatisation of Utilities and the Asset Value Problem, *European Economic Review* 48: 927-941. DOI: 10.1016/j.euroecorev.2003.06.003
- [3] Garside, L., P.A. Grout and A. Zalewska (2013), Does experience make you tougher: Evidence from competition law, *The Economic Journal* 123, 474-490. DOI: 10.1111/j.1468-0297.2012.02560.x. Listed in REF2.
- [4] Grout, P.A. (2003), Public and private sector discount rates in public-private partnerships, *The Economic Journal* 113, C62–C68. DOI: 10.1111/1468-0297.00109
- [5] Grout, P.A., and M. Stevens (2003), The Assessment: Financing and Managing Public Services, *Oxford Review of Economic Policy* 19(2): 215-254. DOI: 10.1093/oxrep/19.2.215
- [6] Grout, P.A. (1997), The Economics of the Private Finance Initiative, *Oxford Review of Economic Policy* 13(4): 53-66. DOI: 10.1093/oxrep/13.4.53

Grants

- [7] Grout (Co-I), with S Burgess, I Jewitt, C Propper and I Tonks (all then Bristol): 'Boundaries of the State', Leverhulme Trust, F/00/182/E and F/182/BB, £3m, 1998-2007.
- [8] Grout (Co-I), ESRC CMPO Centre Grants, RES-343-28-3001 and RES-343-28-0001, £4.8m, 2004-2014.

4. Details of the impact (indicative maximum 750 words)

The main pathways to impact were through Grout's central involvement in Ofgem's key decisions and through his advisory role to various government agencies.

4.1 Impact through Ofgem

Amongst many other activities, Ofgem sets the prices (allowed revenues) that electricity and gas transmission companies (e.g., National Grid), and the gas and electricity network operators can charge. Professor Grout's research into private delivery of public services, including his research into the interaction of regulation and the cost of capital of regulated companies, impacts directly on the appropriate allowed revenues of regulated companies. This research and his analysis of optimal structures of delivery by the public sector led him to be appointed as the sole special advisor of the key regulatory committees of the Ofgem Board (since 2008), and to the Board of Ofgem in 2012.

The UK approach to the provision of offshore transmission (i.e., the transmission of electricity from offshore wind farms) is akin to a traditional PPP model, and Grout's research into the assessment of when PPPs are the appropriate model of delivery, when they can provide value for money, and the appropriate rates of discount for a meaningful public/private comparison, led to him being appointed as Chair of Ofgem's Offshore Committee (which deals with offshore transmission and international interconnection) in January 2013. In addition, he has chaired the key regulatory committees in the absence of the chairman of the board and has chaired settlement committees that impose 'fines' on energy companies for failing to meet the legal obligations in their licence.

In December 2012 alone the board and these committees, in a series of decisions, granted over £50bn of approved revenues for regulated transmission and distribution companies. The fines on energy companies run into millions of pounds. These decisions impact directly on almost every

individual and organisation in the UK. In addition to the impact on household bills, energy prices affect UK business costs and profits which impact on consumer prices both in the UK and around the world. They thus also affect UK competitiveness and government tax revenues.

In recognition of his key contributions public officials have stated: Professor Grout's 'knowledge drawn from his research into the cost of capital of regulated companies and how they are affected by the political environment and large 'one-off' events and his research into the decision making processes of the Competition Commission have moulded final decisions we have taken in these price reviews', (Chief Executive, Ofgem [a]). Professor Grout's 'voice has been significant, incisive and important' ... 'contributing a wealth of economic knowledge and experience' (Chairman of the Board of Ofgem [b]). Grout was also cited in the introduction to the 2012 Ofgem Annual Report for bringing his considerable expertise in economics to help Ofgem.

(i) The RIIO Committees

The Board of Ofgem is the body that regulates and oversees the energy markets in the UK. It has RIIO, E-Serve, Offshore, Remuneration and Audit sub-committees. Since 2008 Grout has been special advisor to all of the RIIO (Revenue equals Incentives + Innovation + Outputs) sub-committees and since 2012 has also been a full board member. The RIIO committees determine all allowed transmission and distribution charges in England, Wales and Scotland. These network charges account for 21% of total electricity bills and 18% of total gas bills. The typical dual fuel bill (i.e. gas and electricity) for a UK household is £1,340pa (Nov 2013).

In December 2012 RIIO-GD1 (Gas Distribution 1) approved total allowed revenues for the gas distribution companies between 1/4/13 to 31/3/21 of £24.8bn (in 2009/10 prices) [c], RIIO-T1 (Transmission 1) approved total allowed revenues in nominal prices for the electricity transmission over the same period of £22.7bn ([d] and [e]) and RIIO-T1 also approved total allowed revenues in nominal prices for the gas transmission for a similar period of £6.9bn [d].

When allowing these network charges Ofgem determines, amongst other things, the cost of capital, approved revenues, and incentive schemes. These are all intimately related to Professor Grout's research and expertise (e.g., [1], [2] and [6]). Grout's research, for example, into how the relevant cost of capital of regulated utilities is affected by political and large shocks to markets (informing whether claims of particular impact on regulated companies during the financial crisis was consistent with empirical evidence) fed into this decision process. The impact of Ofgem's choice of appropriate cost of capital is material. For example, had Ofgem adopted a 1% higher cost of capital for transmission and gas distribution companies in 2012 then the direct additional impact would have been approximately £3.3bn, or approximately an £11pa direct increase for each household, with a significant indirect effect through higher energy costs in the corporate sector [f].

Companies are able to appeal against Ofgem's price controls and these appeals are heard by the UK Competition Commission. Professor Grout's research into the determinants of the decisions taken by the Competition Commission [3] has fed directly into Ofgem's balancing between regulated prices and avoidance of unnecessary appeals, which delay implementation of price controls and as a result can be damaging to consumers and industry.

(ii) The Offshore Committee

Grout chairs Ofgem's Offshore Committee. This is a sub-committee of the board that oversees all offshore investment and in particular the tendering processes for offshore transmission. The UK approach to offshore transmission is one of competitive tendering, and has many features that resemble private finance initiative (PFI) and PPP projects. The National Audit Office (NAO) estimates there will be potentially around £8bn of tenders for offshore transmission to be delivered

between now and 2020 enabling approximately £52bn of offshore investment. Grout's research into PFI provides the platform for him to chair the Offshore Committee and inform final decisions ([4], [6]). For example, feedback from the NAO and the Public Accounts Committee [g] on the offshore tendering process and policy has led to reconsideration of aspects of licence policy and current changes to licence policy. Professor Grout's research into PFI models contributed to amendments, which are currently under public consultation.

4.2 Impact through parliamentary committee and government agencies

i) Grout was the expert advisor (2008-10) to the House of Lords Economic Affairs Committee for its review and report on 'Private finance projects and off balance sheet debt' [h]. The objective of the review was to assess the current state of private finance projects and off balance sheet debt and make recommendations to government for improvements. The expert advisor has important influence (although no vote) on which witnesses are brought to the committee, the questions and themes of each hearing, on the decision making process leading to the report and its recommendations. Professor Grout's input was heavily influenced by his research on PPPs (e.g., [4] and [6]). In the Government's response [i] it accepted the Review's concerns about data and stated that 'it had already taken a number of steps in this area to improve the availability of data on PFI projects', and noted the suggestion that risk spreading could be expanded and suggested that 'HM Treasury will consider options for such expansion with departments on a case by case basis'.

ii) Grout was a member of the advisory panel to the National Audit Office (2006-2007) on their procurement report on PFI, 'Improving the PFI Tendering Process'. He also provided evidence on PPPs to the Scottish Parliament. Both were based significantly on Professor Grout's research [6].

iii) Grout was an advisor (2007-2008) on the Department for Business, Economics and Regulatory Reform (BERR) Report on the Public Services Industry Review [j] and provided commissioned work on the efficacy of various public service models. Professor Grout's contribution was based significantly on his research. Indeed, the definition of public services used in this report to inform the scope of the review is taken from his work [5]. The foreword to the Report points out that Professor Grout was 'of great help in unearthing the data and critiquing the evidence base of the PSI'. The Report made eight high-level recommendations, which were a major input into BERR's 'Supporting Innovation in Services', August 2008.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- [a] Factual statement, Chief Executive, Ofgem
- [b] Chairman of the Board of Ofgem (Gas and Electricity Markets Authority), and Annual Assessment (2012-13) of Ofgem Non-Executive Board members for Secretary of State for Energy and Climate Change.
- [c] Ofgem: RIIO GD1 Final Proposals Overview, 17 December 2012.
- [d] Ofgem: RIIO T1 Final proposals for National Grid Electricity Transmission and National Grid Gas, 17 December 2012.
- [e] Ofgem: RIIO T1 Final proposals for SP Transmission and Scottish Hydro Electric Transmission Ltd, 23 April 2012.
- [f] Ofgem calculation, Regulatory Finance and Compliance (letter).
- [g] Public Accounts Committee – Twentieth Report: Department of Energy and Climate Change Offshore electricity transmission - a new model for infrastructure, 14 January 2013.
- [h] House of Lords Select Committee on Economic Affairs. 1st Report of Session 2009-2010 'Private finance projects and off balance sheet debt', 17 March 2010.
- [i] 'Government Response to Private Finance Projects and off balance sheet debt', HL Paper 114, April 2010.
- [j] Department for Business, Enterprise and Regulatory Reform, Public Services Industry Review, July 2008.