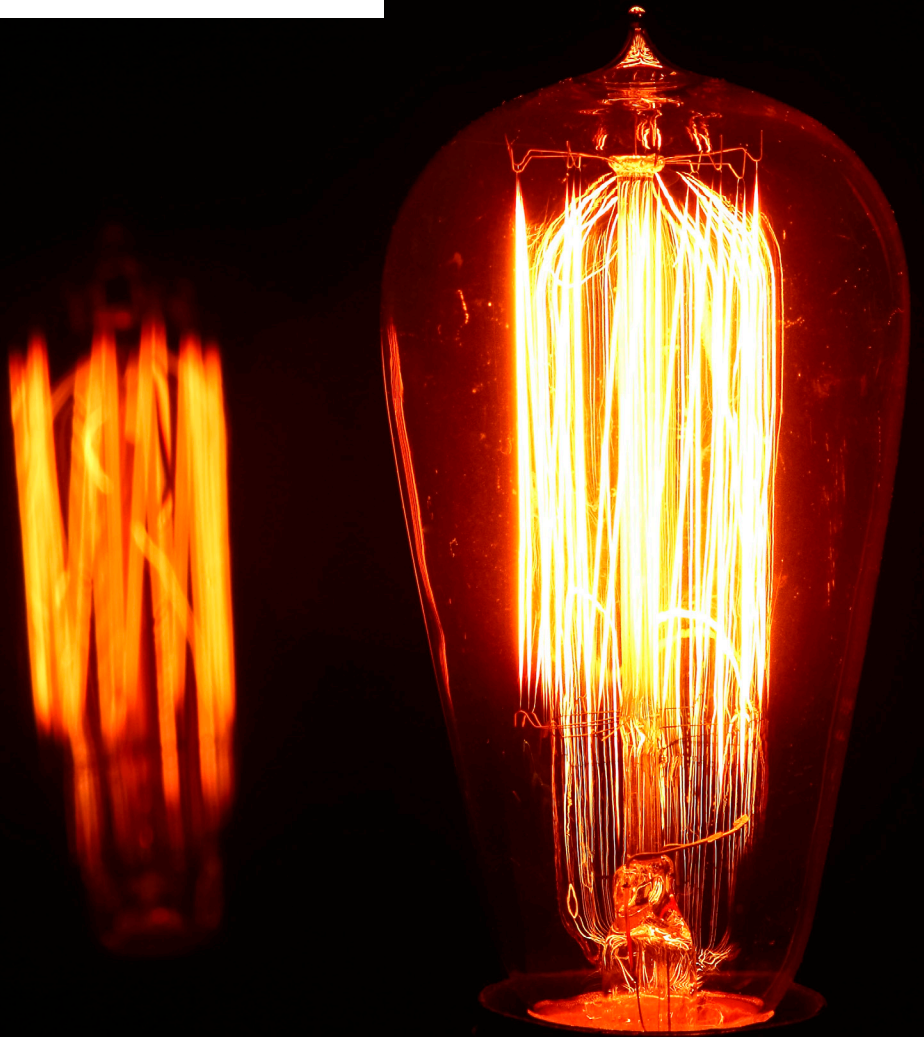


How could ownership affect performance?

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**In the decade since the global financial crisis, Western Europe has seen increased calls for changes in the ownership of essential service assets. For example, during the UK's 2019 general election, the Labour Party campaigned for the nationalisation of key strategic industries such as energy, water and telecoms. We ask how ownership can affect operational incentives and outcomes, and explore the implications for current ownership models and independent regulation**

In the November 2019 issue of *Agenda in focus*, Tim Tutton, Associate at the Centre for Competition Policy, looked at the issue of political control in the context of the UK Labour Party's proposal to nationalise core utilities.<sup>1</sup> While nationalisation is not on the policy agenda for the new Conservative government, the wider concerns raised in recent public debate about the legitimacy of, and value for money provided by, private regulated monopolies may persist in the start of this new decade. The topic of nationalisation is also relevant in the public debate elsewhere in Europe—for example, in the water sector in Italy.<sup>2</sup>

This article does not examine whether private or public ownership is better per se. Empirical analysis has shown that the effect of ownership on outcomes is highly specific to individual circumstances (for example, it differs across sectors and countries).<sup>3</sup> Rather, in the context of recent public debate, we consider how ownership can affect operational incentives and outcomes, and look at any implications that it may have for the system of independent regulation that is currently prevalent in the UK.

## Incentives and efficiency, and the impact of different ownership structures

A textbook view of the role of a well-functioning economic system includes the allocation of scarce resources in the most efficient way. In this context, the key question is how, in practice, an economic system should be structured and operated. Economics distinguishes between several notions of efficiency, including the following.

- **Static efficiency** refers to how efficiently existing resources are utilised at any given point in time. It can be broken down into two subcategories: *productive efficiency*—producing goods and services at the lowest possible cost; and *allocative efficiency*—producing goods and services that represent consumer preferences.
- **Dynamic efficiency** refers to changes in the efficiency of a business over time—such as how efficiently a company lowers its costs. One of the key determinants of dynamic efficiency is the level of investment that a company undertakes.

A firm's ownership structure can influence the type and level of efficiency that it seeks and maximises. For example, it could be argued that because a government is likely to take the view of a long-term social planner, it is able to maximise **allocative efficiency** by capturing the preferences of society. On the other hand, it could be argued that private ownership provides a greater incentive to minimise costs through its profit motive, thereby leading to higher **productive efficiency**.

However, the precise effects of different ownership structures are not clear—there are competing arguments on the effects of state-owned enterprises (SOEs) and private ownership on economic efficiency. We explore the different effects of ownership structures on efficiency in more detail below.

### Static efficiency

As noted above, SOEs may be able to maximise allocative efficiency in the economy by taking a long-term view of the preferences of society. For example, a government may find it easier to implement large-scale investment programmes by making centralised policy decisions. A centralised plan may help the UK government to achieve its 2050 net zero carbon emissions target, for example, by providing clear direction and investment in the new technologies that will decarbonise the heat, transport and power generation sectors.<sup>4</sup> On the other hand, private network companies (structured as separate regulated monopolies) might find it more difficult to coordinate in achieving decarbonisation.

However, this assumes that governments are able to make the 'right' long-term decisions.<sup>5</sup> In reality, governments have to deal with a range of choices that are similar to those considered by private companies. For example, various competing technologies could be used to achieve decarbonisation and lower emissions. The Department for Business, Energy and Industrial Strategy (BEIS) outlines its current

approach to decarbonisation as creating 'the best possible environment for the private sector to innovate and invest' rather than 'predict[ing] every technological breakthrough that will help us meet [emission] targets'.<sup>6</sup> In this context, it is not clear that the UK government will be able or willing to pick winners.

As regards productive efficiency, it is generally expected that the profit motive will provide a strong incentive for private companies to deliver services at the lowest cost. In addition, private companies typically use debt financing, which provides additional pressure and restraint on the management of private companies to manage the company in an efficient manner.<sup>7</sup>

However, compared with private companies, a government may be able to extract greater economies of scale by negotiating on behalf of the whole country or an entire sector of the economy. For example, the government could operate as a single buyer of chemicals for water treatment, as opposed to each water company having to procure the chemicals individually. This might allow SOEs to achieve economies of scale in purchasing and, therefore, buy the necessary inputs at a lower price than private companies.

### Dynamic efficiency and innovation

When it comes to dynamic efficiency, the answer to which structure of ownership delivers the best outcomes depends on the level and effectiveness of investment and innovation. In general, a higher level of investment would be expected to yield a higher level of dynamic efficiency.

On the one hand, a government may invest more than the private sector, as it may take into account the long-run benefits of any investment for the whole economy. For example, a government may choose to invest in high-speed Internet infrastructure in the expectation that the information economy will grow, and that growth in the overall economy could be facilitated by access to this technology.

In contrast, an investment decision for a private company is driven primarily by the profit motive, and may therefore lead to varying levels of investment depending on the strength of this profit motive. In the UK utilities sector, under the current regime of economic regulation, the incentive for companies to invest depends on the levels of returns allowed by the regulator. If allowed returns are sufficient, and investors perceive that there is a low long-term risk environment (e.g. low levels of regulatory or political risk) then regulated

utilities should have an incentive to invest in long-lived assets.

However, as with static efficiency, there are counter-arguments regarding the likely effect of the ownership structure on investment. A government may be tempted to cut investment due to short-term budget constraints or political motives, while the managers and/or shareholders of a privately owned company may take a shorter-term view and not undertake long-term investment with uncertain future payoffs.<sup>8</sup>

Finally, the effect of the investments on dynamic efficiency will also depend on the effectiveness of investment—i.e. it is not only the amount of the investment that matters, but also the ‘quality’ of the investment.

## Does state ownership affect financing costs?

Irrespective of ownership, all businesses have to be funded using equity and (in most cases) debt. There is an argument that SOEs are able to achieve a more efficient combination of equity and debt funding that will result in a lower cost of financing. However, economic theory suggests that this impact may not be clear-cut.

At the outset, it is helpful to distinguish two financing concepts.

- **Capital structure**—the amount of equity and debt that a company is using to finance the assets of the business. Financial ‘leverage’ or ‘gearing’ refers to the proportion of debt financing.
- **Cost of financing**—the costs associated with the equity and debt funding.

If we assume no market imperfections then the capital structure and dividend policy of a firm should not affect its cost of financing.<sup>9</sup> For example, while a firm could increase its proportion of ‘cheap’ debt funding by reducing its amount of ‘expensive’ equity funding, the increase in the proportion of debt will increase the financial risk faced by investors and, therefore, the cost of debt and equity funding. Theoretically, (i) a higher proportion of ‘cheap’ debt; and (ii) a higher cost of debt and equity funding; will offset each other—i.e. the total cost of financing the business will not change with the changes in the relative proportions of debt and equity funding.

However, in reality there are likely to be some market imperfections, such as taxes and the risk of costly default, that imply a capital structure that minimises the cost

of financing. Private companies have an incentive to increase their leverage due to the tax-deductibility of corporate debt.<sup>10</sup> This factor is unlikely to motivate publicly owned companies to increase the proportion of debt financing in their capital structure.

One of the key arguments raised by commentators in support of a change in ownership is that the overall cost of financing for SOEs is lower than in the private sector. For example, analysis prepared by the University of Greenwich’s Public Services International Research Unit calculated potential savings from UK utilities nationalisation as the difference between the current cost of dividends and interest paid by private companies, and the cost of refinancing the private companies by issuing government bonds.<sup>11</sup>

First, the cost of financing may be lower because the government can generally borrow at lower rates than corporates. This is an empirical question—currently the UK government does indeed raise debt at a lower level than private companies, and sovereign debt tends to have a lower yield than corporate debt.<sup>12</sup> However, it is important to consider the effect of a change in ownership on the government’s overall finances. In particular, the initial compensation required to buy out the current private investors in utility companies, and any refinancing of utility companies’ existing debt, would increase the amount of public debt. This increase in public debt could increase the cost of raising new financing for the government, which in turn could lower the cost of debt advantage of the SOEs relative to the private sector.

Second, the cost of financing may appear to be lower if equity investors receive less payment—for example, the SOEs may not pay out any dividends. In practice, this will not necessarily be the case, as SOEs may also pay out dividends. For example, Jersey Water—the water company that is majority-owned by the States of Jersey—pays regular dividends to its shareholders.<sup>13</sup> In this case, the only difference would be that the government itself, rather than private investors, receives the dividends. However, one should not forget the significant upfront cost associated with changes in ownership—any dividends generated by SOEs will represent a return on the public investment.

Nonetheless, if, SOEs do not pay dividends, on the face of it this may be perceived as a direct cost ‘saving’. However, the equity-related risk for which private-sector investors are compensated through a regulated allowed cost of equity would not disappear. In fact, if SOEs did not pay any dividends, in effect the government would be providing an implicit subsidy to the customers of utility companies—i.e. the

government would invest a lot of public resources to buy out the utilities, but would not generate any direct return on investment.

In addition, the risk to equity owners does not disappear by moving ownership from private to public hands. The profit that private companies are allowed to earn under the current regulatory regime reflects the risk of the assets held by the companies; it provides an equity buffer to absorb some of the external shocks that the companies face in terms of their risk exposure. If a government decides that such an equity buffer is not necessary for the SOEs (i.e. if the charges to customers are set at a level that does not provide any profit for the company) then the same external shocks would have to be covered by the taxpayer, in the form of an additional cash injection—or eventually by customers, in the form of higher charges. Overall, the net effect of a change in ownership on the cost of financing is again unclear.

## What are the implications for current ownership models and independent regulation?

Overall, the effect of changes in ownership in the utility sector is unclear—various effects could result in an improvement or worsening in economic efficiency and financing costs. In addition, a large programme to change ownership might be associated with short-term disruption and costs that would make it more difficult to achieve the intended benefits from such policies.<sup>14</sup>

To the extent that there is a perception that regulation is not delivering results that are desirable to society—i.e. that utilities have ‘excess’ returns—the current system could be tweaked, or even overhauled, to improve legitimacy.

Indeed, in the current UK price control cycle, regulators such as Ofgem (the energy regulator for Great Britain) and Ofwat (the economic regulator of the water industry in England and Wales) are implementing challenging price controls, such as halving the RPI-real cost of equity.<sup>15</sup> In addition, regulators are making greater use of indexation mechanisms such that changes in capital markets directly affect the returns that private companies are allowed to earn.

Work is also being undertaken within the UK water sector to develop a social contract between companies and wider society. In April 2019, the trade association Water UK put forward a Public

Interest Commitment, with the objective of enshrining the public interest in the corporate purpose of water companies.<sup>16</sup> It will report its findings by April 2020. Ofwat, in developing its strategy, has also encouraged companies to do more to demonstrate their 'public value'. In this regard, the regulator has noted that 'despite encouraging steps, the sector as a whole has not yet seized the opportunity for integrating public value more deeply, and more systematically'.<sup>17</sup>

To the extent that changes in ownership are a means to an end (i.e. better social outcomes) rather than an end in itself, it seems reasonable to undertake changes to the current systems to deliver such outcomes directly.

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<sup>1</sup> The Labour Party (2019), 'It's time for real change: the Labour Party manifesto 2019', p. 7.

<sup>2</sup> See Oxera (2019), 'Italian water sector: investment in infrastructure', 14 January, <https://bit.ly/2GF9bSf>.

<sup>3</sup> For example, see Cerre (2019), 'Water Sector Ownership and Operation: An Evolving International Debate with Relevance to Proposals for Nationalisation in Italy', July, Table 3.

<sup>4</sup> 'Net zero' means that any carbon emissions are balanced by absorbing an equivalent amount from the atmosphere.

<sup>5</sup> Always making the 'right' decisions would require the government to have perfect information (i.e. to know what all consumers desire and how market prices are set).

<sup>6</sup> Department for Business, Energy and Industrial Strategy (2017), 'The Clean Growth Strategy: leading the way to a low carbon future', October, pp. 10–11.

<sup>7</sup> Debt financing places an additional pressure on management as debt payments (both interest and principal payments) represent a fixed commitment that the company must meet in order to avoid a default. This puts pressure on management to generate sufficient income to meet these commitments by operating the company efficiently. For example, see Grossman, S. and Hart, O. (1982), 'Corporate Financial Structure and Managerial Incentives', chapter 4, in J. McCall (ed.), *The Economics of Information and Uncertainty*, National Bureau of Economic Research book.

<sup>8</sup> This misalignment of management's and society's incentives can be reduced by linking management compensation to socially desirable outcomes.

<sup>9</sup> Modigliani, F. and Miller, M. (1958), 'The Cost of Capital, Corporation Finance and the Theory of Investment', *American Economic Review*, 48:3, pp. 261–297.

<sup>10</sup> In particular, regulated utilities are often criticised for funding a large portion of their operation with debt. For example, see the speech by Jonson Cox, the Chairman of Ofwat, at Water Industry City Conference, 1 March 2018.

<sup>11</sup> Hall, D. and Wegmann, V. (2019), 'Public ownership, benefits and compensation I: benefits of nationalisation of UK water and energy grids and legal and economic issues in determining compensation', University of Greenwich CREW Public Services International Research Unit, November, p. 11.

<sup>12</sup> This is because lending to national governments is typically deemed to be safer than lending to corporates operating in the country. However, this relationship may not always hold. For example, 90% of Italy's high-grade corporate bonds earned a lower yield than Italy's government debt in 2018. See MarketWatch (2018), 'In topsy-turvy Italian markets, sovereign debt now seen as riskier than corporate bonds', 25 May, <https://on.mktw.net/2RYXWcO>.

<sup>13</sup> In 2018, 73.91% of the ordinary share capital of the company was owned by the States of Jersey. See Jersey New Waterworks Company Limited (2018), '2018 Annual Report and Financial Statements', p. 22. The history of the dividend payments is captured in Jersey Water, 'Ordinary and "A" Ordinary share dividend history', <https://bit.ly/2GqoDI5>.

<sup>14</sup> Some utility companies had already incurred additional costs ahead of the General Election, anticipating potential nationalisation should the Labour Party have won. For example, both National Grid and SSE shifted some UK operations into offshore groups, which would have required management time and generated additional legal costs. See *Financial Times* (2019), 'National Grid and SSE shift some UK operations into offshore groups', 24 November, <https://on.ft.com/36sA7PK>.

<sup>15</sup> To illustrate this, in energy the cost of equity in RIIO-T1 for NGET was set at 7.0%, compared with the cost of equity of c. 3.3% proposed by Ofgem in its RIIO-2 Sector Specific Methodology Decision (assuming a 1% RPI-CPIH wedge). Similarly, Ofwat determined a cost of equity of 5.7% at PR14, compared with a cost of equity determination of 3.2% at PR19. See Ofgem (2012), 'RIIO-T1: Final Proposals for National Grid Electricity Transmission plc and National Grid Gas plc – Finance Supporting document', December; Ofgem (2019), 'RIIO-2 Sector Specific Methodology Decision – Finance', 24 May; Ofwat (2014), 'Setting price controls for 2015-20 – Final price control determination notice: policy chapter A7 – risk and reward', December; Ofwat (2019), 'PR19 final determinations: Allowed return on capital technical appendix', December.

<sup>16</sup> Water UK (2019), 'Public Interest Commitment', 25 April.

<sup>17</sup> Ofwat (2019), 'Time to act, together: Ofwat's strategy', October.