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Agenda

Advancing economics in business

Yes, Minister? Incentivising value for money in publicly owned organisations

Profit is typically the incentive that motivates good performance in private sector firms, but the same does not apply to companies in the public sector. Given the pressure on such companies to deliver value for money, is it possible to build in alternative forms of motivation for not-for-profit entities, using organisational incentives instead?

Since the financial crisis began in 2008, several large financial corporations, particularly in the banking sector, have been brought into de facto public ownership.[1] At the same time, existing public organisations need to obtain value for money, as state budgets and consumer spending are tightened. These developments have led to a renewed emphasis in policy debates on the circumstances under which different incentive measures are appropriate for publicly owned companies. On the other hand, a degree of impetus has been given to privatisation in certain countries (as a means to shore up national budgets), which raises the question of whether privatisation will bring about meaningful changes in performance.

For the majority of companies, equity provides incentives to cut costs by giving shareholders a residual claim on a firm's assets: in return for putting their equity at risk, shareholders exert pressure on management to achieve efficiencies. In the context of ex ante price cap regulation, this is exhibited as a pressure to outperform the regulator's expectation of efficiency improvements (see the box below).

By contrast, public sector organisations may generate weak incentives for managers and employees because

What factors encourage managers to exert effort in an equity-financed company?

Shareholders (the principals) hire managers (the agents) to run the business, for example, to determine how resources should be allocated. However, the interests of the two parties are usually divergent, creating a 'principal–agent problem'. Managers in equity-financed companies are enticed to act in the best interests of owners through the following main mechanisms.

***Monitoring by existing shareholders*—a company's owners can most readily seek to reduce the principal–agent problem by directly monitoring their managers' performance. This can be seen most clearly through the owners' ability to influence the composition and decision-making of the board of directors.**

***The role of creditors*—a company's gearing can act as an important disciplining device for senior managers. The threat of illiquidity brings with it the potential for the termination of employment and the stigma associated with being a manager of a company that has gone bankrupt. Furthermore, the creditors have an incentive to monitor managerial performance so as to ensure repayments of both the principal and the interest on debts.**

***The market for corporate control*—outside investors and managerial teams assess the market for corporate and managerial control and look to replace inefficient managers.**

***Equity ownership and stock options*—a common method used to align the interests of management with those of shareholders is to issue shares. This is because management will concentrate its efforts on maximising the value of its stock option, and hence (indirectly) maximise shareholder value.**

***The managerial labour market and career concerns*—it has been argued that the principal–agent problem arises only in the absence of an efficient market for managerial labour: managers looking to maintain or enhance their future employment prospects have an incentive to pursue shareholders' objectives.**

Source: Oxera.

The topic of this article was discussed at the November 2011 meeting of the Oxford Economics Council. This group, whose members include prominent European economic thinkers and academics, meets twice a year to discuss the economic aspects of a broad range of issues. Details can be found at www.oxera.com.

these parties do not stand to gain from any profits related to their behaviour. Indeed, public sector organisations are characterised by special features which indicate that the optimal incentive schemes for inducing managerial effort are likely to differ between them and their private sector counterparts. The following factors have been highlighted in the literature.

- **Multiple principals and tasks**—equity-financed companies tend to have a single, clear objective of profit maximisation, while public sector organisations exist in industries where there are a multitude of (often less clearly defined) aims. In particular, in some industries, there may be a trade-off between the need to maintain a certain standard of safety and a desire to reduce costs.
- **(Legal) monopoly power**—state-owned companies are frequently not subjected to market competition and are instead entrusted with monopoly rights on (some of) their activities. Depending on institutional context, market conditions and regulatory oversight, incentives for cost efficiency may be weaker in the absence of competitive pressures.
- **Intrinsic motivation**—contract theory generally builds from the assumption that agents derive utility solely from the financial compensation they receive for completing the tasks that the principal hires them to carry out. In the public sector, the reality may be somewhat different, as agents may get utility from working for the public sector organisation in question or from their actions as a result of sharing some idealistic or ethical purpose served by that organisation.[2]
- **Competitive (non-)neutrality**—the notion of competitive neutrality implies that government business activities should be neither advantaged nor disadvantaged solely on the basis of their public sector ownership.[3] In reality, however, state-owned enterprises tend to enjoy privileges that are unique to the public sector, and that provide them with a competitive advantage over privately owned firms. Examples include subsidisation by the government, concessionary financing and guarantees, and exemption from bankruptcy rules.

The extent to which institutional design, regulatory oversight and governance arrangements can be expected to overcome the unique features of the public sector, and replicate market outcomes, is examined below.

Is privatisation the answer?

Privatisation of state-owned enterprises has been widespread, across Europe and further afield, over the past three decades. Introducing private equity has the advantages of providing a profit motive, giving the firm access to capital that would not otherwise be available to it, and creating a market for corporate control. If a company underperforms due to poor management, it may become a takeover target, with potential new shareholders believing that they could improve performance. Since a takeover would usually involve a change in management team, an efficient market for corporate control should ensure that resources are transferred from inefficient to efficient managers. This threat of takeover is not present in the public sector as there is no stock to transfer between investors.

The conclusions of academic studies which have looked at firms' performance following privatisation have been mixed. Some have found that privatisation led to improvements in firm management as a consequence of the newly created, concentrated ownership structure, and that privately owned firms are generally more efficient than comparable state-owned enterprises.[4] Other studies, however, have identified no systematic improvement in performance in industries after privatisation or nationalisation.[5]

The CLG structure

Where privatisation has not been pursued, publicly owned organisations have tried several ways to replicate the monitoring role performed by shareholders in the equity model. This has included explorations of the extent to which governance arrangements can provide appropriate incentives. One such method adopted in the UK is the alternative governance structure termed a 'company limited by guarantee' (CLG), a prominent example being Network Rail.

CLGs differ from conventionally financed firms in a crucial way: they have no share capital, and therefore no shareholders. Instead, they are typically controlled by a group of members who have no financial interest in the performance of the company—since they do not receive dividends—but who carry out the corporate governance role.

A further major innovation of companies with CLG status—compared with the traditional mixed equity/debt financing model—has been to replace all of their existing equity with debt, while financing their assets with investment-grade bonds and cash reserves. These reserves can effectively act as a buffer to absorb risks, and therefore play the role of equity in the model.[6]

The membership structure has several potential advantages. First, in principle, members should (since there are fewer of them) have more influence than traditional shareholders.[7] Second, the model may be

advantageous in certain industries (such as rail, water and health) where it is important that profit does not take precedence over other concerns, such as acceptable standards of safety.

On the other hand, CLG status alone may not necessarily address several of the public sector-specific issues outlined above. Members have no direct financial interest in the company's performance. Thus, while bondholders and members of the company perform the oversight role, they may not have as strong incentives as shareholders. The company will also not have the implicit pressure of being a listed company.[8]

The fact that CLGs have been 100% debt-financed may also distort their incentives to pursue efficiency gains. Under the CLG model, the incentive for debt-holders is to ensure that there is a steady cash flow to make their coupon payments, and that their principal is repaid. This could make debt-holders sub-optimally risk-averse, since they do not stand to gain from the upside of risky investment decisions.

Ten years on since the adoption of the CLG model, evidence seems to suggest that the model has not led to a significant increase in the incentives or ability to achieve efficiencies. Indeed, Glas Cymru, owner of Welsh Water, which adopted this model in 2000, announced in February 2010 that it was to undertake a corporate restructuring, with 300 job losses, in a bid to meet Ofwat's efficiency target for the 2009 water periodic review, which required cost savings of 20% over the regulatory control period.[9] It would thus appear that there is some merit in introducing (partial) private finance to some public sector organisations, in order to achieve efficiency targets.[10] Along these lines, Network Rail, for example, recently argued that introducing some risk capital would be positive for incentives.[11]

Performance-related pay

A more common option for publicly owned companies has been to incentivise management through some form of performance-related pay (PRP). Network Rail, for example, has a management incentive plan which entitles senior management to receive annual bonuses of up to 60% of their base salary in return for meeting specified performance criteria.[12]

In certain cases, PRP has been shown to be an effective method of increasing productivity.[13] PRP schemes can affect managers' productivity through two mechanisms.[14] They could have the potential to provide incentives to managers whose interests are not perfectly aligned with those of owners to exert greater effort in pursuing targets. Furthermore, PRP schemes could increase productivity via a sorting mechanism: vacant positions for which pay is closely related to performance should attract applications from only those who are highly skilled and know themselves to be capable of performing the job effectively.

There are, however, potential problems with PRP.

- **Measurability**—there can be difficulties in measuring performance against a direct target, particularly where the organisation's final output is a service rather than a physical product.

- **Scope**—there can be a trade-off between the extent to which targets are based at the level of the individual or the team.

- **Multi-tasking**—if a managerial role requires multi-tasking—and all tasks are rewarded—there will be a bias towards those tasks that can be most readily completed.[15]

- **'Gaming'**—if agents can manipulate, or 'game', the evaluation procedure to their advantage, compensation schemes might inadvertently reward behaviour other than that which is the subject of the evaluation procedure.

Finally, given the nature of the work in the public sector, care for the welfare of the client—or notions of idealism and professionalism—may provide intrinsic motivation that can be diluted by financial, performance-based rewards.[16] It has therefore been argued that receiving pay for completing work may reduce the net utility that a public sector worker derives from their job.

As a result of these criticisms, it has been argued that, although performance-based awards can be important in providing incentives to public sector workers, they need 'selective application to specific agencies or tasks'.[17] In this context, it is necessary to emphasise the importance of identifying and pursuing a single, clear and quantifiable organisational goal for PRP schemes to be successful.

Reputational incentives

The literature on incentives theory has focused on explicit incentives such as PRP schemes. However, in reality, implicit incentives, in the form of career concerns, are also important. In the public sector—perhaps more so than in the private sector—a major incentive to exert effort is derived from concerns over re-election, promotion, and future employment opportunities in the private sector.[18]

To take advantage of career concerns and create reputational incentives to exert effort, some regulators

and public sector organisations have published key performance figures. An example is school league tables, which rank all participating schools against a specified set of criteria. As with PRP schemes, reputational incentives have the potential to work through both motivation and selection mechanisms. With regard to the former, senior managers are unlikely to want to be held to account in the media if the company's performance is below expectations, or poor relative to other industry participants. Equally, positions for which it is known that managers will be held publicly accountable for their performance should discourage applications from those who know themselves to be unsuitable for the job.

However, career concerns may also give managers implicit incentives to act inefficiently, for example by:

- focusing on the short term, to the detriment of performance in the long term;
- directing resources towards projects that are highly visible or have targeted beneficiaries (rather than, say, maintaining infrastructure);
- forgoing investments that have a positive net present value, but subject their own reputations to a considerable degree of risk.

Overall, given the potential to encourage perverse behaviour, the argument for actively seeking to create reputational incentives is inconclusive. Nevertheless, in many cases, strong reputational incentives will be an inherent feature of public sector organisations. Here, the strength of reputational incentives could make the need for additional financial incentives redundant.[19]

Hard budget constraint

Most organisations have to work within a budget: a company's expenditure must be covered by its initial capital and the revenue it accrues from its activities. If it is unable to cover its costs, it will not be able to continue its operations without intervention. An organisation is said to face a hard budget constraint so long as it does not receive support from any other organisation or political institution, but is instead obliged to exit the market if its deficit persists.[20]

Evidently, public sector organisations will have weaker incentives to reduce costs if they perceive that the government will bank-roll any underperformance, although they should ideally be subject to the same financial discipline (hard budget constraint) as their counterparts in the private sector. One method of ensuring that publicly owned companies face a hard budget constraint is by introducing competitive-neutral frameworks that focus on reforming the environments in which public and private entities compete. This involves:

> a systematic review of the legislative and administrative landscape in which state-owned enterprises (SOEs) operate, and a reform of that landscape so that the conditions in which SOEs operate are as closely matched to those faced by private sector competitors as possible.[21]

However, it is premature to say that hardness of budget constraints is 'good' and softness is 'bad'. Indeed, in order to maximise wider social welfare, it may be necessary to provide some form of financial safety net to protect customers from the effects of insolvency.

A greater problem may arise if a bailout in the current period results in expectations of further bailouts in the future, and contributes to a self-perpetuating cycle of soft budget constraints. Once one organisation has been rescued, convincing lenders that other companies are not subject to a state guarantee can be difficult, and potentially inconsistent across time.

Looking to the future

The search for a solution to the efficient provision of public sector goods and services continues. A 'one-size-fits-all' approach is unlikely to be applicable across the multiple organisational forms and institutions which encompass the public sector. That is to say, the design of optimal incentive schemes could feasibly differ as much across hospitals, universities and state-owned utilities as it might be expected to between a public and a private sector organisation. Regardless of the organisation, however, effective incentives ultimately arise from operating on an economic agent's incentive compatibility constraint. The key is therefore in understanding what factors—of which financial compensation will be only one—make up the incentive compatibility constraint, and whether they are likely to differ, on average, across the public and private sectors.

Consequently, both behavioural and labour economics, and 'softer' research fields—including theories of leadership, organisational behaviour and corporate culture—have a considerable role to play in shaping the discussion going forward.[22] In combination with labour economics, these theories could be applied to better understand the supply side of the public sector labour market, and thus the personal and intrinsic motivation that forms an important component in determining the incentive compatibility constraint of public sector workers.

[1] For example, the UK government holds an 84% stake in The Royal Bank of Scotland Group, and a 41% stake in Lloyds Banking Group.
[2] Dixit, A. (2002), 'Incentives and Organizations in the Public Sector: an Interpretative Review', *Journal of Human Resources*, **37**:4, p. 715.
[3] Capobianco, A. and Christiansen, H. (2011), 'Competitive Neutrality and State-Owned Enterprises: Challenges and Policy Options', *OECD Corporate Governance Working Papers*, No. 1.
[4] See, for example, Claessens, S., Djankov, S. and Pohl, G. (1997), 'Ownership and Corporate Governance: Evidence from the Czech Republic', *Policy Research Paper* no. 1737, The World Bank; D'Souza, J. and Megginson, W.L. (1999), 'The Financial and Operating Performance of Privatised Firms during the 1990s', *The Journal of Finance*, **54**:4, pp. 1397–438; Megginson, W.L. and Netter, J.M. (2001), 'From State to Market: A Survey of Empirical Studies on Privatization', *Journal of Public Economics*, **39**, pp. 321–89.
[5] Martin, S. and Parker, D. (1997), *The Impact of Privatisation: Ownership and Corporate Performance in the UK*, Routledge.
[6] Jenkinson, T.J. (2003), 'Private Finance', *Oxford Review of Economic Policy*, **19**:2, pp. 323–34.
[7] Plummer, P. (2003), 'Regulation of Network Rail: a Commercial Company Without Shareholders', CRI Occasional Lecture 9.
[8] Bolt, C. (2010), 'Regulating a State Owned Company: Can We Create the Right Incentives?', Beesley Lecture, October 28th.
[9] Welsh Water (2010), 'Welsh Water to Restructure to Meet Efficiency Challenge', press release, February 9th.
[10] This is particularly the case where safety is not a paramount concern.
[11] Network Rail (2011), 'Periodic Review 2013: First Consultation – Network Rail's Response', September, p. 21.
[12] However, executives were not paid annual bonuses for the financial year 2010/11 following criticism (from politicians and trade unions) of the £2.25m of bonuses paid in the previous financial year. See Network Rail (2011), 'Directors' Remuneration Report 2011/12', June.
[13] See, for example, Kahn, C.M., Silva, E.C.D. and Ziliak, J.P. (2001), 'Performance-based Wages in Tax Collection: The Brazilian Tax Collection Reform and its Effects', *Economic Journal*, **111**:468, pp. 188–205.
[14] See, for example, Lazear, E.P. (2005), 'Output-based Pay: Incentives or Sorting?', in S.W. Polacheck (ed) *Research in Labor Economics, Volume 23, Accounting for Worker Well-Being*, pp. 1–25.
[15] Holmstrom, B. and Milgrom, P. (1991), 'Multi-Task Principal-Agent Problems: Incentive Contracts, Asset Ownership and Job Design', *Journal of Law, Economics and Organization*, **7** (Special Issue), pp. 24–52.
[16] Kreps, D.M. (1997), 'Intrinsic Motivation and Extrinsic Incentives', *American Economic Review,* **87**:2, pp. 359–64.
[17] Burgess, S. and Ratto, M. (2003), 'The Role of Incentives in the Public Sector: Issues and Evidence', *Oxford Review of Economic Policy*, **19**:2, p. 297.
[18] Dewatripont, M., Jewitt, I. and Tirole, J. (1999), 'The Economics of Career Concerns, Part I: Comparing Information Structures', *Review of Economic Studies*, **66**, pp. 183–98.
[19] See, for example, Vickers, J. (1998), 'Inflation Targeting in Practice: The UK Experience', Conference on Implementation of Price Stability, Frankfurt, September 12th.
[20] Kornai, J., Maskin, E. and Roland, G. (2003), 'Understanding the Soft Budget Constraint', *Journal of Economic Literature,* **61**:4, pp. 1095–136.
[21] Capobianco, A. and Christiansen, H. (2011), op. cit., p. 11.
[22] See, for example, Oxera (2010), 'Behavioural Economics, Competition and Remedy Design', *Agenda*, November.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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